Technical Memorandum

Phase 3 Chemical Data Gap Investigation Sampling Results Subareas 5D and 8 in Area IV Santa Susana Field Laboratory Ventura County, California

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Sampling Results
Subareas 5D and 8 in Area IV
Santa Susana Field Laboratory
Ventura County, California

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CDM Smith Task Order DE-DT0003515

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Acronyms and Abbreviations

%	percent
%D	percent difference/percent drift
%R	percent recovery
mg/L	milligram per liter
ng/kg	nanogram per kilogram
ng/L	nanogram per liter
pg/L	picogram per liter
ug/kg	microgram per liter
µg/L	microgram per liter
AOC	Administrative Order on Consent
bgs	below ground surface
CAS	chemical abstract number
CDM Smith	CDM Federal Programs Corporation
CoC	chain of custody
DOE	Department of Energy
DPT	direct push technology
DQI	data quality indicator
DQO	data quality objective
DTSC	Department of Toxic Substances Control
DUAR	data usability assessment review
EFH	extractable fuel hydrocarbon
EPA	U.S. Environmental Protection Agency
ESADA	Eastern States Atomic Development Agency
Fm	formation
FSDS	field sample data sheet
FSP	field sampling plan
FTL	field team leader
GIS	geographic information system
GRO	gasoline range organics
HSA	Historical Site Assessment
ICP	inductively coupled plasma
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
MDL	method detection limit
MS	matrix spike
MSD	matrix spike duplicate
MWH	MWH Americas, Inc.
NDMA	n-Nitrosodimethylamine
PAH	polycyclic aromatic hydrocarbon
PARCCS	precision, accuracy, representativeness, comparability, completeness and sensitivity
PCB	polychlorinated biphenyl
PCT	polychlorinated triphenyl
PE	performance evaluation

PID	photoionization detector
QA	quality assurance
QAPP	quality assurance project plan
QC	quality control
RCRA	Resource Conservation and Recovery Act
RL	reporting limit
RPD	relative percent difference
SDG	sample delivery group
SIM	selective ion monitoring
SOP	standard operating procedure
SOW	statement of work
SSFL	Santa Susana Field Laboratory
SVOC	semi-volatile organic compound
TM	technical memorandum
TPH	total petroleum hydrocarbon
VOC	volatile organic compound
WP	work plan
Master FSP	Master Field Sampling Plan

Section 1
Introduction

This Technical Memorandum (TM) presents the results of chemical analyses of surface and subsurface soil samples collected from Phase 3 soil locations within Subareas 5D and 8 at the Santa Susana Field Laboratory (SSFL) site in Ventura County, California. This work was performed under three planning documents:

- *Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California* (CDM Federal Programs Corporation [CDM Smith] 2012a) (Master Field Sampling Plan [FSP])
- *Addendum No. 7 to Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, Subarea* 8 (CDM Smith 2013a) (Addendum to the Master FSP)
- *Addendum No. 8 to Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, Subarea* 5D (CDM Smith 2013b) (Addendum to the Master FSP)

The Master FSP (CDM Smith 2012a) is Appendix A of the *Work Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California* (CDM Smith 2012b), which also includes Appendix B, Quality Assurance Project Plan (QAPP), Appendix C, Worker Safety and Health Program, and Appendix D, Standard Operating Procedures (SOPs).

The Addendums No. 7 (CDM Smith 2013a) and No. 8 (CDM Smith 2013b) to the Master FSP (CDM Smith 2012a) includes several sample locations for trenches and test pits in Subareas 5D and 8. All of the trenches and test pits that exist in the various Area IV subareas will be sampled at one time (during subsequent Phase 3 sampling) and the associated analytical results will be reported in a separate TM for the trenching and "go-back" sampling.

This TM also provides a description of the sampling activities and a discussion of the analytical data review findings for Phase 3 sampling in Subareas 5D and 8. The TM does not provide an interpretation of the results. The data provided in this TM are intended to be combined with data collected under the prior Resource Conversation and Recovery Act (RCRA) Facility Investigation and the chemical collocated sampling program (Phase 1 sampling) to support the Soil Remedial Action Implementation Plan for chemicals in soil in Area IV. The co-located sampling program was Phase 1 of the chemical investigation activities under the Administrative Order on Consent (AOC) for Remedial Action [Docket Number HSA-CO 10/11-037] between the U.S. Department of Energy (DOE) and the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC).

1.1 Objective and Basis for Data Gap Investigation Sampling in Subarea 5D and Subarea 8

The specific objective of sampling under the Chemical Data Gap Investigation is to identify the nature and extent (vertical and lateral) of soil contamination within Area IV for cleanup remedy evaluation.

The document *Subarea 8 Data Gap Analysis Technical Memorandum, Santa Susana Field Laboratory, Ventura County, California*, (SA8 Data Gap Analysis TM) was prepared by MWH Americas, Inc. (MWH) and included as an attachment to *Addendum No. 7 to Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, Subarea 8* (CDM Smith 2013a).

The document *Subarea 5D Data Gap Analysis Technical Memorandum, Santa Susana Field Laboratory, Ventura County, California*, (SA5D Data Gap Analysis TM) was prepared by MWH and included as an attachment to *Addendum No. 8 to Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, Subarea 5D* (CDM Smith 2013b).

The data gap analysis provides the rationale for selection of each sample location and the chemical sampling rationale.

CDM Smith was responsible for all aspects of the field sampling program under Phase 3 of the AOC, including:

- Field staking of the sample locations selected as a result of the data gap investigation using geographic information system (GIS) coordinates
- Collection of all samples in accordance with the procedures and controls specified in the Master FSP (CDM Smith 2012a), including but not limited to: sample collection; sample container preparation; sample handling; and documentation
- Sample management and shipment, laboratory coordination, and chemical analyses of the samples
- Data review and validation

1.2 Geology

Subareas 5D and 8 of Area IV are within the Cretaceous Chatsworth Formation (Fm) and Tertiary Santa Susana Fm brought into contact by the Burro Flats Fault. The Chatsworth Fm underlies approximately 80 percent of Area IV and is composed predominantly of sandstone interbedded with siltstone and shale. The Santa Susana Fm is composed of interbedded micaceous claystone, siltstone and thin sandstone layers, underling approximately 20 percent of Area IV. The tan fine-grained sandstones of the Santa Susana Fm are known for thin shell beds and calcareous concretions. Many were observed in outcrops and in Subareas 5D and 8. The overlying native soils encountered in Subareas 5D and 8 range from predominantly silty sands to sandy silts at shallow depths with increasing clay content to 10 feet below ground surface (bgs). Disturbed areas in Subareas 5D and 8 comprise fill soils of unknown origin and debris such as concrete, asphalt, and wood. The contact with both formations at many soil boring locations occurs between 2 and 10 feet bgs. Additional information regarding the geology in Area IV can be found in Volume I of *Group 5 – Central Portion of Areas III and IV RCRA Facility Investigation Report, Santa Susana Field Laboratory, Ventura County, California* (CH2M Hill 2008).

1.3 Technical Memorandum Organization

This TM includes the following sections:

- **Section 1 - Introduction** – Summarizes the basis and objectives of Phase 3 soil sampling in Subareas 5D and 8
- **Section 2 - Field Sampling and Analytical Methods** – Provides details regarding field sampling procedures and laboratory analytical methods
- **Section 3 - Soil Sample Analytical Results** – Provides a summary of detected analytical results for each chemical; the appendices provide the overall results
- **Section 4 - Data Usability Assessment** – Discusses the results of the data review and validation processes
- **Section 5 – References** – Identifies the documents used in this report

Section 2
Field Sampling and Analytical Methods

Two hundred and seventy three surface and/or subsurface soil samples were collected from 102 Phase 3 locations in Subarea 5D between August 26 and November 15, 2013. Two hundred and forty one samples were collected from 108 Phase 3 locations in Subarea 8 between July 8 and September 26, 2013. Two mineral grab samples were collected from the hill slope south of Eastern States Atomic Development Agency (ESADA) in Subarea 8 to evaluate a potential source of elevated elemental strontium. Four split samples collected with DTSC are also included in the total sample number for Subarea 8. Sample locations from Subarea 5D are shown on Figure 2-1 and the sample locations in Subarea 8 are shown on Figure 2-2.

Tables 2-1 and 2-2 include the data gap rationale for sampling at each Subarea 5D and 8 location respectively, along with the location identification, location description, rationale/comments, depth of boring, fill description, sample date, sample type, sample number and analyses sampled for. Locations not sampled are highlighted in yellow.

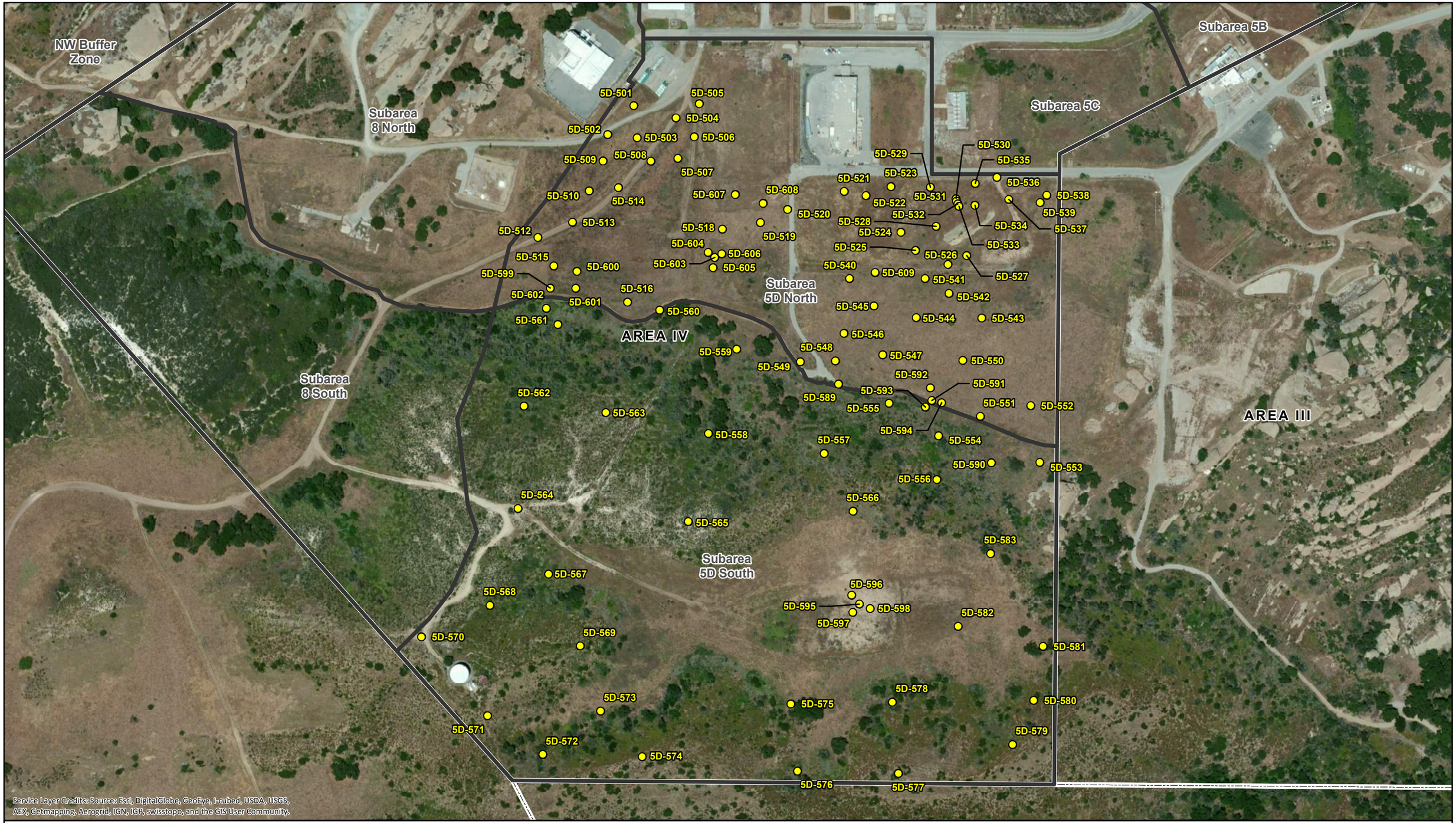
All soil sampling equipment (described in Sections 2.1 and 2.2) that came into contact with sample materials was decontaminated prior to sample collection in accordance with SSFL SOP 12 (Field Equipment Decontamination) of the Master FSP (CDM Smith 2012a). All samples, for both surface and subsurface, were screened for radioactivity using a Micro R Survey Meter (for gamma radiation) and a Pancake Frisker Detector (for alpha and beta radiation), followed by screening with a photoionization detector (PID) as directed in SSFL SOP 7 (Field Measurement of Residual Radiation). For each sample collected, the site geologist also completed a field sample data sheet (FSDS) in accordance with SSFL SOP 8 (Field Data Collection Documents, Content and Control). The completed form was reviewed for correctness in the field by the field sample technician and by the sample coordinator during sample processing. A boring log was created in accordance with SSFL SOP 9 (Lithologic Logging) for each location and reviewed by a state certified Professional Geologist. The FSDS sheets and associated boring logs are presented in Appendix E.

2.1 Surface Sampling

Prior to the collection of the surface soil samples in Subareas 5D and 8, the surface of each sample area was prepared by CDM Smith sampling personnel by removing leaves, grass, and any other surface debris. Surface samples were collected at 31 locations in Subarea 5D and 63 locations in Subarea 8 from the ground surface to 6 inches bgs using a slide hammer equipped with a 2-inch diameter and 6-inch long stainless steel sample liner in accordance with SSFL SOP 2 (Surface Soil Sampling) of the Master FSP (CDM Smith 2012a). The slide hammer sampler was pounded into the soil until the top of the sampler was flush with the ground surface and then removed from the soil. The sample sleeve was removed from the sampler and both ends capped with a Teflon® liner and a plastic cap.

Surface samples were collected at 77 locations in Subarea 5D and 50 locations in Subarea 8 using the direct push technology (DPT) rig in accordance with SSFL SOP 4 (Direct Push Technology (DPT) Sampling) of the Master FSP (CDM Smith 2012a). Stainless steel sleeves measuring 5 ¾ inches by 1 ¾ inches were inserted into the DPT split spoon sampler and pushed to required sample interval. Upon removal from the DPT sampler, each liner was capped on both ends with a Teflon liner and plastic cap.

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Legend

- Sample Location
- Area IV Subarea
- Site Area

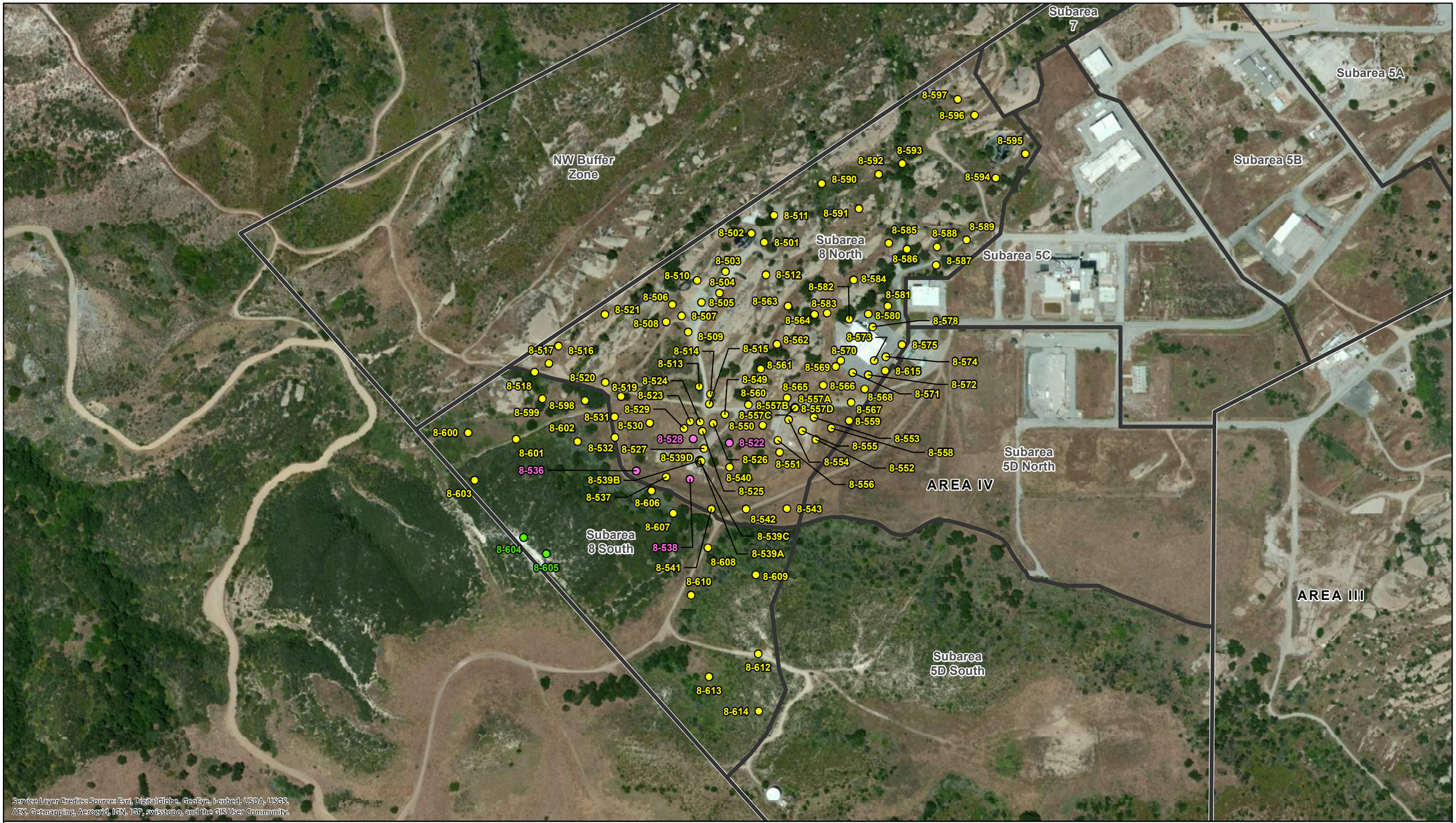
Subarea 5D Phase 3 Sample Locations

0 125 250 500 Feet

Santa Susana Field Laboratory
Ventura County, California
Figure 2-1

CDM Smith

C:_projects\SantaSusana\GIS\MXD\SSFL_Phase3_5D_DG_Sampling_Locations_20140410.mxd 5/14/2014



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.

Subarea 8 Phase 3 Sample Locations

Legend

- DTSC Split Sample Location
- Mineral Sample Location
- Sample Location
- Area IV Subarea
- Site Area

0 170 340 680 Feet

Santa Susana Field Laboratory
Ventura County, California
Figure 2-2

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C:_projects\SantaSusana\GIS\MXD\SSFL_Phase3_8_DG_Sampling_Locations_20140404.mxd 5/27/2014

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-501	West of B4020	Stepout for dioxins at SL-001-SA5DN to the north and dioxins and PAHs at SL-005-SA5DN to the southwest. Based on proximity to former UT-3 near B4009, collect samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock. Bedrock anticipated ~25 feet bgs.	29	None Indicated. Refusal on bedrock.	9/17/2013	Surface	SL-501-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015
					9/17/2013	Subsurface	SL-501-SA5D-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/17/2013	Subsurface	SL-501-SA5D-SB-9.0-10.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/17/2013	Subsurface	SL-501-SA5D-SB-14.0-15.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/17/2013	Subsurface	SL-501-SA5D-SB-19.0-20.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/17/2013	Subsurface	SL-501-SA5D-SB-24.0-25.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/17/2013	Subsurface	SL-501-SA5D-SB-28.0-29.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-502	West of B4020	Targets the unlined drainage along south side of H Street and serves as a stepout for dioxins at SL-130-SA8N to the southwest. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	7.6	None Indicated. Refusal on bedrock.	10/3/2013	Surface	SL-502-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					10/3/2013	Subsurface	SL-502-SA5D-SB-6.5-7.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-503	West of B4020	Characterizes the area between H Street and a former dirt road. Bedrock anticipated ~20 feet bgs.Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	12.8	None Indicated. Refusal on bedrock.	9/17/2013	Surface	SL-503-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/17/2013	Subsurface	SL-503-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-504	Alberson Fire Road	Targets historic dirt road and surface water pathway. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	17.2	None Indicated. Refusal on bedrock.	9/17/2013	Surface	SL-504-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/17/2013	Subsurface	SL-504-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/17/2013	Subsurface (Duplicate)	SL-804-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/17/2013	Subsurface	SL-504-SA5D-SB-9.0-10.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/17/2013	Subsurface	SL-504-SA5D-SB-16.0-17.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Table 2-1
Soil Samples Designated to be Collected From Subarea 5D - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-505	West of B4020	Stepout for dioxins, PCBs, pesticides, and TPH at SL-207-SA5DN to the northeast, dioxins, PAHs, PCBs, TPH (deep), and mercury at SL-018-SA5DN to the northeast, dioxins, PAHs (deep), PCBs, and TPH (deep) at SL-016-SA5DN to the northeast, dioxins, PAHs (deep), and TPH at SL-021-SA5DN to the northeast, PAHs and TPH at SL-019-SA5DN to the east, TPH and PAHs at SL-120-SA5DN to the southeast, and fluoride (deep) at SL-002-SA5DN to the northwest. Also characterizes the area southwest of the former location of UT-11, which had a documented fuel release and targets historic dirt roads. Based on proximity to former UT-11, collect samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Analyze PAHs, TPH, and fluoride in samples deeper than 5 feet to stepout from deeper exceedances to the northeast, to delineate lateral extent of impacts from former UST, and deepest sample assesses potential lateral migration along bedrock.	20.8	None Indicated. Refusal on bedrock.	9/16/2013	Surface	SL-505-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/16/2013	Subsurface	SL-505-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					9/16/2013	Subsurface	SL-505-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					9/16/2013	Subsurface	SL-505-SA5D-SB-14.0-15.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					9/16/2013	Subsurface	SL-505-SA5D-SB-19.0-20.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5D_DG-506	West of B4020	Stepout for PAHs and TPH at SL-020-SA5DN to the east. Also targets a historic dirt road. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	21.2	None Indicated. Refusal on bedrock.	9/11/2013	Surface	SL-506-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/11/2013	Subsurface	SL-506-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-507	West of B4020	Stepout for PAHs, phthalates, PCBs, TPH (deep), mercury, and silver at SL-198-SA5DN to the southwest. Also targets fill extent identified in the EPA TM. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Analyze for TPH in 10-foot and 15-foot samples to stepout from TPH in 9-foot sample at SL-198-SA5DN.	11.6	None Indicated. Refusal on bedrock.	10/3/2013	Surface	SL-507-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					10/3/2013	Subsurface	SL-507-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					10/3/2013	Subsurface	SL-507-SA5D-SB-10.5-11.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-508	West of B4020	Stepout for PAHs, phthalates, PCBs, TPH (deep), mercury, and silver at SL-198-SA5DN to the southeast. Also targets fill extent identified in the EPA TM. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Analyze for TPH in 10-foot and 15-foot samples to stepout from TPH in 9-foot sample at SL-198-SA5DN.	23.8	None Indicated. Refusal on bedrock.	10/3/2013	Surface	SL-508-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					10/3/2013	Subsurface	SL-508-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					10/3/2013	Subsurface	SL-508-SA5D-SB-9.0-10.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					10/3/2013	Subsurface	SL-508-SA5D-SB-14.0-15.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					10/3/2013	Subsurface	SL-508-SA5D-SB-19.0-20.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					10/3/2013	Subsurface	SL-508-SA5D-SB-23.0-24.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-509	West of B4020	Stepout for dioxins and PCBs at SL-199-SA5DN to the southwest. Also targets the disturbed soil area. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	17.9	None Indicated. Refusal on clay.	9/18/2013	Surface	SL-509-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/18/2013	Subsurface	SL-509-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Table 2-1
Soil Samples Designated to be Collected From Subarea 5D - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-510	Northwest Portion of Pond Dredge Area	Stepout for dioxins, PAHs, PCBs, and pesticides at SL-199-SA5DN to the north. Also targets the estimated area of the drop zone of depleted uranium slugs reportedly dropped in the 1960s identified in the EPA TM and a historic dirt road. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	15.8	None Indicated. Refusal on clay.	9/18/2013	Surface	SL-510-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/18/2013	Subsurface	SL-510-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-511	Western Portion of Pond Dredge Area	Conduct exploratory test pit to investigate terrain conductivity anomaly. Collect 0.5 and 5 foot samples within test pit based on visual observations of fill, staining, debris, or other impacts. Collect sample targeting top of native soil if anomlies observed. Collect a separate soil boring to bedrock targeting the estimated area of the drop zone of depleted uranium slugs reportedly dropped in the 1960s identified in the EPA TM. The soil boring also targets a disturbed soil area and serves as a stepout for dioxins, PAHs, and TPH at SL-040-SA8N to the northwest. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Analyze for TPH in 10-foot and 15-foot samples to stepout from TPH in 9-foot sample at SL-040-SA8N, place other analyses on hold pending shallow results.	NA	Test Pit- To be sampled at a later date.	NA	NA	NA	NA
5D_DG-512	Western Portion of Pond Dredge Area	Stepout for pesticides at SL-205-SA5DN and mercury at PDBS1406 to the southeast. Location also targets potential historical surface water pathway. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	19.8	None Indicated. Refusal on bedrock.	9/26/2013	Surface	SL-512-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/26/2013	Subsurface	SL-512-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5D_DG-513	Western Portion of Pond Dredge Area	Stepout for dioxins, PAHs, PCBs, perchlorate, herbicides, TPH, silver, and fluoride (deep) at SL-191-SA5DN to the southeast, and silver at PDTS03, selenium at PDBS1012, and mercury at PDBS1406 to the southwest. Also targets the surface water pathway and a historical dirt road. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	17.2	0-0.5 bgs: fill described as 50% limerock gravel. Refusal on bedrock.	9/18/2013	Surface	SL-513-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, TPH-EFH EPA 8015, pH EPA 9045
					9/18/2013	Subsurface	SL-513-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/18/2013	Subsurface	SL-513-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/18/2013	Subsurface	SL-513-SA5D-SB-16.0-17.0	Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-514	Northwest Portion of Pond Dredge Area	Stepout for silver at PDBS1408 to the northeast, dioxins, PAHs, phthalates, and TPH at SL-197-SA5DN to the southeast, and TPH, silver, and thallium at PDTS01 to the south. Also targets the estimated area of the drop zone of depleted uranium slugs reportedly dropped in the 1960s identified in the EPA TM, a surface water pathway along a historical dirt road, and a disturbed soil area. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock).Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	13.6	0-0.5 bgs: fill described as 45% limerock gravel. Refusal on bedrock.	9/18/2013	Surface	SL-514-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/18/2013	Subsurface	SL-514-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Table 2-1
Soil Samples Designated to be Collected From Subarea 5D - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-515	Western Portion of Pond Dredge Area	Targets potential drainage along north side of historic dirt road observed in 1960 aerial photo. Also serves as a stepout for pesticides at SL-205-SA5DN to the north, PAHs, TPH, antimony, and silver at PDTS03 to the north, selenium at PDBS1012 to the north, and fluoride (deep) at SL-190-SA5DN to east and SL-201-SA5DN to the southwest. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Analyze for fluoride in 10-foot sample to stepout from fluoride in 9-foot sample at SL-201-SA5DN.	23	None Indicated. Refusal on clay.	9/9/2013	Surface	SL-515-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/9/2013	Surface (Duplicate)	SL-815-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/9/2013	Subsurface	SL-515-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/9/2013	Subsurface	SL-515-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/9/2013	Subsurface	SL-515-SA5D-SB-22.0-23.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-516	Southern Portion of Pond Dredge Area	Stepout for PAHs, phthalates, herbicides, and hexavalent chromium (deep) at SL-188-SA5DN to the east and selenium at PDBS1008 to the north. Location also targets surface water pathway observed in historical aerial photograph (1962-63). Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Analyze for hexavalent chromium in 10-foot and 15-foot samples to stepout from hexavalent chromium in 9-foot sample at SL-188-SA5DN.	14	0-8 ft bgs: fill described as trace weathered sandstone formation.	11/15/2013	Surface	SL-516-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					11/15/2013	Subsurface	SL-516-SA5D-SB-4.0-5.0	Dioxins EPA 1613, Herbicides EPA 8151, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/15/2013	Subsurface (Duplicate)	SL-816-SA5D-SB-4.0-5.0	Dioxins EPA 1613, Herbicides EPA 8151, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/15/2013	Subsurface	SL-516-SA5D-SB-9.0-10.0	Dioxins EPA 1613, Herbicides EPA 8151, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/15/2013	Subsurface	SL-516-SA5D-SB-13.0-14.0	Dioxins EPA 1613, Herbicides EPA 8151, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-517	Northeastern Portion of Pond Dredge Area	Conduct exploratory test pit to investigate terrain conductivity anomaly. Collect 0.5 and 5 foot samples within test pit based on visual observations of fill, staining, debris, or other impacts. Collect sample targeting top of native soil if anomlies observed. Collect a separate soil boring to bedrock to stepout for PAHs, phthalates, PCBs, TPH (deep), mercury, and silver at SL-198-SA5DN to the northwest, dioxins, PAHs, and perchlorate at SL-203-SA5DN to the west, phthalates and hexavalent chromium at SL-056-SA5DN to the northeast, PAHs and herbicides at SL-057-SA5DN to the southeast, dioxins, PAHs, phthalates, and pesticides at SL-196-SA5DN to the southwest, and dioxins, PAHs, phthalates, pesticides, and cadmium at SL-187-SA5DN to the south. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Analyze for TPH in 10-foot and 15-foot samples to stepout from TPH in 9-foot sample at SL-198-SA5DN, place other analyses on hold pending shallow results.	NA	Test Pit- To be sampled at a later date.	NA	NA	NA	NA

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-518	Eastern Portion of Pond Dredge Area	Stepout for dioxins, PAHs, phthalates, pesticides, and cadmium at SL-187-SA5DN to the southwest, fluoride (deep) at SL-185-SA5DN to the south, antimony and silver at PDTS07 to the southeast, PAHs and mercury at SL-170-SA5DN to the southeast, PAHs and TPH at PDBS1000 to the southeast, dioxins, PAHs, phthalates, and cadmium at SL-058-SA5DN to the northeast, and PAHs and herbicides at SL-057-SA5DN to the northwest. Also targets the ground scar identified in the EPA TM. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Analyze for fluoride in 10-foot sample to stepout from fluoride in 9-foot sample at SL-185-SA5DN.	16	None Indicated. Refusal on bedrock.	9/10/2013	Surface	SL-518-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/10/2013	Subsurface	SL-518-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/10/2013	Subsurface	SL-518-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/10/2013	Subsurface	SL-518-SA5D-SB-15.0-16.0	Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-519	Eastern Portion of Pond Dredge Area	Stepout for PAHs and TPH at PDBS1000 to the southeast and dioxins, PAHs, phthalates, and cadmium at SL-058-SA5DN to the northwest. Also targets the ground scar identified in the EPA TM. Bedrock anticipated <15 feet bgs.Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	13.5	0-1 ft bgs: fill described as trace igneous gravel. 12 ft bgs: fill described as framing nail found. Refusal on bedrock.	9/11/2013	Surface	SL-519-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/11/2013	Subsurface	SL-519-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-520	Eastern Portion of Pond Dredge Area	Targets unlined drainage along west side of 24th Street and completes vertical characterization of soils at SL-169-SA5DN. Previous samples at this location analyzed at 4-foot and 9-foot depths and analysis did not include TPH or pesticides. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	8.9	1 ft bgs: fill described as trace igneous gravel. Refusal on bedrock.	9/11/2013	Surface	SL-520-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/11/2013	Subsurface	SL-520-SA5D-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/11/2013	Subsurface	SL-520-SA5D-SB-8.0-9.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-521	North of B4363	Stepout for dioxins and PAHs at SL-122-SA5DN to the west and dioxins at SL-091-SA5DN to the north. Also serves to delineate fill with debris encountered at SL-091-SA5DN to a depth of 5 feet bgs in the drainage south of J Street. If fill, staining, debris, or other impacts are observed, collect sample targeting top of native soil. Bedrock anticipated ~10 feet bgs.Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	6.5	None Indicated. Refusal on bedrock.	9/11/2013	Surface	SL-521-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/11/2013	Subsurface	SL-521-SA5D-SB-5.5-6.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-522	Northeast of B4363	Targets the lined drainage at the northwest corner of the parking area north of the B4363 Leach Field. Also serves as a stepout for PAHs, phthalates, TPH, mercury, and selenium at U5BS1059 to the south and dioxins in SL-091-SA5DN to the northwest. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical lateral migration to bedrock.	7	1 ft bgs: fill described as 10% igneous gravel. Refusal on bedrock.	9/11/2013	Surface	SL-522-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/11/2013	Subsurface	SL-522-SA5D-SB-6.0-7.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-523	Northeast of B4363	Stepout for dioxins, PAHs, and pesticides at SL-123-SA5DN to the southeast. Also assess the lateral extent of impacts in the drainage south of J Street. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	1.7	None Indicated. Refusal on bedrock.	9/11/2013	Surface	SL-523-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045

Table 2-1
Soil Samples Designated to be Collected From Subarea 5D - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-524	Northeast of B4363	Stepout for TPH and cadmium at L6TS02S01 to the west, TPH at U5BS1036 to the west, dioxins, phthalates, pesticides, TPH, and mercury at SL-107-SA5DN to the west, and dioxins, PAHs, phthalates, pesticides, herbicides, and mercury at SL-108-SA5DN to the southwest. Also characterizes the area downslope of the B4363 Leach Field. Bedrock anticipated <15 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	6.4	1 ft bgs: fill described as trace quartz/biotite granite. Refusal on bedrock.	9/4/2013	Surface	SL-524-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/4/2013	Subsurface	SL-524-SA5D-SB-5.5-6.5	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/4/2013	Subsurface (Duplicate)	SL-824-SA5D-SB-5.5-6.5	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-525	East of the B4363	Characterizes the area east and downslope of B4363. Bedrock anticipated <5 feet bgs. If deep soils encountered, collect sample and place on hold pending shallow results. Bedrock anticipated ~5 feet bgs.	3.6	1 ft bgs: fill described as trace concrete. Refusal on bedrock.	9/3/2013	Surface	SL-525-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/3/2013	Subsurface	SL-525-SA5D-SB-2.5-3.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-526	Drainage Ditch North of L Street	Targets the drainage on the north side of L Street and historic dirt road. Bedrock anticipated <5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	4.5	None Indicated. Refusal on bedrock.	8/29/2013	Surface	SL-526-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/29/2013	Subsurface	SL-526-SA5D-SB-3.0-4.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-527	West of B4353	Stepout for dioxins, TPH, and mercury at SL-135-SA5DN and SL-137-SA5DN to the east and for dioxins and TPH at SL-138-SA5DN to the southeast. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	5.3	None Indicated. Refusal on bedrock.	9/3/2013	Surface	SL-527-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/3/2013	Subsurface	SL-527-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-528	West of B4353	Characterizes the area east of B4363 and targets a historical dirt road. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	3.3	None Indicated. Refusal on bedrock.	9/3/2013	Surface	SL-528-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/3/2013	Subsurface	SL-528-SA5D-SB-2.5-3.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-529	Northwest of B4353	Stepout for dioxins, PAHs, and pesticides at SL-123-SA5DN to the southwest and for dioxins, PAHs, and pesticides at SL-127-SA5DN to the northeast collected in the drainage south of J Street. Also targets the historical dirt road and ground scar identified in the EPA TM. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	4	None Indicated. Refusal on bedrock.	9/11/2013	Surface	SL-529-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/11/2013	Subsurface	SL-529-SA5D-SB-3.0-4.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-530	Northwest of B4353	Transect/stepout for dioxins at SL-126-SA5DN to characterize overbank deposits. Four lateral stepout locations comprise a drainage transect (with previous drainage sample in the middle); collect stepouts 5 feet and 10 feet laterally from location SL-126-SA5DN. Bedrock anticipated <5 feet bgs. Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess historical deposition over time and potential lateral migration along bedrock.	3.8	None Indicated. Refusal on bedrock.	8/30/2013	Surface	SL-530-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/30/2013	Subsurface	SL-530-SA5D-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-531	Northwest of B4353		2.5	None Indicated. Refusal on bedrock.	8/30/2013	Surface	SL-531-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
5D_DG-532	Northwest of B4353		3.5	None Indicated. Refusal on bedrock.	8/30/2013	Surface	SL-532-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/30/2013	Subsurface	SL-532-SA5D-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-533	Northwest of B4353		3.5	None Indicated. Refusal on bedrock.	8/30/2013	Surface	SL-533-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/30/2013	Subsurface	SL-533-SA5D-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-534	North of B4353	Targets the ground scar identified in the EPA TM and a historic dirt road. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	7.5	None Indicated. Refusal on bedrock.	8/30/2013	Surface	SL-534-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/30/2013	Subsurface	SL-534-SA5D-SB-6.5-7.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-535	North of B4353	Stepout for dioxins, PAHs, and pesticides at SL-127-SA5DN to the northwest collected in the drainage south of J Street. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	3.5	None Indicated. Refusal on bedrock.	8/30/2013	Surface	SL-535-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/30/2013	Surface (Duplicate)	SL-835-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/30/2013	Subsurface	SL-535-SA5D-SB-2.0-3.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-536	North of B4353	Targets drainage along south side of J Street and serves as a stepout for dioxins, PAHs, and phthalates at SL-127-SA5DN to the west. Also targets historic dirt road. Bedrock anticipate <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	4.5	None Indicated. Refusal on bedrock.	8/28/2013	Surface	SL-536-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/28/2013	Subsurface	SL-536-SA5D-SB-3.5-4.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-537	North of B4353	Stepout for dioxins, PAHs, phthalates, arsenic, cadmium, mercury, and silver at SL-129-SA5DN to the southeast. Also targets a historic dirt road. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	4.5	None Indicated. Refusal on bedrock.	8/28/2013	Surface	SL-537-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/28/2013	Subsurface	SL-537-SA5D-SB-2.5-3.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-538	North of B4353	Stepout for dioxins, PAHs, phthalates, arsenic, cadmium, mercury, and silver at SL-129-SA5DN to the southwest. Also targets an unknown above ground storage tank. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	4	None Indicated. Refusal on bedrock.	8/28/2013	Surface	SL-538-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/28/2013	Subsurface	SL-538-SA5D-SB-3.0-4.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Table 2-1
Soil Samples Designated to be Collected From Subarea 5D - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-539	Northeast of B4353	Stepout for dioxins, PAHs, phthalates, arsenic, cadmium, mercury, and silver at SL-129-SA5DN to the northwest. Also targets a historic dirt road. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	4	None Indicated. Refusal on bedrock.	8/29/2013	Surface	SL-539-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/29/2013	Subsurface	SL-539-SA5D-SB-3.0-4.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-540	South of B4363	Stepout for dioxins, PAHs, pesticides, and cadmium at SL-101-SA5DN to the northeast collected in the drainage south of L Street and for dioxins at SL-166-SA5DN to the southwest. Bedrock anticipated ~5 feet bgs.Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	6.2	None Indicated. Refusal on bedrock.	9/3/2013	Surface	SL-540-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/3/2013	Subsurface	SL-540-SA5D-SB-5.0-6.0	TPH-GRO EPA 8015, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015
5D_DG-541	South of B4363	Stepout for dioxins, PAHs, and perchlorate at SL-148-SA5DN to the north collected in the drainage south of L Street. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	3.6	None Indicated. Refusal on bedrock.	9/3/2013	Surface	SL-541-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, TPH-EFH EPA 8015, pH EPA 9045
					9/3/2013	Subsurface	SL-541-SA5D-SB-2.5-3.5	TPH-GRO EPA 8015, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, TPH-EFH EPA 8015
5D_DG-542	Southwest of B4353	Stepout for dioxins and pesticides at SL-149-SA5DN to the east. Bedrock anticipated <10 feet bgs.Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	5	None Indicated. Refusal on bedrock.	8/29/2013	Surface	SL-542-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/29/2013	Subsurface	SL-542-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-543	South of B4353	Stepout for dioxins and pesticides at SL-149-SA5DN to the north and dioxins and PAHs at SL-150-SA5DN to the northeast. Also historic dirt road. Bedrock anticipated <10 feet bgs.Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	11.5	None Indicated. Refusal on bedrock.	8/29/2013	Surface	SL-543-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/29/2013	Subsurface	SL-543-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-544	South of B4363	Characterizes the hillslope south of B4363. Targets historic dirt road. Bedrock anticipated ~10 feet bgs.Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	7.2	None Indicated. Refusal on bedrock.	9/4/2013	Surface	SL-544-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/4/2013	Subsurface	SL-544-SA5D-SB-6.5-7.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-545	South of B4363	Characterizes the hillslope south of B4363. Targets magnetometer anomaly and a historic dirt road. Bedrock anticipated ~10 feet bgs. .Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	7	5.4 ft bgs: fill described as trace concrete. Refusal on bedrock.	9/3/2013	Surface	SL-545-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/3/2013	Subsurface	SL-545-SA5D-SB-6.0-7.0	TPH-GRO EPA 8015, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015
5D_DG-546	South of B4363	Stepout for dioxins at SL-166-SA5DN to the northwest. Bedrock anticipated <15 feet bgs.Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	14	None Indicated. Refusal on bedrock.	9/4/2013	Surface	SL-546-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/4/2013	Subsurface	SL-546-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-547	South of B4363	Stepout for PAHs at SL-162-SA5DN to the southwest. Also targets the historic dirt road. Bedrock anticipated ~10 feet bgs.Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	11	None Indicated. Refusal on bedrock.	9/4/2013	Surface	SL-547-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/4/2013	Subsurface	SL-547-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-548	South of B4363	Stepout for PAHs at SL-162-SA5DN to the southeast. Also targets historic dirt road and ground scar identified in the EPA TM. Bedrock anticipated <15 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	22.6	None Indicated. Refusal on bedrock.	8/26/2013	Surface	SL-548-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/26/2013	Subsurface	SL-548-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5D_DG-549	South of B4363	Targets entrance to B4173. Location also serves as stepout for dioxins (deep), PAHs, phthalates, and pesticides at SL-165-SA5DN to the northwest. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Collect 10-foot sample and place on hold pending shallow results. Analyze for dioxins in 10-foot sample to stepout from dioxins in 9-foot sample at SL-165-SA5DN.	12.2	None Indicated. Refusal on bedrock.	11/12/2013	Surface	SL-549-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, SVOC EPA 8270, TPH-EFH EPA 8015, pH EPA 9045
					11/12/2013	Subsurface	SL-549-SA5D-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/12/2013	Subsurface	SL-549-SA5D-SB-11.0-12.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-550	South of B4353	Characterizes the hillslope south of B4353. Bedrock anticipated <15 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	15	None Indicated. Refusal on bedrock.	9/6/2013	Surface	SL-550-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/6/2013	Subsurface	SL-550-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/6/2013	Subsurface (Duplicate)	SL-850-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-551	South of B4353	Targets potential drainage along north side of historic dirt road observed in 1960 aerial photo. Also serves as a stepout for dioxins at SL-159-SA5DN to the east and fluoride at SL-160-SA5DN to the northwest. Bedrock anticipated ~10 feet bgs. Collect 10-foot sample and place on hold pending shallow results; analyze 10-foot sample for fluoride since detected at depth in SL-160-SA5DN.	18.5	None Indicated. Refusal on bedrock.	9/12/2013	Surface	SL-551-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/12/2013	Subsurface	SL-551-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/12/2013	Subsurface	SL-551-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/12/2013	Subsurface	SL-551-SA5D-SB-14.0-15.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/12/2013	Subsurface	SL-551-SA5D-SB-17.5-18.5	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-552	South of B4353	Stepout for dioxins at SL-156-SA5DN to the northeast, SL-157-SA5DN to the north, and SL-159-SA5DN to the southwest. Also targets historic dirt road. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	12.8	None Indicated. Refusal on bedrock.	9/6/2013	Surface	SL-552-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/6/2013	Subsurface	SL-552-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Table 2-1
Soil Samples Designated to be Collected From Subarea 5D - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-553	Northeastern Portion of Hillslope	Characterizes the hillslope south of the B4363/4353 area. Also serves as a stepout for perchlorate, herbicides, hexavalent chromium, and fluoride at SL-040-SA5DS to the southwest and for dioxins at SL-159-SA5DN to the north. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock).Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	5.7	0-1.0 ft bgs: fill described as 10% igneous gravel. Refusal on bedrock.	9/12/2013	Surface	SL-553-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 904
					9/12/2013	Surface (Duplicate)	SL-853-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 904
					9/12/2013	Subsurface	SL-553-SA5D-SB-4.5-5.5	Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015
5D_DG-554	South of B4353	Stepout for fluoride at SL-160-SA5DN to the northwest. Also characterizes the hillslope south of the B4363/4353 area. Bedrock anticipated ~10 feet bgs. Analyze 10-foot sample for fluoride since detected at depth in SL-160-SA5DN.	8	None Indicated. Refusal on bedrock.	9/5/2013	Surface	SL-554-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/5/2013	Subsurface	SL-554-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/5/2013	Subsurface	SL-554-SA5D-SB-7.0-8.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-555	South of B4353	Stepout for fluoride at SL-160-SA5DN to the northeast and PAHs at SL-162-SA5DN to the northwest. Also targets historic dirt road. Bedrock anticipated ~10 feet bgs. Analyze 10-foot sample for fluoride since detected at depth in SL-160-SA5DN.	11.4	None Indicated. Refusal on clay.	9/5/2013	Surface	SL-555-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/5/2013	Subsurface	SL-555-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/5/2013	Subsurface	SL-555-SA5D-SB-10.5-11.5	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-556	South of the B4363/4353 Area	Characterizes the hillslope south of the B4363/4353 area. Targets the surface water pathway downslope of the Soil Borrow Area. Also serves as a stepout for perchlorate, herbicides, hexavalent chromium, and fluoride at SL-040-SA5DS. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	12.1	None Indicated. Refusal on bedrock.	9/5/2013	Surface	SL-556-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					9/5/2013	Subsurface	SL-556-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015
					9/5/2013	Subsurface	SL-556-SA5D-SB-11.0-12.0	Fluoride EPA 300/9056, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015
5D_DG-557	South of the B4363/4353 Area	Characterizes the hillslope south of the B4363/4353 area. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock).Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	1.6	None Indicated. Refusal on bedrock.	9/24/2013	Surface	SL-557-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-558	South of the Pond Dredge Area	Characterizes the hillslope south of the Pond Dredge area. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock).Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	5	None Indicated. Refusal on bedrock.	9/24/2013	Surface	SL-558-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/24/2013	Subsurface	SL-558-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5D_DG-559	Northeastern Portion of Hillslope	Also serves as a stepout for PAHs, phthalates (deep), and pesticides at SL-180-SA5DN to the north, dioxins and PAHs at SL-181-SA5DN to the northeast, cadmium and molybdenum at SL-184-SA5DN to the northeast, and fluoride (deep) at SL-185-SA5DN to the east. Also targets the historical dirt road. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Analyze for PAHs and fluoride in 10-foot samples to stepout from phthalates in 9-foot sample at SL-180-SA5DN and fluoride in the 9-foot sample at SL-185-SA5DN.	6.9	None Indicated. Refusal on clay.	9/5/2013	Surface	SL-559-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/5/2013	Subsurface	SL-559-SA5D-SB-6.0-7.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-560	Northeastern Portion of Hillslope	Stepout for PAHs, phthalates, herbicides, and hexavalent chromium (deep) at SL-188-SA5DN to the north. Also targets a historic dirt road. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Analyze for hexavalent chromium in 10-foot and 15-foot samples to stepout from hexavalent chromium in 9-foot sample at SL-188-SA5DN.	8.2	None Indicated. Refusal on bedrock.	11/12/2013	Surface	SL-560-SA5D-SB-0.0-0.5	Herbicides EPA 8151, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TPH-GRO EPA 8015
					11/12/2013	Subsurface	SL-560-SA5D-SB-4.0-5.0	Herbicides EPA 8151, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/12/2013	Subsurface (Duplicate)	SL-860-SA5D-SB-4.0-5.0	Herbicides EPA 8151, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/12/2013	Subsurface	SL-560-SA5D-SB-7.0-8.0	Herbicides EPA 8151, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-561	South of the Pond Dredge Area	Characterizes the hillslope south of the Pond Dredge area. Also serves as a stepout for fluoride (deep) at SL-201-SA5DN to the northwest. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Analyze for fluoride in 10-foot sample to stepout from fluoride in 9-foot sample at SL-201-SA5DN.	10	None Indicated.	10/8/2013	Surface	SL-561-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					10/8/2013	Subsurface	SL-561-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					10/8/2013	Subsurface	SL-561-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5D_DG-562	South of the Pond Dredge Area	Characterizes the hillslope south of the Pond Dredge area. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock).Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	13.1	None Indicated. Refusal on bedrock.	9/25/2013	Surface	SL-562-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/25/2013	Subsurface	SL-562-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5D_DG-563	South of the Pond Dredge Area	Characterizes the hillslope south of the Pond Dredge area. Also targets area adjacent to the water pipeline. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock).Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	9.5	None Indicated. Refusal on bedrock.	9/25/2013	Surface	SL-563-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/25/2013	Subsurface	SL-563-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					9/25/2013	Subsurface	SL-863-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015

Table 2-1
Soil Samples Designated to be Collected From Subarea 5D - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-564	South of the Pond Dredge Area	Characterizes the hillslope south of the Pond Dredge area. Also targets historic dirt road. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock).Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	9.6	None Indicated. Refusal on bedrock.	10/1/2013	Surface	SL-564-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					10/1/2013	Subsurface	SL-564-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-565	South of the Pond Dredge Area	Characterizes the hillslope south of the Pond Dredge area. Also targets historic dirt road. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock).Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	1.7	None Indicated. Refusal on bedrock.	9/24/2013	Surface	SL-565-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/24/2013	Surface (Duplicate)	SL-865-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5D_DG-566	South of the B4363/4353 Area	Characterizes the hillslope south of the B4363/4353 area. Also targets area near historical dirt road. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock).Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	5	None Indicated. Refusal on clay.	9/24/2013	Surface	SL-566-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/24/2013	Subsurface	SL-566-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5D_DG-567	Northeast of B4701 (Water Tank)	Characterizes the hillslope north of the water tank (B4701) and serves as a stepout for pesticides and herbicides at SL-031-SA5DS. Also targets area adjacent to the water pipeline. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock).Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	4.5	None Indicated. Refusal on bedrock.	10/7/2013	Surface	SL-567-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					10/7/2013	Subsurface	SL-567-SA5D-SB-3.5-4.5	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5D_DG-568	Northeast of B4701 (Water Tank)	Targets the surface water flow pathway downslope of the water tank (B4701). Pesticides and herbicides added to general characterization suite due to results above screening levels in the vicinity. Bedrock anticipated ~20 feet bgs. Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	3.5	0-3.5 ft bgs: fill described as concrete and sandstone gravel. Refusal on bedrock.	9/23/2013	Surface	SL-568-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/23/2013	Subsurface	SL-568-SA5D-SB-2.5-3.5	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					9/23/2013	Subsurface (Duplicate)	SL-868-SA5D-SB-2.5-3.5	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5D_DG-569	Northeast of B4701 (Water Tank)	Targets the drainage northeast of the water tank. Also serves as a stepout for PAHs and phthalates at SL-030-SA5DS to the west. Bedrock anticipated <5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	2.3	None Indicated. Refusal on bedrock.	9/25/2013	Subsurface	SL-569-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5D_DG-570	Northwest of B4701 (Water Tank)	Stepout for dioxins, PAHs, PCBs, and herbicides at SL-036-SA5DS to the southeast. Also targets historic dirt road. Bedrock anticipated ~10 feet bgs.Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	8.7	0-6.0 ft bgs: fill described as igneous/metamorphic and sandstone gravel. Refusal on bedrock.	10/1/2013	Surface	SL-570-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					10/1/2013	Subsurface	SL-570-SA5D-SB-4.0-5.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-571	Southeast of B4701 (Water Tank)	Stepout for PAHs and herbicides at SL-027-SA5DS to the northwest and perchlorate, pesticides, and silver at SL-028-SA5DS to the northwest. Also targets historic dirt road. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	2.2	None Indicated. Refusal on bedrock.	9/23/2013	Surface	SL-571-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
5D_DG-572	Southeast of B4701 (Water Tank)	Stepout for dioxins and pesticides at SL-002-SA5DS to the northeast and herbicides at SL-025-SA5DS to the southeast. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	2.5	None Indicated. Refusal on bedrock.	9/23/2013	Surface	SL-572-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Pesticides EPA 8081

Table 2-1
Soil Samples Designated to be Collected From Subarea 5D - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-573	East of B4701 (Water Tank)	Stepout for dioxins and pesticides at SL-002-SA5DS to the southwest. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	18.8	None Indicated. Refusal on bedrock.	9/25/2013	Surface	SL-573-SA5D-SB-0.0-0.5	PAH EPA 8270 SIM, Pesticides EPA 8081
					9/25/2013	Subsurface	SL-573-SA5D-SB-4.0-5.0	Pesticides EPA 8081
5D_DG-574	East of B4701 (Water Tank)	Stepout for dioxins, PAHs, and pesticides at SL-001-SA5DS to the west and herbicides at SL-024-SA5DS to the east. Also targets historic dirt road. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	0.5	0-0.5 ft bgs: fill described as sandstone gravel. Refusal on bedrock.	9/23/2013	Surface	SL-574-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, PAH EPA 8270 SIM, Pesticides EPA 8081
5D_DG-575	South of the Soil Borrow Area	Stepout for herbicides and PAHs at SL-022-SA5DS to the southeast. Targets a surface water flow pathway. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	4	None Indicated. Refusal on bedrock.	10/7/2013	Surface	SL-575-SA5D-SB-0.0-0.5	Herbicides EPA 8151, PAH EPA 8270 SIM
					10/7/2013	Subsurface	SL-575-SA5D-SB-3.0-4.0	Herbicides EPA 8151, PAH EPA 8270 SIM
5D_DG-576	South of the Soil Borrow Area	Stepout for herbicides at SL-024-SA5DS to the west, dioxins, herbicides, and pesticides at SL-004-SA5DS to the northwest, dioxins, herbicides, and TPH at SL-005-SA5DS to the northeast. Also targets the historical dirt road. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	4.5	None Indicated. Refusal on bedrock.	9/19/2013	Surface	SL-576-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Pesticides EPA 8081, TPH-EFH EPA 8015
					9/19/2013	Subsurface	SL-576-SA5D-SB-3.5-4.5	Herbicides EPA 8151, Pesticides EPA 8081, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-577	South of the Soil Borrow Area	Stepout for TPH at SL-019-SA5DS to the north. Also targets historic dirt road. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	0.5	None Indicated. Refusal on bedrock.	9/19/2013	Surface	SL-577-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5D_DG-578	South of the Soil Borrow Area	Stepout for herbicides at SL-038-SA5DS to the northwest, dioxins and PAHs at SL-006-SA5DS to the southwest, and TPH at SL-019-SA5DS to the south. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	2.2	None Indicated. Refusal on bedrock.	9/19/2013	Surface	SL-578-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, PAH EPA 8270 SIM, TPH-EFH EPA 8015
5D_DG-579	Southeast of the Soil Borrow Area	Stepout for dioxins and pesticides at SL-017-SA5DS to the northwest and perchlorate at SL-016-SA5DS to the north. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	1.5	None Indicated. Refusal on bedrock.	9/19/2013	Surface	SL-579-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Perchlorate Confirmation EPA 6850/6860, Pesticides EPA 8081
					9/19/2013	Surface (Duplicate)	SL-879-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Perchlorate Confirmation EPA 6850/6860, Pesticides EPA 8081
5D_DG-580	Southeast of the Soil Borrow Area	Stepout for perchlorate at SL-016-SA5DS to the west and hexavalent chromium at SL-015-SA5DS to the northwest. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	1	0-0.5 ft bgs: fill described as 5% sandstone gravel. Refusal on bedrock.	9/19/2013	Surface	SL-580-SA5D-SB-0.0-0.5	Perchlorate Confirmation EPA 6850/6860, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
5D_DG-581	Southeast of the Soil Borrow Area	Stepout for benzoic acid at SL-013-SA5DS to the west and hexavalent chromium at SL-015-SA5DS to the southwest. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	3.9	None Indicated. Refusal on bedrock.	9/19/2013	Surface	SL-581-SA5D-SB-0.0-0.5	PAH EPA 8270 SIM, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					9/19/2013	Subsurface	SL-581-SA5D-SB-2.5-3.5	PAH EPA 8270 SIM, Hexavalent Chromium EPA 7196/7199, pH EPA 9045

Table 2-1
Soil Samples Designated to be Collected From Subarea 5D - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-582	Eastern Portion of Soil Borrow Area	Targets the drainage in the eastern portion of the soil borrow area. Also serves as a stepout for herbicides at SL-038-SA5DS to the southwest. Bedrock anticipated ~20 feet bgs. Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	11.3	None Indicated. Refusal on clay.	9/30/2013	Surface	SL-582-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					9/30/2013	Subsurface	SL-582-SA5D-SB-4.0-5.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/30/2013	Subsurface (Duplicate)	SL-882-SA5D-SB-4.0-5.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					9/30/2013	Subsurface	SL-582-SA5D-SB-10.0-11.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-583	Northeastern of the Soil Borrow Area	Characterizes the northeastern portion of the Soil Borrow Area. Also targets the historical dirt road. Bedrock anticipated >10 feet bgs (adjacent samples did not encounter bedrock). Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	2.5	None Indicated. Refusal on bedrock.	9/23/2013	Surface	SL-583-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5D_DG-589	South of B4353	Targets potential structure at end of historic dirt road identified in 1960 aerial photograph. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	27	None Indicated. Refusal on bedrock.	10/2/2013	Surface	SL-589-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					10/2/2013	Subsurface	SL-589-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-590	Hillslope South of B4353	Collect sample at former location SL-040-SA5DS to confirm previous perchlorate and fluoride detects slightly above Lookup Table values. Analyze all depths since fluoride detected at depth.	12	None Indicated. Refusal on bedrock.	9/6/2013	Surface	SL-590-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045
					9/6/2013	Subsurface	SL-590-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045
					9/6/2013	Subsurface (Duplicate)	SL-890-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045
					9/6/2013	Subsurface	SL-590-SA5D-SB-11.0-12.0	Fluoride EPA 300/9056, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045
5D_DG-591	South of B4353	Resample fluoride at SL-160-SA5DN to confirm detect slightly above Lookup Table value. Analyze all depths since previous fluoride detect at depth.	7.4	None Indicated. Refusal on bedrock.	9/12/2013	Surface	SL-591-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056, pH EPA 9045
					9/12/2013	Subsurface	SL-591-SA5D-SB-6.5-7.5	Fluoride EPA 300/9056, pH EPA 9045
5D_DG-592	South of B4353	Stepout for previous low level detect at SL-160-SA5DN. Analyze all depths since previous fluoride detect at depth.	11.4	None Indicated. Refusal on bedrock.	9/12/2013	Surface	SL-592-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056
					9/12/2013	Subsurface	SL-592-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056
					9/12/2013	Subsurface	SL-592-SA5D-SB-10.5-11.5	Fluoride EPA 300/9056
5D_DG-593	South of B4353	Stepout for previous low level detect at SL-160-SA5DN. Analyze all depths since previous fluoride detect at depth.	4.5	None Indicated. Refusal on bedrock.	10/7/2013	Surface	SL-593-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056, pH EPA 9045
					10/7/2013	Subsurface	SL-593-SA5D-SB-3.5-4.5	Fluoride EPA 300/9056, pH EPA 9045
5D_DG-594	South of B4353	Stepout for previous low level detect at SL-160-SA5DN. Analyze all depths since previous fluoride detect at depth.	8	None Indicated. Refusal on bedrock.	10/2/2013	Surface	SL-594-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056
					10/2/2013	Subsurface	SL-594-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056
					10/2/2013	Subsurface	SL-594-SA5D-SB-7.0-8.0	Fluoride EPA 300/9056

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-595	Area IV Borrow Pit	Resample fluoride at SL-037-SA5DS to confirm detect slightly above Lookup Table value. Analyze all depths since previous fluoride detect at depth.	17.7	None Indicated. Refusal on clay.	9/30/2013	Surface	SL-595-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056, pH EPA 9045
					9/30/2013	Subsurface	SL-595-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, pH EPA 9045
					9/30/2013	Subsurface	SL-595-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, pH EPA 9045
					9/30/2013	Subsurface	SL-595-SA5D-SB-14.0-15.0	Fluoride EPA 300/9056, pH EPA 9045
					9/30/2013	Subsurface	SL-595-SA5D-SB-17.0-18.0	Fluoride EPA 300/9056, pH EPA 9045
5D_DG-596	Area IV Borrow Pit	Stepout for previous low level detect at SL-037-SA5DS. Analyze all depths since previous fluoride detect at depth.	12.5	None Indicated. Refusal on clay.	9/30/2013	Surface	SL-596-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056
					9/30/2013	Subsurface	SL-596-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056
					9/30/2013	Subsurface	SL-596-SA5D-SB-11.5-12.5	Fluoride EPA 300/9056
5D_DG-597	Area IV Borrow Pit	Stepout for previous low level detect at SL-037-SA5DS. Analyze all depths since previous fluoride detect at depth.	18	None Indicated. Refusal on clay.	9/30/2013	Surface	SL-597-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056, pH EPA 9045
					9/30/2013	Subsurface	SL-597-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, pH EPA 9045
					9/30/2013	Subsurface	SL-597-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, pH EPA 9045
					9/30/2013	Subsurface	SL-597-SA5D-SB-14.0-15.0	Fluoride EPA 300/9056, pH EPA 9045
					9/30/2013	Subsurface	SL-597-SA5D-SB-17.0-18.0	Fluoride EPA 300/9056, pH EPA 9045
5D_DG-598	Area IV Borrow Pit	Stepout for previous low level detect at SL-037-SA5DS. Analyze all depths since previous fluoride detect at depth.	18.8	None Indicated. Refusal on clay.	10/1/2013	Surface	SL-598-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056
					10/1/2013	Subsurface	SL-598-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056
					10/1/2013	Subsurface	SL-598-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056
					10/1/2013	Subsurface	SL-598-SA5D-SB-14.0-15.0	Fluoride EPA 300/9056
					10/1/2013	Subsurface	SL-598-SA5D-SB-18.0-19.0	Fluoride EPA 300/9056
5D_DG-599	Southwest of Pond Dredge Area	Resample fluoride at SL-201-SA5DN to confirm detect slightly above Lookup Table value. Analyze all depths since previous fluoride detect at depth.	23	None Indicated. Refusal on clay.	9/9/2013	Surface	SL-599-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056, pH EPA 9045
					9/9/2013	Subsurface	SL-599-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, pH EPA 9045
					9/9/2013	Subsurface	SL-599-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, pH EPA 9045
					9/9/2013	Subsurface	SL-599-SA5D-SB-14.0-15.0	Fluoride EPA 300/9056, pH EPA 9045
					9/9/2013	Subsurface	SL-599-SA5D-SB-19.0-20.0	Fluoride EPA 300/9056, pH EPA 9045
					9/9/2013	Subsurface	SL-599-SA5D-SB-22.0-23.0	Fluoride EPA 300/9056, pH EPA 9045
5D_DG-600	Southwest of Pond Dredge Area	Resample fluoride at SL-190-SA5DN to confirm detect slightly above Lookup Table value. Analyze all depths since previous fluoride detect at depth.	19.4	None Indicated. Refusal on clay.	10/2/2013	Surface	SL-600-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056, pH EPA 9045
					10/2/2013	Surface (Duplicate)	SL-900-SA5D-SB-0.0-0.5	pH EPA 9045, Fluoride EPA 300/9056
					10/2/2013	Subsurface	SL-600-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, pH EPA 9045
					10/2/2013	Subsurface	SL-600-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, pH EPA 9045
					10/2/2013	Subsurface	SL-600-SA5D-SB-14.0-15.0	Fluoride EPA 300/9056, pH EPA 9045
					10/2/2013	Subsurface	SL-600-SA5D-SB-18.5-19.5	Fluoride EPA 300/9056, pH EPA 9045

Table 2-1
Soil Samples Designated to be Collected From Subarea 5D - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-601	Southwest of Pond Dredge Area	Stepout for previous low level detect at SL-190-SA5DN and SL-201-SA5DN. Location also targets surface water pathway observed in historical aerial photograph (1962-63). Analyze all depths since previous fluoride detect at depth.	21.5	None Indicated. Refusal on bedrock.	9/9/2013	Surface	SL-601-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056
					9/9/2013	Subsurface	SL-601-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056
					9/9/2013	Subsurface	SL-601-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056
					9/9/2013	Subsurface	SL-601-SA5D-SB-14.0-15.0	Fluoride EPA 300/9056
					9/9/2013	Subsurface	SL-601-SA5D-SB-20.5-21.5	Fluoride EPA 300/9056
5D_DG-602	Southwest of Pond Dredge Area	Resample fluoride at SL-201-SA5DN to confirm detect slightly above Lookup Table value. Analyze all depths since previous fluoride detect at depth.	10	None Indicated.	10/8/2013	Surface	SL-602-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056, pH EPA 9045
					10/8/2013	Subsurface	SL-602-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, pH EPA 9045
					10/8/2013	Subsurface	SL-602-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, pH EPA 9045
5D_DG-603	Eastern Portion of Pond Dredge Area	Resample fluoride at SL-185-SA5DN to confirm detect slightly above Lookup Table value. Analyze all depths since previous fluoride detect at depth.	14	None Indicated. Refusal on bedrock.	9/10/2013	Surface	SL-603-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056, pH EPA 9045
					9/10/2013	Subsurface	SL-603-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, pH EPA 9045
					9/10/2013	Subsurface	SL-603-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, pH EPA 9045
					9/10/2013	Subsurface	SL-603-SA5D-SB-13.0-14.0	Fluoride EPA 300/9056, pH EPA 9045
5D_DG-604	Eastern Portion of Pond Dredge Area	Stepout for previous low level detect at SL-185-SA5DN. Analyze all depths since previous fluoride detect at depth.	17.4	None Indicated. Refusal on bedrock.	9/10/2013	Surface	SL-604-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056
					9/10/2013	Subsurface	SL-604-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056
					9/10/2013	Subsurface	SL-604-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056
					9/10/2013	Subsurface	SL-604-SA5D-SB-16.5-17.5	Fluoride EPA 300/9056
5D_DG-605	Eastern Portion of Pond Dredge Area	Stepout for previous low level detect at SL-185-SA5DN. Analyze all depths since previous fluoride detect at depth.	15.6	None Indicated. Refusal on bedrock.	9/10/2013	Surface	SL-605-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056
					9/10/2013	Subsurface	SL-605-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, Fluoride EPA 300/9056
					9/10/2013	Subsurface (Duplicate)	SL-905-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056
					9/10/2013	Subsurface	SL-605-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056
					9/10/2013	Subsurface	SL-605-SA5D-SB-14.5-15.5	Fluoride EPA 300/9056
5D_DG-606`	Eastern Portion of Pond Dredge Area	Stepout for previous low level detect at SL-185-SA5DN. Analyze all depths since previous fluoride detect at depth.	13.7	None Indicated. Refusal on bedrock.	9/10/2013	Surface	SL-606-SA5D-SB-0.0-0.5	Fluoride EPA 300/9056, pH EPA 9045
					9/10/2013	Subsurface	SL-606-SA5D-SB-4.0-5.0	Fluoride EPA 300/9056, pH EPA 9045
					9/10/2013	Subsurface	SL-606-SA5D-SB-9.0-10.0	Fluoride EPA 300/9056, pH EPA 9045
					9/10/2013	Subsurface	SL-606-SA5D-SB-13.0-14.0	Fluoride EPA 300/9056, pH EPA 9045
5D_DG-607	Parking Lot South of B4020	Location targets parking lot area south of B4020 where storage was observed in historical photograph. Also serves as stepout for PAH detects in the area. Previous samples collected at a depth of 10 feet bgs, but bedrock was not encountered. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	10.7	0-0.5 ft bgs: fill described as igneous/metamorphic gravel. Refusal on clay.	10/1/2013	Surface	SL-607-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					10/1/2013	Subsurface	SL-607-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5D_DG-608	Parking Lot South of B4020	Location targets parking lot area south of B4020 where storage was observed in historical photograph. Also serves as stepout for PAH detects in the area. Previous samples collected at a depth of 10 feet bgs, but bedrock was not encountered. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	10.7	None Indicated. Refusal on clay.	10/3/2013	Surface	SL-608-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					10/3/2013	Subsurface	SL-608-SA5D-SB-4.0-5.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5D_DG-609	South of B4363	Location targets tank with unknown contents and surface water drainage along L Street. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	1.5	0-1.5 ft bgs: fill gravel described as igneous/metamorphic gravel and sandstone formation. Refusal on bedrock.	11/15/2013	Surface	SL-609-SA5D-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045

Notes & Abbreviations:

Ag = Silver
AST = Above-ground Storage Tank
B(a)P = benzo (a) pyrene
BG = Background
bgs = below ground surface
CCA = Clearly Contaminated Area
Cd = Cadmium
Cr (VI) = hexavalent chromium
DG = Data Gap
EFH = extractable fuel hydrocarbons
EPA = Environmental Protection Agency
EPA TM = Environmental Protection Agency Technical Memo
ESA = Environmentally Sensitive Area
ESADA = Eastern States Atomic Development Agency
ESG = Energy Systems Group
DTSC = Department of Toxic Substances Control
FD = field duplicate sample
FSDF = Former Sodium Disposal Facility
ft = feet
GRO = gasoline range organics
Hg = mercury
HSA = Historical Site Assessment
ISL = interim screening level
L = liter
N = normal sample
ng/kg = nanogram per kilogram
ND = nondetect
NDMA = n-Nitrosodimethylamine
Ni = Nickel
NCY = New Conservation Yard
PDU = Process Development Unit
PID = Photoionization Detector
PAH = polyaromatic hydrocarbon
PCB = polychlorinated biphenyl
PCT = polychlroinated triphenyl
PGRAY = potential gamma radiation anomaly
ppb = parts per billion
ppm = parts per million
RFI = Facility Investigation Reports
ppt = part per trillion
RL = reporting limit
SL = Sample Location
SPTF = Sodium Pump Test Facility
SRE = Sodium Reactor Experiment
TEQ = toxicity equivalency factor
TM = technical memorandum
TPH = total petroleum hydrocarbons
UST = underground storage tank
SNAP RFI, 2008 = Systems for Nuclear Auxiliary Power
VOC = Volatile Organic Carbon
Samples not collected

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-501	Northeast of FSDF Pistol Range	Delineates northeastern extent of the FSDF Pistol Range Clearly Contaminated Area. Also serves as a stepout for dioxins and PCBs at FSBS0066 to the northwest, targets confluence of three surface water pathways, and characterizes native soil adjacent to the 2000 Interim Measure excavation. Location selected as a representative drainage location within Subarea 8N to assess the presence of pesticides and herbicides. Bedrock anticipated ~10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	13.3	None indicated. Refusal on bedrock.	7/15/2013	Surface	SL-501-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					7/15/2013	Surface (Duplicate)	SL-801-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					7/15/2013	Subsurface	SL-501-SA8-SB-4.0-5.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/15/2013	Subsurface	SL-501-SA8-SB-9.0-10.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/15/2013	Subsurface	SL-501-SA8-SB-12.0-13.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-502	North of FSDF Pistol Range	Delineates northern extent of the FSDF Pistol Range Clearly Contaminated Area and stepout for dioxins and PCBs at FSBS0066 to the northeast. Also targets historic dirt road and disturbed soil area adjacent to the 2000 Interim Measure excavation. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	8.7	None indicated. Refusal on bedrock.	7/15/2013	Surface	SL-502-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/15/2013	Subsurface	SL-502-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					7/15/2013	Subsurface	SL-502-SA8-SB-7.5-8.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-503	Southwest of FSDF Pistol Range	Stepout for dioxins at Sl-135-SA8N to the North and 56SW to the south. Bedrock anticipated <5 feet bgs. Collect surface sample only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	4.2	None indicated. Refusal on bedrock.	7/15/2013	Surface	SL-503-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/15/2013	Subsurface	SL-503-SA8-SB-3.0-4.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-504	Northeast of FSDF	Characterizes native soil adjacent to the 2000 Interim Measure excavation to confirm boundary of previous excavation. Also serves as a stepout for dioxins at 56SW to the northeast. Biphenyls added due to use in Area IV operations and potential disposal at FSDF. Mobile chemicals added due to proximity to potential groundwater impact location and 2000 Interim Measure addressed perchlorate. Bedrock anticipated ~5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	3.5	None indicated. Refusal on bedrock.	7/16/2013	Surface	SL-504-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					7/16/2013	Subsurface	SL-504-SA8-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015, VOC EPA 8260
					7/16/2013	Subsurface (Duplicate)	SL-804-SA8-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015, VOC EPA 8260
8_DG-505	Northeast of FSDF	Stepout for PCBs, mercury, and dioxins at 92S to the west, mercury at 101BE to the northwest, and PCBs at DTSC-A to the south. Also targets disturbed soil area. Bedrock anticipated ~5 feet bgs. Collect surface sample only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	10.8	0-3.6 ft bgs: fill described as 100% igneous/metamorphic gravel and silt. Refusal on bedrock.	7/16/2013	Surface	SL-505-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/16/2013	Subsurface	SL-505-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Table 2-2
Soil Samples Designated to be Collected from Subarea 8 - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-506	North of FSDF	Characterizes native soil adjacent to the 2000 Interim Measure excavation to confirm boundary of previous excavation. Also serves as a stepout for PCBs and dioxins at 89BW to the northeast. Biphenyls added due to use in Area IV operations and potential disposal at FSDF. Mobile chemicals added due to proximity to potential groundwater impact location and 2000 Interim Measure addressed perchlorate. Bedrock anticipated ~5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	5.3	None indicated. Refusal on bedrock.	7/18/2013	Surface	SL-506-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					7/18/2013	Subsurface	SL-506-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015, VOC EPA 8260
8_DG-507	North of FSDF	Characterizes native soil adjacent to the 2000 Interim Measure excavation to confirm boundary of previous excavation, and targets historic dirt road and disturbed soil area. Biphenyls added due to use in Area IV operations and potential disposal at FSDF. Mobile chemicals added due to proximity to potential groundwater impact location and 2000 Interim Measure addressed perchlorate. Bedrock anticipated ~5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	4.5	None indicated. Refusal on bedrock.	7/16/2013	Surface	SL-507-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					7/16/2013	Subsurface	SL-507-SA8-SB-3.0-4.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015, VOC EPA 8260
8_DG-508	North of FSDF	Characterizes native soil adjacent to the 2000 Interim Measure excavation to confirm boundary of previous excavation. Biphenyls added to general characterization suite due to use in Area IV operations and potential disposal at FSDF. Mobile chemicals added due to proximity to potential groundwater impact location and 2000 Interim Measure addressed perchlorate. Bedrock anticipated ~5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	2.3	None indicated. Refusal on bedrock.	7/16/2013	Surface	SL-508-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					7/16/2013	Surface	SL-508-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
8_DG-509	Northeast of FSDF	Characterizes native soil adjacent to the 2000 Interim Measure excavation to confirm boundary of previous excavation, and targets historic dirt road and disturbed soil area. Biphenyls added due to use in Area IV operations and potential disposal at FSDF. Mobile chemicals added due to proximity to potential groundwater impact location and 2000 Interim Measure addressed perchlorate. Bedrock anticipated ~5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	4.7	None indicated. Refusal on bedrock.	7/18/2013	Surface	SL-509-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					7/18/2013	Subsurface	SL-509-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015, VOC EPA 8260
8_DG-510	North of FSDF	Stepout for TPH at SL-122-SA8N to the north and mercury at 101BE to the southwest. Bedrock anticipated <5 feet bgs. Collect surface and 5 ft. sample only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	0.6	None indicated. Refusal on bedrock.	7/16/2013	Surface	SL-510-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-511	North of FSDF Pistol Range	Characterizes hillslope northeast of the FSDF Pistol Range. Bedrock anticipated <5 feet bgs. Hold shallow sample for all analysis except TPH and PAHs since previously characterized at nearby sample location. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	6.8	None indicated. Refusal on bedrock.	7/15/2013	Surface	SL-511-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/15/2013	Subsurface	SL-511-SA8-SB-6.0-7.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-512	Southeast of FSDF Pistol Range	Stepout for dioxins at SL-091-SA8N. Also targets drainage downslope from ESADA. Bedrock anticipated <5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	2	None indicated. Refusal on bedrock.	7/17/2013	Surface	SL-512-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-513	Southeastern Portion of FSDF	Targets the kerosene boiler that was used to power the steam lance and historic dirt road, and characterizes native soil adjacent to the 2000 Interim Measure excavation to confirm boundary of previous excavation. Also delineates the northern extent of the FSDF Southeast Clearly Contaminated Area and serves as a stepout for TPH, dioxins, PCBs, PAHs, lead, and mercury at SL-133-SA8N to the east. Biphenyls added due to use in Area IV operations and potential disposal at FSDF. Mobile chemicals added due to proximity to potential groundwater impact location and 2000 Interim Measure addressed perchlorate. Bedrock anticipated ~10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	8.9	None indicated. Refusal on bedrock.	7/17/2013	Surface	SL-513-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					7/17/2013	Subsurface	SL-513-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015
					7/17/2013	Subsurface	SL-513-SA8-SB-8.0-9.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015, VOC EPA 8260
8_DG-514	Southeastern Portion of FSDF	Targets the drainage southeast of FSDF constructed to divert surface water east of the 2000 Interim Measure excavation. Also delineates the FSDF Southeast Clearly Contaminated Area to the west and serves as a stepout for TPH, dioxins, PCBs, lead, and mercury at SL-133-SA8N to the east. PCBs and perchlorate previously characterized at adjacent sample FSBS0005. Location selected as a representative drainage location within Subarea 8N to assess the presence of pesticides and herbicides. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	8.7	None indicated. Refusal on bedrock.	7/17/2013	Surface	SL-514-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					7/17/2013	Subsurface	SL-514-SA8-SB-4.0-5.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					7/17/2013	Subsurface	SL-514-SA8-SB-7.5-8.5	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-515	Southeastern Portion of FSDF	Delineates eastern extent of the FSDF Southeast Clearly Contaminated Area. Also serves as a stepout for PCBs at PCS-29 and PAHs at PCS-31 to the southwest, and targets historic dirt road. Perchlorate added to general characterization suite due to exceedance in eastern portion of Clearly Contaminated Area. Bedrock anticipated ~10 feet bgs. Sample all depths.	14	None indicated. Refusal on bedrock.	7/17/2013	Surface	SL-515-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, TPH-EFH EPA 8015, pH EPA 9045
					7/17/2013	Subsurface	SL-515-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/17/2013	Subsurface	SL-515-SA8-SB-9.0-10.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/17/2013	Subsurface	SL-515-SA8-SB-14.0-15.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-516	West of FSDF	Targets debris identified during 2008 debris survey. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	0.5	None indicated. Refusal on bedrock.	7/19/2013	Surface	SL-516-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-517	West of FSDF	Stepout for dioxins, PAHs, PCBs, TPH, cadmium, and mercury at SL-085-SA8N to the northeast and hexavalent chromium at SL-016-SA8S to the south. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	4.2	None indicated. Refusal on bedrock.	7/19/2013	Surface	SL-517-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					7/19/2013	Subsurface	SL-517-SA8-SB-3.0-4.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015
8_DG-518	West of FSDF	Stepout for dioxins, phthalates, PCBs, hexavalent chromium, and mercury at SL-016-SA8S to the southeast. Also targets surface water pathway and historic dirt road. Bedrock anticipated ~5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	5	None indicated. Refusal on bedrock.	7/19/2013	Surface	SL-518-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					7/19/2013	Subsurface	SL-518-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015

Table 2-2
Soil Samples Designated to be Collected from Subarea 8 - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-519	Southwest of FSDF	Stepout for TPH at SL-080-SA8N to the northeast. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	4.5	None indicated. Refusal on bedrock.	7/18/2013	Surface	SL-519-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/18/2013	Subsurface	SL-519-SA8-SB-3.5-4.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-520	Southwest of FSDF	Characterizes native soil within disturbed soil area southwest of the 2000 Interim Measure excavation. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	2	None indicated. Refusal on bedrock.	7/18/2013	Surface	SL-520-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-521	West of FSDF	Stepout for TPH at SL-071-SA8N to the southwest and cadmium and mercury at 92-886-1B-1 to the northwest. Location will also assess potential air dispersion impacts related to burning and treatment activities at the former FSDF ponds and is located northwest of FSDF in the prevailing wind direction. Location is one of six locations proposed that will assess this migration pathway, the others include 8_DG-101 and four 'future' samples located west of the Area IV boundary. Two of the future locations are in drainages (8_DG-118 and 8_DG-120) to evaluate the potential for subsequent surface water transport of aerially deposited contaminants. Additional sampling to address this pathway will also be proposed in the Northern Buffer Zone Subarea. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	2	None indicated. Refusal on bedrock.	7/19/2013	Surface	SL-521-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-522	North of ESADA Former Pistol Range	Stepout for dioxins and PAHs at SL-023-SA8N to the north, phthalates and TPH at SL-036-SA8N to the northeast, and dioxins, PAHs, phthalate, cadmium, mercury, and TPH at SL-027-SA8N to the southeast. Also targets historical dirt road. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	19.8	None indicated. Refusal on bedrock.	7/26/2013	Surface	SL-522-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/26/2013	Subsurface	SL-522-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/24/2013	Surface	SL-522-SA8-SB-0.0-0.5-dtsc	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020
8_DG-523	North of ESADA	Vertical delineation of PCBs and mercury at ESBS0010. Deep sample at this location not previously analyzed for PCBs and mercury. Cyanide added to general characterization suite due to potential association of AST with PDU, and biphenyls added due to use in Area IV operations. Bedrock anticipated ~10 feet bgs. Collect 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	11	None indicated. Refusal on bedrock.	7/25/2013	Subsurface	SL-523-SA8-SB-4.0-5.0	Cyanide EPA 9012, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/25/2013	Subsurface (Duplicate)	SL-823-SA8-SB-4.0-5.0	Cyanide EPA 9012, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-524	North of ESADA	Vertical delineation of PAHs, PCBs, and TPH at ESBS0011. Deep sample at this location not previously analyzed for PAHs, PCBs, and TPH. Cyanide added to general characterization suite due to potential association of AST with PDU, and biphenyls added due to use in Area IV operations. Bedrock anticipated ~10 feet bgs. Collect 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	15.5	None indicated. Refusal on bedrock.	7/25/2013	Subsurface	SL-524-SA8-SB-4.0-5.0	Cyanide EPA 9012, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-525	North of ESADA	Stepout for PCBs and mercury at ESBS0010 to the northwest, PAHs, PCBs, and TPH at ESBS0011 to the north, and PAHs, phthalates, and TPH at ESBS0006 to the southwest. Also targets historic dirt road and disturbed soil area. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	14.5	None indicated. Refusal on bedrock.	7/25/2013	Surface	SL-525-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/25/2013	Subsurface	SL-525-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-526	North of ESADA	Stepout for dioxins, PAHs, phthalates, PCBs, and TPH at SL-022-SA8N to the northwest, PAHs, PCBs, and TPH at ESBS0011 to the west, and dioxins, PAHs, and phthalates at SL-023-SA8N to the east. Also targets historic dirt road and disturbed soil area. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	17.5	None indicated. Refusal on bedrock.	7/29/2013	Surface	SL-526-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/29/2013	Subsurface	SL-526-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-527	Northwest of ESADA Pistol Range	Stepout for PAHs, phthalates, and TPH at ESBS0006 to the northwest and phthalates at ESBS0007 to the west. Also targets B4370 (Storage Shed). Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	15.3	None indicated. Refusal on bedrock.	7/24/2013	Surface	SL-527-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/24/2013	Subsurface	SL-527-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-528	North of ESADA	Vertical delineation of PAHs, phthalates, and TPH at ESBS0006. Deep sample at this location not previously analyzed for PAHs, phthalates, and TPH. Also targets historic dirt road. Bedrock anticipated ~10 feet bgs. Collect 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	15	None indicated. Refusal on bedrock.	7/24/2013	Surface	SL-528-SA8-SB-0.0-0.5-dtsc	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020
					7/24/2013	Subsurface	SL-528-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-529	North of ESADA	Stepout for PAHs, phthalates, and TPH at ESBS0006 to the southeast, PCBs and mercury at ESBS0010 to the northeast, and dioxins and phthalates at 10246220 to the North. Also targets historic dirt road and disturbed soil area. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	11	None indicated. Refusal on bedrock.	7/29/2013	Surface	SL-529-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/29/2013	Subsurface	SL-529-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-530	North of ESADA	Stepout for TPH at SL-012-SA8N to the east, PAHs at ESBS0005 to the south, and dioxins, phthalates, PCBs, mercury at SL-016-SA8N to the north. Also targets historic dirt road and soil disturbance area. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	6.1	None indicated. Refusal on bedrock.	8/9/2013	Surface	SL-530-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/9/2013	Subsurface	SL-530-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/9/2013	Subsurface (Duplicate)	SL-830-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-531	Southeast of FSDF	Characterizes the northwest portion of ESADA. Also targets historic dirt road. Bedrock anticipated ~5 feet bgs. If deep soils encountered, sample and place on hold pending shallow results. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	8.8	None indicated. Refusal on bedrock.	7/18/2013	Surface	SL-531-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/18/2013	Subsurface	SL-531-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Table 2-2
Soil Samples Designated to be Collected from Subarea 8 - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-532	Northwest of ESADA	Characterizes hillslope west of hummocky area identified during the 2008 Debris Survey. Also targets area adjacent to historic dirt road. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	7.3	None indicated. Refusal on bedrock.	7/19/2013	Surface	SL-532-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/19/2013	Subsurface	SL-532-SA8-SB-6.5-7.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-533	Northwest of ESADA	Conduct exploratory test pit to investigate hummocky area identified during 2008 debris survey. Location of test pit will be based on field observation of hummocky terrain. If fill, staining, debris, or other impacts are observed, collect sample targeting top of native soil. Bedrock anticipated ~5 feet bgs. If deep soils encountered, sample and place on hold pending shallow results.	NA	NA	NA	Test Pit- To be sampled at a later date.	NA	NA
8_DG-534	Northwest of ESADA	Conduct exploratory test pit to investigate hummocky area identified during 2008 debris survey. Location of test pit will be based on field observation of hummocky terrain. If fill, staining, debris, or other impacts are observed, collect sample targeting top of native soil. Bedrock anticipated ~5 feet bgs. If deep soils encountered, sample and place on hold pending shallow results.	NA	NA	NA	Test Pit- To be sampled at a later date.	NA	NA
8_DG-535	Northwest of ESADA	Vertical delineation of PAHs in surface sample at ESBS0005 and the deeper sample collected at 4.5 feet bgs sample had a limited analytical suite. Conduct exploratory test pit to investigate hummocky area identified during 2008 debris survey. Location of test pit will be based on field observation of hummocky terrain. If fill, staining, debris, or other impacts are observed, collect sample targeting top of native soil. Bedrock anticipated <10 feet bgs. Analyze 5-foot sample and place shallow and deep samples on hold pending results of 5-foot sample.	NA	NA	NA	Test Pit- To be sampled at a later date.	NA	NA
8_DG-536	Southeast of ESADA	Characterizes hillslope southwest of B4814. Also serves as a stepout for PCBs, dioxins, cadmium, and zinc at SL-013-SA8N to the northeast and targets historical dirt road. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	7	None indicated. Refusal on bedrock.	7/31/2013	Surface	SL-536-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/24/2013	Surface	SL-536-SA8-SB-0.0-0.5-dtsc	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020
					7/31/2013	Subsurface	SL-536-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-537	South of ESADA	Characterizes hillslope south of ESADA Former Storage Yard. Also targets historical dirt road and soil disturbance area. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	7	None indicated. Refusal on bedrock.	7/31/2013	Surface	SL-537-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/31/2013	Subsurface	SL-537-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-538	West of ESADA Former Pistol Range	Delineates western extent of the ESADA Pistol Range Clearly Contaminated Area. Also serves as a stepout for TPH at SL-010-SA8N to the northwest and targets historic dirt road and disturbed soil area. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	9.3	None indicated. Refusal on bedrock.	8/9/2013	Surface	SL-538-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/24/2013	Surface	SL-538-SA8-SB-0.0-0.5-dtsc	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020
					8/9/2013	Subsurface	SL-538-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/9/2013	Subsurface	SL-838-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-539A	Former Transformer Pole X-35 West of ESADA Pistol Range	Previous sample was a composite of four discrete samples with ND result. Transformers in Area IV with previous ND results are being re-sampled with discrete samples. Re-collect samples at four former discrete locations and analyze each sample for PCBs; hold deep samples pending shallow results. Location 8_DG-39B also serves as a stepout for TPH at SL-010 to the west and dioxins, PAHs, PCBs, mercury, and TPH at SL-011-SA8N and phthalate at ESBS0007 to the northwest. Bedrock anticipated <10 feet bgs. Collect surface sample & 3 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	0.5	None indicated.	7/26/2013	Surface	SL-539A-SA8-SB-0.0-0.5	PCBs/PCTs EPA 8082
8_DG-539B			11.7	None indicated. Refusal on bedrock.	7/26/2013	Surface	SL-539B-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/26/2013	Subsurface	SL-539B-SA8-SB-2.0-3.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-539C			0.5	None indicated.	7/26/2013	Surface	SL-539C-SA8-SB-0.0-0.5	PCBs/PCTs EPA 8082
8_DG-539D			0.5	None indicated.	7/26/2013	Surface	SL-539D-SA8-SB-0.0-0.5	PCBs/PCTs EPA 8082
8_DG-540	Northeast of ESADA Former Pistol Range	Delineates northern extent of the ESADA Pistol Range Clearly Contaminated Area. Also serves as a stepout for dioxins, PAHs, cadmium, and TPH at SL-028-SA8N to the east and targets historic dirt road. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	15.8	None indicated. Refusal on bedrock.	7/26/2013	Surface	SL-540-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/26/2013	Subsurface	SL-540-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-541	South of ESADA Former Pistol Range	Characterizes hillslope south of ESADA former pistol range. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	18	None indicated. Refusal on bedrock.	8/9/2013	Surface	SL-541-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/9/2013	Subsurface	SL-541-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-542	Southeast of ESADA Former Pistol Range	Characterizes hillslope adjacent to disturbed soil area. Also targets historic dirt road and surface water pathway from the hillslope south of ESADA to the northeast. Location selected as a representative drainage location within Subarea 8N to assess the presence of pesticides and herbicides. Bedrock anticipated >10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	18.6	0-1.0 ft bgs: fill described as <5% igneous/metamorphic gravel, asphalt, and brick material. Refusal on bedrock.	9/26/2013	Surface	SL-542-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					9/26/2013	Subsurface	SL-542-SA8-SB-4.0-5.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					9/26/2013	Subsurface	SL-542-SA8-SB-9.0-10.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					9/26/2013	Subsurface	SL-542-SA8-SB-14.0-15.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					9/26/2013	Subsurface	SL-542-SA8-SB-17.5-18.5	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-543	South of Solar Concentrator Facility	Characterizes hillslope adjacent to disturbed soil area. Also targets historic dirt road. Bedrock anticipated >10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	15.1	None indicated. Refusal on bedrock.	8/13/2013	Surface	SL-543-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/13/2013	Subsurface	SL-543-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/13/2013	Subsurface (Duplicate)	SL-843-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015

Table 2-2
Soil Samples Designated to be Collected from Subarea 8 - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-544	East of ESADA Former Pistol Range	Delineates northeastern extent of ESADA Pistol Range Clearly Contaminated Area. Also serves as a stepout for dioxins, PAHs, cadmium, and TPH at SL-028-SA8N to the north and targets terrain conductivity fill anomaly and disturbed soil area. Conduct exploratory trench to investigate the terrain conductivity fill anomaly and the extent of disturbed soil. If fill, staining, debris, or other impacts are observed, collect sample targeting top of native soil. Bedrock anticipated ~10 feet bgs. Collect 10-foot sample and place on hold pending shallow results.	NA	NA	NA	Trench- To be sampled at a later date.	NA	NA
8_DG-545	South of Solar Concentrator Facility	Stepout for dioxins, PAHs, and TPH at SL-032-SA8N to the north. Also targets the southern boundary of the soil disturbance area. Conduct exploratory trench to investigate the extent of disturbed soil. If fill, staining, debris, or other impacts are observed, collect sample targeting top of native soil. Bedrock anticipated >10 feet bgs. Collect 10-foot sample and place on hold pending shallow results.	NA	NA	NA	Trench- To be sampled at a later date.	NA	NA
8_DG-546	South of Solar Concentrator Facility	Conduct exploratory trench to investigate debris area identified during 2008 debris survey. Also targets terrain conductivity anomaly. Fill anticipated based on previous sampling in the area and historical aerial photographs. Excavate until top of native soils encountered. Bedrock anticipated >10 feet bgs. No samples proposed since area previously characterized; collect samples if warranted based on field observations.	NA	NA	NA	Trench- To be sampled at a later date.	NA	NA
8_DG-547	Southwest of the Solar Concentrator Facility	Conduct exploratory trench to investigate debris area identified during 2008 debris survey. Also targets geophysical point anomaly. Fill anticipated based on previous sampling in the area and historical aerial photographs. Excavate until top of native soils encountered. Bedrock anticipated >10 feet bgs. No samples proposed since area previously characterized; collect samples if warranted based on field observations.	NA	NA	NA	Trench- To be sampled at a later date.	NA	NA
8_DG-548	West of the Solar Concentrator Facility	Conduct exploratory trench to investigate topographic low spot adjacent to the debris area identified during 2008 debris survey. Also targets terrain conductivity anomaly. Fill anticipated based on previous sampling in the area and historical aerial photographs. Excavate until top of native soils encountered. Bedrock anticipated >10 feet bgs. No samples proposed since area previously characterized; collect samples if warranted based on field observations.	NA	NA	NA	Trench- To be sampled at a later date.	NA	NA
8_DG-549	West of Solar Concetrator Facility	Stepout for dioxins, PAHs, and phthalates at SL-023-SA8N to the south. Also targets area adjacent to historic dirt road. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	16.2	None indicated. Refusal on bedrock.	7/30/2013	Surface	SL-549-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/30/2013	Subsurface	SL-549-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-550	South of B4056 Landfill	Targets the former lined drainage west of the former solar concentrator facility and completes vertical characterization of soils at SL-041-SA8N. Previous samples at this location analyzed at 4-foot and 9-foot depths. The location is adjacent to SL-046-SA8N, where dioxins, TPH, and PAHs were detected above the screening levels in accumulated sediments within the drainage. Bedrock anticipated >10 feet bgs. Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock. Samples collected at 5-foot and 10-foot depths will be analyze for TPH to complete the analytical suite at SL-041-SA8N.	18	None indicated. Refusal on bedrock.	7/22/2013	Surface	SL-550-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/22/2013	Subsurface	SL-550-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/22/2013	Subsurface	SL-550-SA8-SB-9.0-10.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/22/2013	Subsurface	SL-550-SA8-SB-14.0-15.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/22/2013	Subsurface	SL-550-SA8-SB-17.0-18.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-551	South of the Solar Concentrator Facility	Targets the former lined drainage south of the former solar concentrator facility. Bedrock anticipated >10 feet bgs. Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	19.8	None indicated. Refusal on bedrock.	7/23/2013	Surface	SL-551-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/23/2013	Subsurface	SL-551-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/23/2013	Subsurface (Duplicate)	SL-851-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/23/2013	Subsurface	SL-551-SA8-SB-9.0-10.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/23/2013	Subsurface	SL-551-SA8-SB-14.0-15.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/23/2013	Subsurface	SL-551-SA8-SB-19.0-20.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-552	East of the Solar Concentrator Facility	Targets the former lined drainage east of the former solar concentrator facility. Also serves as a stepout for TPH (deep) at SL-040-SA8N to the east. Bedrock anticipated >10 feet bgs. Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	8.6	None indicated. Refusal on bedrock.	8/2/2013	Surface	SL-552-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/2/2013	Subsurface	SL-552-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/2/2013	Subsurface	SL-552-SA8-SB-7.5-8.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-553	Northeast of the Solar Concentrator Facility	Targets the former lined drainage northeast of the former solar concentrator facility. Location selected as a representative drainage location within Subarea 8N to assess the presence of pesticides and herbicides. Bedrock anticipated >10 feet bgs. Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	19	None indicated. Refusal on bedrock.	8/27/2013	Surface	SL-553-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/27/2013	Subsurface	SL-553-SA8-SB-4.0-5.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					8/27/2013	Subsurface	SL-853-SA8-SB-4.0-5.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					8/28/2013	Subsurface	SL-553-SA8-SB-9.0-10.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					8/28/2013	Subsurface	SL-553-SA8-SB-14.0-15.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					8/28/2013	Subsurface	SL-553-SA8-SB-18.0-19.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-554	Solar Concentrator Facility	Characterizes the operational area on the downslope side of the Concentrator Facility. Bedrock anticipated >10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	11.7	None indicated. Refusal on bedrock.	7/22/2013	Surface	SL-554-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/22/2013	Subsurface	SL-554-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Table 2-2
Soil Samples Designated to be Collected from Subarea 8 - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-555	Solar Concentrator Facility	Targets the location of the former Solar Concentrator Facility. Bedrock anticipated >10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	19.8	None indicated. Refusal on bedrock.	7/23/2013	Surface	SL-555-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/23/2013	Subsurface	SL-555-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-556	Southwest of the Solar Concentrator Facility	Targets area adjacent to B4425 (storage shed). Bedrock anticipated >10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	11.9	None indicated. Refusal on bedrock.	7/22/2013	Surface	SL-556-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/22/2013	Subsurface	SL-556-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-557A	Former Transformer Pole X-32 north of Solar Concentrator Facility	Previous sample was a composite of four discrete samples with ND result. Transformers in Area IV with previous ND results are being re-sampled with discrete samples. Re-collect samples at four former discrete locations and analyze each sample for PCBs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	0.5	None indicated.	7/23/2013	Surface	SL-557A-SA8-SB-0.0-0.5	PCBs/PCTs EPA 8082
8_DG-557B			0.5	None indicated.	7/23/2013	Surface	SL-557B-SA8-SB-0.0-0.5	PCBs/PCTs EPA 8082
8_DG-557C			0.5	None indicated.	7/23/2013	Surface	SL-557C-SA8-SB-0.0-0.5	PCBs/PCTs EPA 8082
8_DG-557D			0.5	None indicated.	7/23/2013	Surface	SL-557D-SA8-SB-0.0-0.5	PCBs/PCTs EPA 8082
8_DG-558	East of the Solar Concentrator Facility	Stepout for dioxins, PAHs, and TPH at SL-040-SA8N to the southwest. Also targets the northwest portion of the estimated area of the drop zone of depleted uranium slugs reportedly dropped in the 1960s identified in the EPA TM and a disturbed soil area. Bedrock anticipated >10 feet bgs. Analyze 10-foot and 15-foot sample to stepout from TPH in 9-foot sample at SL-040-SA8N.	13.5	None indicated. Refusal on bedrock.	8/2/2013	Surface	SL-558-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/2/2013	Subsurface	SL-558-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/2/2013	Subsurface	SL-558-SA8-SB-9.0-10.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/2/2013	Subsurface	SL-558-SA8-SB-12.5-13.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-559	East of the Solar Concentrator Facility	Stepout for dioxins and PCBs at SL-199-SA5DN to the southeast. Also targets the disturbed soil area. Bedrock anticipated >10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	13	None indicated. Refusal on bedrock.	8/2/2013	Surface	SL-559-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/2/2013	Subsurface	SL-559-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-560	Northwest of the Solar Concentrator Facility	Targets the unidentified structure located north of H Street that was identified in historical aerial photo (photo SS-812, no date). Also serves as a stepout for TPH at SL-089-SA8N to the northeast. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	9	None indicated. Refusal on bedrock.	7/30/2013	Surface	SL-560-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/30/2013	Subsurface	SL-560-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-561	West of B4009	Stepout for dioxins and TPH at SL-079-SA8N to the southwest. Also targets area adjacent to the historical dirt road shown in 1980 aerial photo. Bedrock anticipated >10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	8.2	None indicated. Refusal on bedrock.	7/9/2013	Surface	SL-561-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/9/2013	Subsurface	SL-561-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-562	West of B4009	Stepout for dioxins and TPH at SL-079-SA8N to the northeast. Also targets historic dirt road. Bedrock anticipated >10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	2.1	None indicated. Refusal on bedrock.	7/9/2013	Surface	SL-562-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-563	Northwest of B4009	Targets historic dirt road and surface water pathway. Bedrock anticipated <5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	2.8	None indicated. Refusal on bedrock.	7/9/2013	Surface	SL-563-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/9/2013	Subsurface	SL-563-SA8-SB-2.0-3.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-564	Northwest of B4009	Stepout for TPH at SL-102-SA8N to the east and dioxins at SL-090-SA8N to the southwest. Also targets drainage downslope from ESADA. Location selected as a representative drainage location within Subarea 8N to assess the presence of pesticides and herbicides. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	0.7	None indicated. Refusal on bedrock.	8/6/2013	Surface	SL-564-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
8_DG-565	Southeast of B4009	Stepout for cadmium and mercury at 92-886-2-1 to the northwest. Bedrock anticipated <5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	11	None indicated. Refusal on bedrock.	8/8/2013	Surface	SL-565-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/8/2013	Subsurface	SL-565-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-566	Southwest of B4009	Characterizes hillslope south of B4009. Also targets historical dirt road. Bedrock anticipated >10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	11.4	None indicated. Refusal on bedrock.	8/7/2013	Surface	SL-566-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/7/2013	Subsurface	SL-566-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-567	South of B4009	Characterizes the lined drainage north of Arness Fire Road. Location selected as a representative drainage location within Subarea 8N to assess the presence of pesticides and herbicides. Bedrock anticipated >10 feet bgs. Collect and analyze shallow sample just below the concrete lining, then collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	12.4	None indicated. Refusal on bedrock.	8/8/2013	Surface	SL-567-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/8/2013	Subsurface	SL-567-SA8-SB-4.0-5.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/8/2013	Subsurface	SL-567-SA8-SB-9.0-10.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-568	South of B4009	Targets the lined drainage south of B4009. Also characterizes the area adjacent to the outside storage along fence observed in aerial photos and area southwest of former UT-3. Bedrock anticipated >10 feet bgs. Collect and analyze shallow sample just below concrete lining, then collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	5	0-2.0 ft bgs: fill described as 1% asphalt. Refusal on bedrock.	8/5/2013	Surface	SL-568-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/5/2013	Subsurface	SL-568-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-569	Southwest of B4009	Targets the lined drainage southwest of B4009. The location is adjacent to SL-108-SA8N, where dioxins, TPH, PAHs, and zinc were detected above the screening levels in accumulated sediments within the drainage. Collect and analyze shallow sample just below concrete lining, then collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	7.9	0-1.0 ft bgs: fill described as 2% asphalt. Refusal on bedrock.	8/5/2013	Surface	SL-569-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/5/2013	Subsurface	SL-569-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/5/2013	Subsurface	SL-569-SA8-SB-7.0-8.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-570	Southwest of B4009	Characterizes the operational area southwest of B4009. Also targets a historic dirt road. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	10	0-3.8 ft bgs: fill described as 100% clay. Refusal on bedrock.	7/11/2013	Surface	SL-570-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/11/2013	Subsurface	SL-570-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Table 2-2
Soil Samples Designated to be Collected from Subarea 8 - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-571	Southwest of B4009	Characterizes operational area southwest of B4009 and targets the former location of the southern ISI storage trailer and historic dirt road. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	13.5	0-6.5 ft bgs: fill described as 100% decomposed granitic clay. Refusal on bedrock.	7/10/2013	Surface	SL-571-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/10/2013	Subsurface	SL-571-SA8-SB-6.5-7.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/10/2013	Subsurface	SL-571-SA8-SB-12.5-13.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-572	South of B4009	Characterizes area southwest of former UT-3. Also characterizes operational area south of B4009. Based on proximity to former UT-3, collect samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock. VOCs added due to proximity to potential groundwater impact location. Bedrock anticipated <20 feet bgs. Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	19.3	0-3.8 ft bgs: fill described as 100% decomposed granitic clay. Refusal on bedrock.	7/10/2013	Surface	SL-572-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/10/2013	Subsurface	SL-572-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/10/2013	Subsurface	SL-572-SA8-SB-9.0-10.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/10/2013	Subsurface	SL-572-SA8-SB-14.0-15.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/10/2013	Subsurface	SL-572-SA8-SB-18.5-19.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015, VOC EPA 8260
8_DG-573	Southeast of B4009	Targets doorway at the southwest portion of B4009 and the location where the former UT-3 fuel pipeline entered B4009. Also characterizes area northwest of former UT-3. Based on proximity to former UT-3, collect samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock. VOCs added due to proximity to potential groundwater impact location. Bedrock anticipated ~15 feet bgs. Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	10.4	0-3.8 ft bgs: fill described as 100% road and decomposed granitic clay. Refusal on bedrock.	7/10/2013	Surface	SL-573-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/10/2013	Subsurface	SL-573-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/10/2013	Subsurface	SL-573-SA8-SB-9.5-10.5	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015, VOC EPA 8260
8_DG-574	Southeast of B4009	Characterizes area northeast of former UT-3. Also characterizes operational area southeast of B4009 and targets historic dirt road. Based on proximity to former UT-3, collect samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock. VOCs added due to proximity to potential groundwater impact location. Bedrock anticipated ~15 feet bgs. Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	15.2	0-7.4 ft bgs: fill described as 100% compacted clay. 0-0.5ft bgs: fill described at 100% angular road mix/asphalt.	7/11/2013	Surface	SL-574-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/11/2013	Subsurface	SL-574-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/11/2013	Subsurface	SL-574-SA8-SB-9.0-10.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/11/2013	Subsurface	SL-574-SA8-SB-14.0-15.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015, VOC EPA 8260
					7/11/2013	Subsurface (Duplicate)	SL-874-SA8-SB-14.0-15.0	Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015, VOC EPA 8260

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-575	East of B4009	Targets the lined drainage east of B4009 and serves as a stepout for TPH (deep) at SL-004-SA5DN to the northeast. Collect sample just below concrete lining. Also targets area adjacent to outside storage along fence observed in aerial photos and northeast of former UT-3. Location selected as a representative drainage location within Subarea 8N to assess the presence of pesticides and herbicides. Bedrock anticipated ~15 feet bgs. Collect and analyze shallow sample just below the concrete lining, then collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock and delineate lateral extent of impacts from former UST.	10.7	None indicated. Refusal on bedrock.	8/7/2013	Surface	SL-575-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/7/2013	Subsurface	SL-575-SA8-SB-4.0-5.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/7/2013	Subsurface	SL-575-SA8-SB-9.0-10.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-577	Northeast of B4009	Conduct exploratory trench to address uncertainty regarding location of a septic tank identified on a facility drawing. Previous geophysical surveys and soil borings did not find evidence of a septic tank in the location identified on the drawing. Also characterizes the operational area northeast of B4009 and the former location of the northern ISI storage trailer. If fill, staining, debris, or other impacts are observed, collect sample targeting top of native soil. Tetralin and biphenyls added to general characterization suite due to potential use in reactor operations. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock since targeting a septic tank to assess potential vertical migration to bedrock.	NA	NA	NA	Trench- To be sampled at a later date.	NA	NA
8_DG-578	North of B4009	Targets the location where the former SGR hold-up tank (UT-4) pipeline entered B4009. Also serves as a stepout for PAHs and TPH at L0BS0012 to the northeast. Tetralin and biphenyls added to general characterization suite due to potential use in reactor operations. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock since targeting a subsurface pipeline to assess potential vertical migration to bedrock.	9.4	0-8.2 ft bgs: fill described as 100% clay with sand aggregate. Refusal on bedrock.	7/12/2013	Surface	SL-578-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, SVOC EPA 8270, TIC EPA 8270, TPH-EFH EPA 8015, pH EPA 9045
					7/12/2013	Subsurface	SL-578-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TIC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/12/2013	Subsurface (Duplicate)	SL-878-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TIC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/12/2013	Subsurface	SL-578-SA8-SB-9.0-10.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TIC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-579	Northeast of B4009	Conduct exploratory trench to confirm that UT-4 was removed. UT-4 reportedly removed and the vault filled with concrete. Concrete was encountered during prior attempts to sample the location of UT-4. If a concrete vault encountered, excavate along one side of the vault and collect a sample of native soil at a depth just below the bottom of the vault. Tetralin and biphenyls added to general characterization suite due to potential use in reactor operations. VOCs added due to proximity to potential groundwater impact location. Bedrock anticipated ~10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock since targeting a UST to assess potential vertical migration to bedrock.	NA	NA	NA	Trench- To be sampled at a later date.	NA	NA
8_DG-580	North of B4009	Targets the location where the SGR hold-up tank (UT-4) pipeline leads to the B4009 Leach Field. Also serves as a stepout for PAHs and TPH at L0BS0012 to the southeast. Tetralin and biphenyls added to general characterization suite due to potential use in reactor operations. Bedrock anticipated ~10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock since targeting a subsurface pipeline to assess potential vertical migration to bedrock.	11.6	0-9.5ft bgs: fill described as 100% clay. Refusal on bedrock.	7/12/2013	Surface	SL-580-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, SVOC EPA 8270, TIC EPA 8270, TPH-EFH EPA 8015, pH EPA 9045
					7/12/2013	Subsurface	SL-580-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TIC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					7/12/2013	Subsurface	SL-580-SA8-SB-10.5-11.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, SVOC EPA 8270, TIC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Table 2-2
Soil Samples Designated to be Collected from Subarea 8 - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-581	Northeast of B4009	Stepout for dioxins and TPH at SL-129-SA8N to the northeast and PAHs and TPH at L0BS0012 to the southwest. Also characterizes area downslope of B4009. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	5.8	None indicated. Refusal on bedrock.	7/12/2013	Surface	SL-581-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/12/2013	Subsurface	SL-581-SA8-SB-4.5-5.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-582	North of B4009	Stepout for dioxins and TPH at SL-101-SA8N to the northwest, PAHs, antimony, and mercury at L0TS01S03 to the west, antimony and mercury at L0TS01S01 to the southwest, and TPH at L0BS0017 to the southwest. Also characterizes the area to the east of the B4009 Leach Field. VOCs added due to proximity to potential groundwater impact location. Bedrock anticipated ~10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	3.5	None indicated. Refusal on bedrock.	8/6/2013	Surface	SL-582-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/6/2013	Subsurface	SL-582-SA8-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015, VOC EPA 8260
8_DG-583	Northeast of B4009	Stepout for dioxins and TPH at SL-101-SA8N to the southeast, TPH at SL-102-SA8N to the southwest, and PAHs, antimony, and mercury at L0TS01S03 to the south. Also targets the surface water pathway downslope of the B4009 Leach Field. Tetralin and biphenyls added to general characterization suite due to potential use in reactor operations. Location selected as a representative drainage location within Subarea 8N to assess the presence of pesticides and herbicides. VOCs added due to proximity to potential groundwater impact location. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential lateral migration along bedrock.	1.4	None indicated. Refusal on bedrock.	8/6/2013	Surface	SL-583-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, SVOC EPA 8270, TIC EPA 8270, TPH-EFH EPA 8015, pH EPA 9045
					8/6/2013	Surface	SL-883-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, SVOC EPA 8270, TIC EPA 8270, TPH-EFH EPA 8015, pH EPA 9045
8_DG-584	North of B4009	Targets debris identified during the 2008 debris survey. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	1.7	None indicated. Refusal on bedrock.	8/6/2013	Surface	SL-584-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-585	Southwest of B4056 Landfill	Characterizes hillslope southwest of the B4056 Landfill. Location will also assess potential air dispersion impacts related to burning activities at the B4100 Trench and is located northwest of the B4100 Trench in the prevailing wind direction. Location is one of five locations proposed that will assess this migration pathway, the others include 8_DG-88, 8_DG-89, 8_DG-91, and 8_DG-92. Additional sampling to address this pathway will also be proposed in the Northern Buffer Zone Subarea. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	2	None indicated. Refusal on bedrock.	8/12/2013	Surface	SL-585-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-586	South of the B4056 Landfill	Stepout for dioxins, phthalates, and TPH at SL-127-SA8N to the southeast, dioxins at 5C_DG-588 to the south and BHBS1005 to the southeast, dioxins, PAHs, PCBs, TPH, antimony, and mercury at 5C_DG-586 to the southwest, and dioxins and TPH at SL-128-SA8N to the southwest. Also characterizes low spot downslope of B4100 just before surface water enters the drainage. Bedrock anticipated <5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	1.7	None indicated. Refusal on bedrock.	7/8/2013	Surface	SL-586-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-587	South of B4056 Landfill	Stepout for dioxins at BHBS1005 and dioxins, antimony, and zinc at 5C_DG-592 to the southwest. Also targets a historic dirt road. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	7.7	None indicated. Refusal on bedrock.	7/12/2013	Surface	SL-587-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/12/2013	Subsurface	SL-587-SA8-SB-6.5-7.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-588	South of B4056 Landfill	Location will assess potential air dispersion impacts related to burning activities at the B4100 Trench and is located northwest of the B4100 Trench in the prevailing wind direction. Location is one of five locations proposed that will assess this migration pathway, the others include 8_DG-85, 8_DG-89, 8_DG-91, and 8_DG-92. Additional sampling to address this pathway will also be proposed in the Northern Buffer Zone Subarea. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	3.3	None indicated. Refusal on bedrock.	7/8/2013	Surface	SL-588-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, TPH-EFH EPA 8015, pH EPA 9045
					7/8/2013	Surface (Duplicate)	SL-888-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, TPH-EFH EPA 8015, pH EPA 9045
					7/8/2013	Subsurface	SL-588-SA8-SB-2.0-3.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Perchlorate Confirmation EPA 6850/6860, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-589	South of the B4056 Landfill	Characterizes the area downslope of the Southern Screening Area and the Roadside Debris Area previously identified in the Group 8 RFI SAP. The Southern Screening Area is a new potential fill area identified ("Loose Earth Fill") in historical drawing that associated the area with the Building 4056 Landfill. Also targets a historic dirt road. Location will assess potential air dispersion impacts related to burning activities at the B4100 Trench and is located northwest of the B4100 Trench in the prevailing wind direction. Location is one of five locations proposed that will assess this migration pathway, the others include 8_DG-85, 8_DG-88, 8_DG-91, and 8_DG-92. Additional sampling to address this pathway will also be proposed in the Northern Buffer Zone Subarea. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	3.7	None indicated. Refusal on bedrock.	7/30/2013	Surface	SL-589-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/30/2013	Subsurface	SL-589-SA8-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-590	West of the B4056 Landfill	Characterizes drainage north of B4009 that leads to the administrative boundary. Completes the analytical suite at L0BS0003, which was previously sampled for metals only at 0.5 feet bgs. Location selected as a representative drainage location within Subarea 8N to assess the presence of pesticides and herbicides. Bedrock anticipated ~10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	8.3	None indicated. Refusal on bedrock.	8/12/2013	Surface	SL-590-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015
					8/12/2013	Subsurface	SL-590-SA8-SB-4.0-5.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/12/2013	Subsurface	SL-590-SA8-SB-7.0-8.0	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-591	West of the B4056 Landfill	Characterizes the hillslope west of the B4056 Landfill Clearly Contaminated Area and targets surface water pathway downslope of B4009. Location will also assess potential air dispersion impacts related to burning activities at the B4100 Trench and is located northwest of the B4100 Trench in the prevailing wind direction. Location is one of five locations proposed that will assess this migration pathway, the others include 8_DG-85, 8_DG-88, 8_DG-89, and 8_DG-92. Additional sampling to address this pathway will also be proposed in the Northern Buffer Zone Subarea. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical lateral migration to bedrock.	1.5	None indicated.	8/12/2013	Surface	SL-591-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-592	West of the B4056 Landfill	Characterizes the hillslope west of the B4056 Landfill Clearly Contaminated Area and targets surface water pathway downslope of B4009. Location will also assess potential air dispersion impacts related to burning activities at the B4100 Trench and is located northwest of the B4100 Trench in the prevailing wind direction. Location is one of five locations proposed that will assess this migration pathway, the others include 8_DG-85, 8_DG-88, 8_DG-89, and 8_DG-92. Additional sampling to address this pathway will also be proposed in the Northern Buffer Zone Subarea. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical lateral migration to bedrock.	4.4	None indicated. Refusal on bedrock.	8/12/2013	Surface	SL-592-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/12/2013	Subsurface	SL-592-SA8-SB-3.5-4.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-593	West of B4056 Landfill	Delineates western extent of the B4056 Landfill Clearly Contaminated Area and targets a low spot within the drainage. Bedrock anticipated <5 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	7.1	None indicated. Refusal on bedrock.	8/12/2013	Surface	SL-593-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/12/2013	Subsurface	SL-593-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015

Table 2-2
Soil Samples Designated to be Collected from Subarea 8 - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-594	Southwest of the B4056 Pit	Delineates eastern extent of the B4056 Landfill Clearly Contaminated Area. Also targets historic dirt road. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	0.4	None indicated. Refusal on bedrock.	8/15/2013	Surface	SL-594-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-595	Southeast of the B4056 Pit	Characterizes the area southeast of the B4056 Pit. Bedrock anticipated ~5 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	1	None indicated. Refusal on bedrock.	8/15/2013	Surface	SL-595-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-596	Northeast of B4056 Landfill	Delineates the northeastern extent of the B4056 Landfill Clearly Contaminated Area. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	2.5	None indicated. Refusal on bedrock.	7/30/2013	Surface	SL-596-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-597	Northeast of B4056 Landfill	Delineates the northeastern extent of the B4056 Landfill Clearly Contaminated Area. Also, serves as a stepout for TPH at SL-119-SA8N to the southwest. Bedrock anticipated <5 feet bgs. Collect surface only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	2.7	None indicated. Refusal on bedrock.	8/15/2013	Surface	SL-597-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
8_DG-598	Southwest of FSDF	Stepout for phthalate at SL-017-SA8S to the northwest. Bedrock anticipated ~5 feet bgs. Collect surface only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	5.1	None indicated. Refusal on bedrock.	7/31/2013	Surface	SL-598-SA8-SB-0.0-0.5	PAH EPA 8270 SIM
					7/31/2013	Subsurface	SL-598-SA8-SB-4.5-5.5	PAH EPA 8270 SIM
8_DG-599	Southwest of FSDF	Stepout for dioxins and PCBs at SL-018-SA8S to the northeast. Also targets historic dirt road. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	4.1	None indicated. Refusal on bedrock.	7/31/2013	Surface	SL-599-SA8-SB-0.0-0.5	Dioxins EPA 1613, PCBs/PCTs EPA 8082
					7/31/2013	Subsurface	SL-599-SA8-SB-3.0-4.0	Dioxins EPA 1613, PCBs/PCTs EPA 8082
8_DG-600	Northwestern Portion of Hillslope	Characterizes hillslope west of ESADA. Also targets area adjacent to dirt road. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	15.3	None indicated. Refusal on bedrock.	8/14/2013	Surface	SL-600-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/14/2013	Subsurface	SL-600-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-601	Northwestern Portion of Hillslope	Characterizes hillslope west of ESADA. Also targets area adjacent to dirt road. Location will also assess potential air dispersion impacts related to burning and treatment activities at the former FSDF ponds and is located southwest of FSDF in the periodic 'Santa Ana' wind direction. Location is one of six locations proposed that will assess this migration pathway, the others include 8_DG-21 and four 'future' samples located west of the Area IV boundary. Two of the future locations are in drainages (8_DG-118 and 8_DG-120) to evaluate the potential for subsequent surface water transport of aerially deposited contaminants. Additional sampling to address this pathway will also be proposed in the Northern Buffer Zone Subarea. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	20	None indicated. Refusal on bedrock.	7/18/2013	Surface	SL-601-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/18/2013	Subsurface	SL-601-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-602	Northeastern Portion of Hillslope	Characterizes hillslope west of ESADA. Also targets area adjacent to dirt road. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	12.6	None indicated. Refusal on bedrock.	8/14/2013	Surface	SL-602-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/14/2013	Subsurface	SL-602-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-603	Northwestern Portion of Hillslope	Vertical delineation of thallium at BKND-1. Deep sample at this location not previously collected. Bedrock anticipated <10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	1.7	None indicated. Refusal on bedrock.	NA	NA	NA	No sample collected due to shallow refusal.

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-604	Central Portion of Hillslope	Targets mineralized area near SL-005-SA8S and SL-007-SA8S to provide additional metals and inorganic data to evaluate if the potential source of elevated strontium detections above screening levels on the Subarea 8 Hillslope are related to the mineralization of geologic feature and are naturally occurring (e.g., associated as a trace element in the calcium carbonate). Location will be based on field observation of mineralization. Collect a sample of minerals present on the ground surface and analyze for metals and inorganics.	3.4	None indicated. Refusal on bedrock (CaCO3).	8/29/2013	Surface	SL-604-SA8-SB-0.0-0.5	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, pH EPA 9045
					8/29/2013	Surface (Duplicate)	SL-904-SA8-SB-0.0-0.5	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, pH EPA 9045
8_DG-605	Central Portion of Hillslope	Targets mineralized area near SL-005-SA8S and SL-007-SA8S to provide additional metals and inorganic data to evaluate if the potential source of elevated strontium detections above screening levels on the Subarea 8 Hillslope are related to the mineralization of geologic feature and are naturally occurring (e.g., associated as a trace element in the calcium carbonate). Location will be based on field observation of mineralization. Collect a sample of minerals present on the ground surface and analyze for metals and inorganics.	1.4	None indicated. Refusal on bedrock (CaCO3).	8/29/2013	Surface	SL-605-SA8-SB-0.0-0.5	Fluoride EPA 300/9056, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, pH EPA 9045
8_DG-606	Eastern Portion of Hillslope	Targets debris identified during 2008 debris survey. Also characterizes hillslope south of the ESADA. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	10.5	None indicated. Refusal on bedrock.	7/19/2013	Surface	SL-606-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/19/2013	Subsurface	SL-606-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-607	Eastern Portion of Hillslope	Characterizes hillslope south of the ESADA. Also serves as a stepout for pesticides at SL-023-SA8S to the southwest and targets dirt road and surface water pathway. Location selected as a representative drainage location within Subarea 8N to assess the presence of pesticides and herbicides. Bedrock anticipated ~10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	6.3	None indicated. Refusal on bedrock.	8/9/2013	Surface	SL-607-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/9/2013	Subsurface	SL-607-SA8-SB-5.0-6.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-608	Eastern Portion of Hillslope	Characterizes hillslope southeast of the ESADA. Also targets historic dirt road and surface water flow pathway. Bedrock anticipated ~10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	8	None indicated. Refusal on bedrock.	8/1/2013	Surface	SL-608-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/1/2013	Subsurface	SL-608-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/1/2013	Subsurface	SL-608-SA8-SB-7.0-8.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-609	Eastern Portion of Hillslope	Characterizes hillslope southeast of the ESADA. Also targets historical dirt road. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	7	None indicated. Refusal on bedrock.	8/13/2013	Surface	SL-609-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/13/2013	Subsurface	SL-609-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-610	Eastern Portion of Hillslope	Characterizes hillslope southeast of ESADA and targets surface water pathway adjacent to historic dirt road. Location selected as a representative drainage location within Subarea 8N to assess the presence of pesticides and herbicides. Bedrock anticipated <10 feet bgs. Collect and analyze deepest sample targeting soil just above bedrock to assess potential vertical migration to bedrock.	7.8	None indicated. Refusal on bedrock.	8/1/2013	Surface	SL-610-SA8-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					8/1/2013	Subsurface	SL-610-SA8-SB-4.0-5.0	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					8/1/2013	Subsurface	SL-610-SA8-SB-6.8-7.8	Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015

Table 2-2
Soil Samples Designated to be Collected from Subarea 8 - Phase 3

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
8_DG-611	Southern Portion of Hillslope	Characterizes hillslope southeast of the ESADA and targets debris area identified during the 2008 debris survey. Conduct exploratory test pit to investigate debris area. If fill, staining, debris, or other impacts are observed, collect sample targeting top of native soil. Bedrock anticipated <10 feet bgs. If deep soils encountered, sample and place on hold pending shallow results.	NA	NA	NA	Test Pit- To be sampled at a later date.	NA	NA
8_DG-612	Southern Portion of Hillslope	Characterizes hillslope southeast of the ESADA. Also targets historical dirt road. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	5.8	None indicated. Refusal on bedrock.	7/30/2013	Surface	SL-612-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/30/2013	Subsurface	SL-612-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
8_DG-613	Southern Portion of Hillslope	Characterizes hillslope southeast of the ESADA. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	16	None indicated. Refusal on bedrock.	8/14/2013	Surface	SL-613-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/14/2013	Subsurface	SL-613-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-614	Southern Portion of Hillslope	Characterizes hillslope southeast of the ESADA. Also targets historical dirt road. Bedrock anticipated ~10 feet bgs. Collect surface sample & 5 ft. only and drill to bedrock or refusal. If fill/staining/disturbance/PID hit encountered, sample deeper intervals. Sample fill/native contact and/or default sample depths.	6	None indicated. Refusal on bedrock.	8/13/2013	Surface	SL-614-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					8/13/2013	Subsurface	SL-614-SA8-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
8_DG-615	Southeast of B4009	Characterizes area southeast of former UT-3. Based on proximity to former UT-3, collect samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock. VOCs added due to proximity to potential groundwater impact location. Bedrock anticipated <20 feet bgs. Collect and analyze samples at 5-foot intervals to bedrock with deepest sample collected just above bedrock to assess potential vertical migration to bedrock.	1.8	None indicated.	8/27/2013	Surface	SL-615-SA8-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045

Notes & Abbreviations:

Ag = Silver
AST = Above-ground Storage Tank
B(a)P = benzo (a) pyrene
BG = Background
bgs = below ground surface
CCA = Clearly Contaminated Area
Cd = Cadmium
Cr (VI) = hexavalent chromium
DG = Data Gap
EFH = extractable fuel hydrocarbons
EPA = Environmental Protection Agency
EPA TM = Environmental Protection Agency Technical Memo
ESA = Environmentally Sensitive Area
ESADA = Eastern States Atomic Development Agency
ESG = Energy Systems Group
DTSC = Department of Toxic Substances Control
FD = field duplicate sample
FSDF = Former Sodium Disposal Facility
ft = feet
GRO = gasoline range organics
Hg = mercury
HSA = Historical Site Assessment
ISL = interim screening level
L = liter
N = normal sample
ng/kg = nanogram per kilogram
ND = nondetect
NDMA = n-Nitrosodimethylamine
Ni = Nickel
NCY = New Conservation Yard
PDU = Process Development Unit
PID = Photoionization Detector
PAH = polyaromatic hydrocarbon
PCB = polychlorinated biphenyl
PCT = polychlorinated triphenyl
PGRAY = potential gamma radiation anomaly
ppb = parts per billion
ppm = parts per million
RFI = Facility Investigation Reports
ppt = part per trillion
RL = reporting limit
SL = Sample Location
SPTF = Sodium Pump Test Facility
SRE = Sodium Reactor Experiment
TEQ = toxicity equivalency factor
TM = technical memorandum
TPH = total petroleum hydrocarbons
UST = underground storage tank
SNAP RFI, 2008 = Systems for Nuclear Auxiliary Power
VOC = Volatile Organic Carbon
Samples not collected

After the samples were collected and labeled "Top" and "Bottom," adhesive sample labels completed with all sampling information were affixed to all sample sleeves and jars, which were then placed into plastic zip top bags and stored in a cooler with double bagged ice until the samples were relinquished to the project sample coordinator or field team leader (FTL). Each surface sample was to be analyzed for the analytes identified for each sample location as indicated in Table 1 of the Subareas 5D and 8 Data Gap Analysis TMs (CDM Smith 2013a and 2013b).

Two locations in Subarea 8 were collected as grab samples. The locations targeted the mineralized areas on the hill slope south of ESADA to evaluate potential source of elevated strontium detections. Calcium carbonate minerals within the Santa Susana Fm were identified on the hill slope by the FTL and sample locations determined based on best mineral exposure. Several distinct mineral samples were collected and placed in 16 ounce glass jars for analysis. All grab samples were screened for radioactivity using a Micro R Survey Meter (for gamma radiation) and a Pancake Frisker Detector (for alpha and beta radiation), followed by screening with a PID as directed in SSFL SOP 7 (Field Measurement of Residual Radiation). The mineral sample locations in Subarea 8 are shown on Figure 2-2.

Four surface locations in Subarea 8 were collected and homogenized in accordance with the DTSC recommended method. Following homogenization, the soil was split between CDM Smith and the DTSC representative onsite during sample collection. Each set of samples were sent to different laboratories and analyzed for metals by Method Environmental Protection Agency (EPA) 6010, 6020 and 7471. The split sample locations in Subarea 8 are shown on Figure 2-2.

2.2 Subsurface Sampling

Most of the subsurface soil sampling was performed by a California-licensed DPT subcontractor under CDM Smith oversight and in accordance with SSFL SOP 4 (Direct Push Technology [DPT] Sampling) of the Master FSP (CDM Smith 2012a). The majority of the Phase 3 DPT borings in Subareas 5D and 8 were advanced to depths of between approximately 3 and 10 feet bgs. Tables 2-1 and 2-2 provide the actual depths reached at each location. Appendix E also provides the specific boring log for each sample.

Soil cores were collected using the DPT dual-tube sampling method, which consists of a 2-inch outer steel drive casing and an inner 1¾-inch diameter acetate soil sampling sleeve. After the liner was retracted from the core barrel, it was opened lengthwise with a cutting tool. Samples were collected from the acetate sleeve by the CDM Smith sample technician at the depths specified in Table 1 of the Subarea 5D and 8 Data Gap Analysis TM. Samples were also collected from any depths where the PID detected concentrations above background or where there was visual evidence of possible contamination.

Soil for total petroleum hydrocarbons-gasoline range organics (TPH-GRO) and TPH-Extractable Fuel Hydrocarbons (EFH) analyses was collected from the acetate sleeve using EnCore® samplers. Subsurface soil for semivolatile organic compound (SVOC) polycyclic aromatic hydrocarbon (PAH), and polychlorinated biphenyl/polychlorinated triphenyl (PCB/PCT) analyses was removed from the acetate sleeve in a manner causing minimal soil disturbance and placed into glass jars (ranging from four ounces to 16 ounces depending on volume of soil needed for the required analyses). Soil for all non-volatile analyses was also placed into glass jars. Adhesive sample labels were completed with all sampling information and affixed to each sample jar, and then placed into plastic zip top bags. The EnCore® samplers were placed into the bags in which they were received (three samplers per bag),

and the sample label affixed to the outside of the bag. All jars and EnCore® samplers were placed in a cooler with double bagged ice.

Several subsurface locations were not accessible by the DPT rig and borings at these locations were advanced using a hand auger. Each location was augered to the required sample depth and every foot of augered soil was retrieved to the surface, placed in plastic bags and screened using the Micro R, Pancake, and PID. All borings were sampled in accordance with SSFL SOP 3 (Subsurface Soil Sampling with Hand Auger) of the Master FSP (CDM Smith 2012a), using a slide hammer equipped with stainless steel sleeves. Any EnCore® samplers needed were filled from the bottom end of the sleeve, and the sleeve was capped and submitted for the required analyses. This process was repeated at those locations where deeper samples were also to be collected.

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

2.3 Sample Handling

All soil samples were relinquished by the field sample technician or geologist to CDM Smith's FTL or sample coordinator. The FTL or sample coordinator reviewed the completed FSDS for each submitted soil sample and ensured that the sample labels were legible and correct and that the sample labels matched the information on the FSDS. Any discrepancies were discussed with the field sample technicians and corrections to the sample labels and/or FSDS were made as needed. All sample labels were covered with clear tape, the sleeves and jars placed back into their plastic zip top bag, and refrigerated.

All sampling information on the FSDS was input into the Scribe electronic database by the sampling coordinator and one or more chain-of-custody (CoC) forms were generated at the end of the day from the database. The FTL reviewed each CoC, corrected any discrepancies, and reprinted the CoC, as needed. All CoCs for the Phase 3 Subarea 5D and 8 sampling activities are presented in Appendix F. Each completed CoC was signed by the field sample technician and the FTL as the individual responsible for release of the samples to the courier. All samples were packed into coolers and shipped in accordance with SSFL SOP 11 (Packaging and Shipping Environmental Samples).

2.4 Field Quality Control Procedures

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

2.4.1 Field Duplicates and MS/MSD Samples

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

During sampling in Subarea 5D, a total of 16 field duplicates and MS/MSD samples were collected equating to approximately eight percent. In Subarea 8, a total of 13 duplicate and MS/MSD samples

were collected equating to approximately six percent. On an individual method basis, the five percent goal was met or exceeded for all analyses.

2.4.2 Equipment Rinsate Blank Samples

Equipment rinsate blanks were collected weekly for both surface and subsurface samples regardless of the number of soil samples collected. A total of 25 equipment rinsate blank samples were collected and analyzed for all the same analytical parameters as the soil samples.

2.4.3 Field Blank Samples

Field blanks were collected once for each lot number of ASTM International Type II water that was used for decontamination. One field blank was collected during Phase 3 sampling in Subareas 5D and 8. Other field blanks are associated with samples in Subareas 5D and 8 but were collected prior to the sampling conducted in these subareas. The field blank samples were analyzed for all the same analytical parameters as the soil samples.

2.4.4 Trip Blank Samples

Trip blanks filled with laboratory analyte-free water were sent to the site from the laboratory and were submitted unopened with any samples to be analyzed for organic parameters.

2.4.5 Decontamination of Sampling Equipment

All sampling and drilling equipment were decontaminated by the DPT subcontractor and/or CDM Smith staff before and after completing each sample. This included the hand auger equipment, slide hammer equipment, split spoon sampler and drill rods for the DPT, Encore® sampler and other sampling equipment. All sampling equipment was cleaned with the triple rinse method before sampling at the next depth; cleaning was also done between locations. The external surfaces of the equipment were washed with potable water and Alconox, or equivalent laboratory-grade detergent. Equipment was scrubbed until all visible dirt, grime, grease, oil, loose paint, rust flakes, etc., was removed. The equipment was then rinsed with potable water.

Any surface sampling equipment that came into contact with soil including the auger bucket and the slide hammer sampler cup and cap (that holds the stainless steel sleeves in place while sampling) were decontaminated as follows:

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

If the sampling device was not used immediately after being decontaminated, it was placed in a sealed plastic bag.

2.5 Analytical Laboratory Methods and Procedures

The Subarea 5D and 8 Phase 3 soil samples were subject to analysis using at least one of the following analytical methods:

- Metals using EPA Methods 6010C/6020A, 7471B (mercury), and 7199 (chromium VI)
- Cyanide using EPA Method 9012B

- Fluoride using EPA Method 300
- Sulfite using EPA Method 377.1
- Soil pH using EPA Method 9045M
- SVOCs using EPA Method 8270D
- PAHs using Method 8270D selective ion monitoring (SIM)
- N-Nitrosodimethylamine (NDMA) using EPA Method 8270D and 8270D SIM
- Volatile Organic Compounds (VOCs) using EPA Method 8260B
- Pesticides using EPA Method 8081B
- Herbicides using EPA Method 8151A
- PCBs/PCTs using EPA Method 8082A
- Dioxins/furans using EPA Method 1613B
- Perchlorate using EPA Method 6850
- TPH-EFH using EPA Method 8015M
- TPH-GRO using EPA Method 8015M

Eurofins Lancaster Laboratory in Lancaster, Pennsylvania analyzed all parameters for the Phase 3 Subareas 5D and 8 samples. The laboratory was selected using a competitive procurement process.

2.6 Data Review Processes

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

- Cross-reference checking of sample CoC documents against the laboratory acknowledgement of sample receipt form. The laboratory acknowledgement of sample receipt was typically transmitted to the data manager via e-mail two to three days after sample receipt and login and includes a summary of the requested analyses to be performed per sample. Sample log-in errors were identified and corrected at this step.

- Tracking of sample collection, receipt, and laboratory sample delivery group (SDG) numbers on a sample tracking spreadsheet. This spreadsheet also includes field QC sample information, sample location coordinates, and required laboratory deliverables including reports, electronic data deliverables, raw data, and the status of validation.

- Laboratory consulting with the project chemists on data quality issues that occurred during sample analyses such as missed holding times, poor spike recoveries, etc. These issues are resolved based on technical and professional judgment and project data quality objectives to obtain usable data.

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

- Reconciliation of the reported analyses against the analyses that were requested on the CoCs.

- Review of the laboratory case narratives. The case narrative identifies and explains quality issues encountered during the analysis of the samples. Quality issues may include (but are not limited to) missed holding times, poor spike recoveries in matrix or batch-specific QC samples, instrument calibration exceedances, and blank contamination.
- Review of the laboratory-specific QC data. The QC data are provided by the laboratory in summary form. Any unanticipated deviations from the project or method-specific criteria are reconciled with the laboratory at this stage.

2.7 Deviations from the Master FSP

During the Phase 3 field sampling and analytical programs, modifications from the procedures detailed in the Master FSP (CDM Smith 2012a) and project SOPs were required. These modifications and associated resolutions were discussed with the FTL, the project manager, and in some cases with the DTSC representative prior to implementation. In other instances, deviations implemented in the field were not discussed with the project manager or DTSC prior to their implementation. These deviations are described in the following subsections.

2.7.1 Field Sampling

A total of 104 locations in Subarea 5D (Table 2-1) and 120 locations in Subarea 8 (Table 2-2) were to be sampled at one or more depths. No subsurface samples were collected at one location due to shallow refusal at less than 2.5 feet bgs in Subarea 8. Two locations in Subarea 5D and 11 locations in Subarea 8 were not sampled because they are planned to be completed as trenches and/or test pits. These samples are highlighted in yellow in Tables 2-1 and 2-2.

The SSFL SOP 2 (Surface Soil Sampling) requires soil to be collected in decontaminated stainless steel sleeves during soil sample collection by slide hammer. Due to loose sand soil conditions that prevented soil from remaining within the stainless steel sleeve, three samples were collected using a clean slide hammer and placed directly into glass jars.

2.7.2 Analytical

No analytical deviations were encountered during analyses of samples collected for Phase 3 in Subareas 5D and 8.

Section 3

Area IV Subarea 5D and Subarea 8 Phase 3 Soil Sampling Analytical Results

Because this TM only provides the analytical results, data in this section are presented in a summary fashion. Tables 3-1, 3-2 and 3-3 summarize the Phase 3 Subarea 5D surface, subsurface and combined soil sample data respectively. Tables 3-4, 3-5 and 3-6 summarize the Phase 3 Subarea 8 surface, subsurface and combined soil sample data respectively. The tables detail the chemicals analyzed, their associated chemical abstract service (CAS) number, frequency of detection, minimum and maximum detected concentrations, range of observed detection limits and reporting limits (RLs), and the sample location where the maximum concentration of each analyte was detected. If two locations for the maximum concentration are listed and only one maximum concentration value is provided, this indicates that the concentration was the same at the specified depth at both locations.

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

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Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	55 / 81	0.403 J Z	185	0.0169 - 0.141	4.88 - 5.55	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	46 / 81	0.0152 J FD, Z	18	0.00682 - 0.0723	4.88 - 5.55	ng/kg	5D_DG-537	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	10 / 81	0.105 J Z	1.25 J Z	0.00934 - 0.0966	4.88 - 5.55	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	28 / 81	0.0308 J Z	1.81 J Z	0.0164 - 0.143	4.88 - 5.55	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	25 / 81	0.0546 J Z	0.717 J Z	0.00765 - 0.102	4.88 - 5.55	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	66 / 81	0.0385 J FD, Z	6.78	0.0172 - 0.15	4.88 - 5.55	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	22 / 81	0.0544 J Z	0.773 J Z	0.00627 - 0.094	4.88 - 5.55	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	62 / 81	0.0862 J Z	4.32 J Z	0.0156 - 0.133	4.88 - 5.55	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	56 / 81	0.139 J Z	1.84 J Z	0.00744 - 0.108	4.88 - 5.55	ng/kg	5D_DG-521	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	40 / 81	0.156 J FD, Z	5.59	0.0116 - 0.126	4.88 - 5.55	ng/kg	5D_DG-583	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	27 / 81	0.0657 J FD, Z	1.37 J Z	0.0213 - 0.186	4.88 - 5.55	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	26 / 81	0.0469 J Z	1.11 J Z	0.00701 - 0.0937	4.88 - 5.55	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	2,3,4,7,8-PECDF	57117-31-4	29 / 81	0.0515 J Z	1.34 J Z	0.0118 - 0.121	4.88 - 5.55	ng/kg	5D_DG-568	LL	1613B	0 - 0.5
Dioxins	2,3,7,8-TCDD	1746-01-6	19 / 81	0.029 J Z	0.15 J Z	0.0256 - 0.265	0.975 - 1.11	ng/kg	5D_DG-502	LL	1613B	0 - 0.5
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	45 / 81	0.0277 J Z	0.702 J Z	0.0231 - 0.234	0.975 - 1.11	ng/kg	5D_DG-568	LL	1613B	0 - 0.5
Dioxins	OCDD	3268-87-9	63 / 81	1.11 J Z	2690	0.0135 - 0.18	9.75 - 11.1	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	OCDF	39001-02-0	33 / 81	0.77 J Z	69.9	0.0131 - 0.222	9.75 - 11.1	ng/kg	5D_DG-537	LL	1613B	0 - 0.5
Dioxins	TCDD TEQ	TCDD TEQ	80 / 81	0.00124	4.91	0 - 0	0 - 0	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Fluoride	Fluoride	16984-48-8	27 / 27	0.54 J Q, Z	2.7 J Q	0.4 - 1.5	0.51 - 3.8	mg/kg	5D_DG-597	LL	300	0 - 0.5
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	0 / 17	-	-	44 - 360	91 - 460	µg/kg	-	-	-	-
Herbicides	2,4,5-T	93-76-5	0 / 17	-	-	0.83 - 0.93	1.7 - 1.9	µg/kg	-	-	-	-
Herbicides	2,4-D	94-75-7	0 / 17	-	-	12 - 14	36 - 41	µg/kg	-	-	-	-
Herbicides	2,4-DB	94-82-6	0 / 17	-	-	6.3 - 11	17 - 19	µg/kg	-	-	-	-
Herbicides	Dicamba	1918-00-9	0 / 17	-	-	4 - 4.5	12 - 14	µg/kg	-	-	-	-
Herbicides	Dichlorprop	120-36-5	0 / 17	-	-	9.1 - 10	17 - 19	µg/kg	-	-	-	-
Herbicides	Dinitrobutyl Phenol	88-85-7	0 / 15	-	-	9.1 - 10	24 - 27	µg/kg	-	-	-	-
Herbicides	MCPA	94-74-6	0 / 17	-	-	770 - 860	2500 - 2800	µg/kg	-	-	-	-
Herbicides	MCPP	93-65-2	0 / 17	-	-	760 - 900	2500 - 2800	µg/kg	-	-	-	-
Herbicides	Silvex (2,4,5-TP)	93-72-1	0 / 17	-	-	0.76 - 0.85	1.7 - 1.9	µg/kg	-	-	-	-
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	4 / 6	0.2 J Z	0.62	0.14 - 0.16	0.4 - 0.45	mg/kg	5D_DG-556	LL	7199	0 - 0.5
Mercury	Mercury	7439-97-6	46 / 76	0.01 J Z	0.277	0.0096 - 0.0111	0.0161 - 0.0184	mg/kg	5D_DG-524	LL	7471B	0 - 0.5
Metals	Aluminum	7429-90-5	76 / 76	12700	35900 J E	7.08 - 8.08	39.3 - 44.9	mg/kg	5D_DG-560	LL	6010C	0 - 0.5
Metals	Antimony	7440-36-0	24 / 76	0.825 J Q, Z	2.43 J Q, Z	0.726 - 0.83	3.93 - 4.49	mg/kg	5D_DG-545	LL	6010C	0 - 0.5
Metals	Arsenic	7440-38-2	76 / 76	1.81 J Z	11.8 J Q, E	0.687 - 0.785	3.93 - 4.49	mg/kg	5D_DG-549	LL	6010C	0 - 0.5
Metals	Barium	7440-39-3	76 / 76	40.2	170	0.0324 - 0.037	0.982 - 1.12	mg/kg	5D_DG-589	LL	6010C	0 - 0.5
Metals	Beryllium	7440-41-7	76 / 76	0.417 J Z	1.36	0.0658 - 0.0751	0.982 - 1.12	mg/kg	5D_DG-560	LL	6010C	0 - 0.5
Metals	Boron	7440-42-8	74 / 76	1.03 J Z	30.9	0.825 - 0.942	9.82 - 11.2	mg/kg	5D_DG-547	LL	6010C	0 - 0.5
Metals	Cadmium	7440-43-9	60 / 76	0.114 J Z	1.2	0.0746 - 0.0852	0.982 - 1.12	mg/kg	5D_DG-566	LL	6010C	0 - 0.5
Metals	Calcium	7440-70-2	76 / 76	2060	98100	3.28 - 17.8	19.6 - 107	mg/kg	5D_DG-564	LL	6010C	0 - 0.5
Metals	Chromium	7440-47-3	76 / 76	17.5	42.4 J Q, E	0.157 - 0.179	2.95 - 3.36	mg/kg	5D_DG-560	LL	6010C	0 - 0.5
Metals	Cobalt	7440-48-4	76 / 76	5.17	11.8 J A	0.0972 - 0.111	0.982 - 1.12	mg/kg	5D_DG-506	LL	6010C	0 - 0.5
Metals	Copper	7440-50-8	75 / 76	6.56	30.5	0.285 - 1.5	1.96 - 10.4	mg/kg	5D_DG-565	LL	6010C	0 - 0.5
Metals	Iron	7439-89-6	76 / 76	19000	55000 J FD	3.55 - 20.3	39.3 - 224	mg/kg	5D_DG-565	LL	6010C	0 - 0.5
Metals	Lead	7439-92-1	76 / 76	4.36	16.4	0.491 - 0.561	2.95 - 3.36	mg/kg	5D_DG-533	LL	6010C	0 - 0.5
Metals	Lithium	7439-93-2	76 / 76	16 J E	40.5	0.33 - 0.38	3.9 - 4.5	mg/kg	5D_DG-570	LL	6010C	0 - 0.5
Metals	Magnesium	7439-95-4	76 / 76	3430	9110	1.64 - 1.87	9.82 - 11.2	mg/kg	5D_DG-557	LL	6010C	0 - 0.5
Metals	Manganese	7439-96-5	76 / 76	241 J E	581	0.0815 - 0.0931	0.982 - 1.12	mg/kg	5D_DG-506	LL	6010C	0 - 0.5
Metals	Molybdenum	7439-98-7	1 / 76	0.19 J Z	0.19 J Z	0.167 - 0.191	1.96 - 2.24	mg/kg	5D_DG-607	LL	6010C	0 - 0.5
Metals	Nickel	7440-02-0	76 / 76	8.63	24.4	0.128 - 0.146	1.96 - 2.24	mg/kg	5D_DG-560	LL	6010C	0 - 0.5
Metals	Phosphorus	7723-14-0	76 / 76	141	800	2.84 - 3.24	9.82 - 11.2	mg/kg	5D_DG-558	LL	6010C	0 - 0.5
Metals	Potassium	7440-09-7	76 / 76	1810	7160 J E, Q	8.19 - 9.35	98.2 - 112	mg/kg	5D_DG-583	LL	6010C	0 - 0.5
Metals	Selenium	7782-49-2	70 / 76	0.109 J Z	0.462	0.0982 - 0.112	0.393 - 0.449	mg/kg	5D_DG-502	LL	6020A	0 - 0.5
Metals	Silver	7440-22-4	62 / 76	0.0269 J Z 0.0269 J Z	0.11 J Z 0.11 J Z	0.0255 - 0.0292	0.196 - 0.224	mg/kg	5D_DG-568 5D_DG-507	LL LL	6020A 6020A	0 - 0.5 0 - 0.5
Metals	Sodium	7440-23-5	76 / 76	63.4 J Z	259	16.4 - 18.7	98.2 - 112	mg/kg	5D_DG-537	LL	6010C	0 - 0.5
Metals	Strontium	7440-24-6	76 / 76	14.8 J A	196	0.0668 - 0.363	0.393 - 2.13	mg/kg	5D_DG-564	LL	6020A	0 - 0.5

Table 3-1
Summary of Analytical Results for Chemicals – Validated Data
Surface Soils – Subarea 5D – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Metals	Thallium	7440-28-0	74 / 76	0.187 J Z	0.477 J Q	0.0295 - 0.0336	0.196 - 0.224	mg/kg	5D_DG-503	LL	6020A	0 - 0.5
Metals	Tin	7440-31-5	0 / 76	-	-	0.216 - 0.247	9.82 - 11.2	mg/kg	-	-	-	-
Metals	Titanium	7440-32-6	76 / 76	781	1620	0.168 - 0.894	0.99 - 5.26	mg/kg	5D_DG-535	LL	6010C	0 - 0.5
Metals	Vanadium	7440-62-2	76 / 76	35.2	80 J Q	0.128 - 0.146	0.982 - 1.12	mg/kg	5D_DG-560	LL	6010C	0 - 0.5
Metals	Zinc	7440-66-6	76 / 76	44	127	0.196 - 0.224	3.93 - 4.49	mg/kg	5D_DG-507	LL	6010C	0 - 0.5
Metals	Zirconium	7440-67-7	74 / 76	1.27 J Z 1.27 J Z	11	0.825 - 0.942	4.91 - 5.61	mg/kg	5D_DG-568	LL	6010C	0 - 0.5
Moisture Content	Moisture	MOIST	102 / 102	1	12.4	0.1 - 0.1	0.1 - 0.1	%	5D_DG-514	LL	160.3M	0 - 0.5
PAHs	1-Methylnaphthalene	90-12-0	8 / 81	0.74 J Z	2.7	0.67 - 7	1.7 - 17	µg/kg	5D_DG-513	LL	8270D SIM	0 - 0.5
PAHs	2-Methylnaphthalene	91-57-6	31 / 81	0.69 J Z	2.9	0.67 - 7	1.7 - 17	µg/kg	5D_DG-578	LL	8270D SIM	0 - 0.5
PAHs	Acenaphthene	83-32-9	0 / 81	-	-	0.67 - 7	1.7 - 17	µg/kg	-	-	-	-
PAHs	Acenaphthylene	208-96-8	2 / 81	0.42 J Z	0.45 J Z	0.33 - 3.5	1.7 - 17	µg/kg	5D_DG-566	LL	8270D SIM	0 - 0.5
PAHs	Anthracene	120-12-7	9 / 81	0.37 J Z	19	0.33 - 3.5	1.7 - 17	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Benzo(a)anthracene	56-55-3	20 / 81	0.76 J Z	210	0.67 - 7	1.7 - 17	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Benzo(a)pyrene	50-32-8	17 / 81	0.71 J Z	480	0.67 - 7	1.7 - 17	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Benzo(b)fluoranthene	205-99-2	49 / 81	0.74 J Z	590	0.67 - 7	1.7 - 17	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Benzo(e)pyrene	192-97-2	8 / 81	3.5 J Z	320	3.3 - 35	17 - 180	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Benzo(g,h,i)perylene	191-24-2	21 / 81	0.69 J Z	280	0.67 - 7	1.7 - 17	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Benzo(k)fluoranthene	207-08-9	17 / 81	0.73 J Z	260	0.67 - 7	1.7 - 17	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	14 / 81	6.3 J Z	130	6 - 63	18 - 190	µg/kg	5D_DG-578	LL	8270D SIM	0 - 0.5
PAHs	Butylbenzylphthalate	85-68-7	10 / 81	10 J Z 10 J Z	110 J Z	6 - 63	18 - 190	µg/kg	5D_DG-568	LL	8270D SIM	0 - 0.5
PAHs	Chrysene	218-01-9	58 / 81	0.36 J Z	320	0.33 - 3.5	1.7 - 17	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Dibenzo(a,h)anthracene	53-70-3	4 / 81	1 J Z	92	0.67 - 7	1.7 - 17	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Diethylphthalate	84-66-2	0 / 81	-	-	6 - 63	18 - 190	µg/kg	-	-	-	-
PAHs	Dimethylphthalate	131-11-3	0 / 81	-	-	6 - 63	18 - 190	µg/kg	-	-	-	-
PAHs	Di-n-butylphthalate	84-74-2	0 / 81	-	-	6 - 63	18 - 190	µg/kg	-	-	-	-
PAHs	Di-n-octylphthalate	117-84-0	0 / 81	-	-	6 - 63	18 - 190	µg/kg	-	-	-	-
PAHs	Fluoranthene	206-44-0	42 / 81	0.72 J Z	79	0.67 - 7	1.7 - 17	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Fluorene	86-73-7	2 / 81	0.7 J Z	0.85 J Z	0.67 - 7	1.7 - 17	µg/kg	5D_DG-510	LL	8270D SIM	0 - 0.5
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	16 / 81	0.71 J Z 0.71 J Z	280	0.67 - 7	1.7 - 17	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Naphthalene	91-20-3	44 / 81	0.69 J Z	4.2	0.67 - 7	1.7 - 17	µg/kg	5D_DG-561	LL	8270D SIM	0 - 0.5
PAHs	N-Nitrosodimethylamine	62-75-9	0 / 81	-	-	0.67 - 7	1.7 - 17	µg/kg	-	-	-	-
PAHs	Phenanthrene	85-01-8	39 / 81	0.7 J Z	30	0.67 - 7	1.7 - 17	µg/kg	5D_DG-567	LL	8270D SIM	0 - 0.5
PAHs	Pyrene	129-00-0	38 / 81	0.71 J Z	120	0.67 - 7	1.7 - 17	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PCB/PCTs	Aroclor 1016	12674-11-2	0 / 76	-	-	2.7 - 3.8	14 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1221	11104-28-2	0 / 76	-	-	4.2 - 5.8	14 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1232	11141-16-5	0 / 76	-	-	3.4 - 4.7	14 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1242	53469-21-9	0 / 76	-	-	3.4 - 4.7	14 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1248	12672-29-6	0 / 76	-	-	2.7 - 3.8	14 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1254	11097-69-1	10 / 76	6.3 J Z	60	3.6 - 5	14 - 19	µg/kg	5D_DG-568	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 1260	11096-82-5	1 / 76	7.2 J Z	7.2 J Z	3.2 - 4.5	14 - 19	µg/kg	5D_DG-507	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 1262	37324-23-5	0 / 76	-	-	2.7 - 3.8	14 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1268	11100-14-4	0 / 76	-	-	2.7 - 3.8	14 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5432	63496-31-1	0 / 76	-	-	8.3 - 11	27 - 38	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5442	12642-23-8	0 / 76	-	-	8.3 - 11	27 - 38	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5460	11126-42-4	2 / 76	13 J Z	15 J L, Z	8.3 - 11	27 - 38	µg/kg	5D_DG-568	LL	8082A	0 - 0.5
Perchlorate	Perchlorate	14797-73-0	0 / 9	-	-	2.1 - 2.4	5.1 - 5.7	µg/kg	-	-	-	-
Pesticides	4,4'-DDD	72-54-8	2 / 35	0.5 J Z	0.54 J Z	0.33 - 0.85	1.7 - 1.9	µg/kg	5D_DG-532	LL	8081B	0 - 0.5
Pesticides	4,4'-DDE	72-55-9	14 / 35	0.46 J Z	15	0.33 - 1.7	1.7 - 8.9	µg/kg	5D_DG-524	LL	8081B	0 - 0.5
Pesticides	4,4'-DDT	50-29-3	12 / 35	0.4 J Z	5.3	0.35 - 4.5	1.7 - 4.5	µg/kg	5D_DG-505	LL	8081B	0 - 0.5
Pesticides	Aldrin	309-00-2	0 / 35	-	-	0.17 - 0.19	0.83 - 0.93	µg/kg	-	-	-	-
Pesticides	Alpha-BHC	319-84-6	1 / 35	0.28 J Z	0.28 J Z	0.17 - 0.19	0.83 - 0.93	µg/kg	5D_DG-573	LL	8081B	0 - 0.5
Pesticides	Beta-BHC	319-85-7	0 / 35	-	-	0.96 - 1.1	1.9 - 2.1	µg/kg	-	-	-	-
Pesticides	Chlordane	57-74-9	0 / 35	-	-	4 - 4.5	17 - 19	µg/kg	-	-	-	-

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Pesticides	Delta-BHC	319-86-8	1 / 35	0.51 J Z	0.51 J Z	0.45 - 1.4	0.83 - 1.4	µg/kg	5D_DG-568	LL	8081B	0 - 0.5
Pesticides	Dieldrin	60-57-1	3 / 35	0.38 J Z	0.69 J Z	0.33 - 1.3	1.7 - 1.9	µg/kg	5D_DG-532	LL	8081B	0 - 0.5
Pesticides	Endosulfan I	959-98-8	0 / 35	-	-	0.22 - 0.46	0.83 - 0.93	µg/kg	-	-	-	-
Pesticides	Endosulfan II	33213-65-9	0 / 35	-	-	0.33 - 0.44	1.7 - 1.9	µg/kg	-	-	-	-
Pesticides	Endosulfan Sulfate	1031-07-8	0 / 35	-	-	0.33 - 0.68	1.7 - 1.9	µg/kg	-	-	-	-
Pesticides	Endrin	72-20-8	0 / 35	-	-	0.33 - 0.48	1.7 - 1.9	µg/kg	-	-	-	-
Pesticides	Endrin Aldehyde	7421-93-4	0 / 35	-	-	0.33 - 0.47	1.7 - 1.9	µg/kg	-	-	-	-
Pesticides	Endrin Ketone	53494-70-5	1 / 35	1.8	1.8	0.6 - 0.67	1.8 - 2	µg/kg	5D_DG-568	LL	8081B	0 - 0.5
Pesticides	Gamma-BHC (Lindane)	58-89-9	1 / 35	0.24 J Z	0.24 J Z	0.17 - 0.21	0.83 - 0.93	µg/kg	5D_DG-572	LL	8081B	0 - 0.5
Pesticides	Heptachlor	76-44-8	1 / 35	0.19 J Z	0.19 J Z	0.17 - 0.19	0.83 - 0.93	µg/kg	5D_DG-573	LL	8081B	0 - 0.5
Pesticides	Heptachlor Epoxide	1024-57-3	3 / 35	0.22 J Z	0.26 J Z	0.17 - 1.2	0.83 - 1.2	µg/kg	5D_DG-532	LL	8081B	0 - 0.5
Pesticides	Methoxychlor	72-43-5	1 / 35	4.1 J Z	4.1 J Z	1.7 - 1.9	6.7 - 7.5	µg/kg	5D_DG-568	LL	8081B	0 - 0.5
Pesticides	Mirex	2385-85-5	0 / 35	-	-	0.35 - 0.78	1.7 - 1.9	µg/kg	-	-	-	-
Pesticides	Technical Toxaphene	8001-35-2	0 / 35	-	-	14 - 76	33 - 76	µg/kg	-	-	-	-
pH	pH	pH	88 / 88	5.81	8.36	0.01 - 0.01	0.01 - 0.01	pH	5D_DG-536	LL	9045M	0 - 0.5
SVOC	1,1'-Biphenyl	92-52-4	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	1,2,4-Trichlorobenzene	120-82-1	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	1,2-Dichlorobenzene	95-50-1	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	1,2-Diphenylhydrazine	122-66-7	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	1,3-Dichlorobenzene	541-73-1	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	1,4-Dichlorobenzene	106-46-7	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	2,4,5-Trichlorophenol	95-95-4	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	2,4,6-Trichlorophenol	88-06-2	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	2,4-Dichlorophenol	120-83-2	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	2,4-Dimethylphenol	105-67-9	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	2,4-Dinitrophenol	51-28-5	0 / 2	-	-	320 - 340	710 - 740	µg/kg	-	-	-	-
SVOC	2,6-Dichlorophenol	87-65-0	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	2-Chloronaphthalene	91-58-7	0 / 2	-	-	8 - 8	35 - 37	µg/kg	-	-	-	-
SVOC	2-Chlorophenol	95-57-8	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	2-Methylphenol	95-48-7	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	2-Nitroaniline	88-74-4	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	2-Nitrophenol	88-75-5	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	3,3'-Dichlorobenzidine	91-94-1	0 / 2	-	-	110 - 110	360 - 370	µg/kg	-	-	-	-
SVOC	3,5-Dimethylphenol	108-68-9	0 / 2	-	-	36 - 37	180 - 190	µg/kg	-	-	-	-
SVOC	3-Nitroaniline	99-09-2	0 / 2	-	-	72 - 74	180 - 190	µg/kg	-	-	-	-
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	0 / 2	-	-	180 - 190	540 - 560	µg/kg	-	-	-	-
SVOC	4-Bromophenyl-phenylether	101-55-3	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	4-Chloro-3-methylphenol	59-50-7	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	4-Chloroaniline	106-47-8	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	4-Chlorophenyl-phenylether	7005-72-3	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	4-Methylphenol	106-44-5	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	4-Nitroaniline	100-01-6	0 / 2	-	-	72 - 74	180 - 190	µg/kg	-	-	-	-
SVOC	4-Nitrophenol	100-02-7	0 / 2	-	-	180 - 190	540 - 560	µg/kg	-	-	-	-
SVOC	Aniline	62-53-3	0 / 2	-	-	180 - 190	360 - 370	µg/kg	-	-	-	-
SVOC	Benzidine	92-87-5	0 / 2	-	-	750 - 780	1800 - 1900	µg/kg	-	-	-	-
SVOC	Benzoic Acid	65-85-0	0 / 2	-	-	180 - 190	540 - 560	µg/kg	-	-	-	-
SVOC	Benzyl Alcohol	100-51-6	0 / 2	-	-	180 - 190	360 - 370	µg/kg	-	-	-	-
SVOC	bis(2-chloroethoxy)methane	111-91-1	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	bis(2-chloroethyl) ether	111-44-4	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	Carbazole	86-74-8	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	Dibenzofuran	132-64-9	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	Diphenylamine	NDPA122-39-4	0 / 2	-	-	36 - 37	180 - 190	µg/kg	-	-	-	-
SVOC	Hexachlorobenzene	118-74-1	0 / 2	-	-	4 - 4	18 - 19	µg/kg	-	-	-	-
SVOC	Hexachlorobutadiene	87-68-3	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	Hexachlorocyclopentadiene	77-47-4	0 / 2	-	-	180 - 190	540 - 560	µg/kg	-	-	-	-

Table 3-1
Summary of Analytical Results for Chemicals – Validated Data
Surface Soils – Subarea 5D – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
SVOC	Hexachloroethane	67-72-1	0 / 2	-	-	36 - 37	180 - 190	µg/kg	-	-	-	-
SVOC	Isophorone	78-59-1	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	Nitrobenzene	98-95-3	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	N-Nitroso-di-n-propylamine	621-64-7	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	N-Nitrosodiphenylamine	86-30-6	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	Pentachlorophenol	87-86-5	0 / 2	-	-	36 - 37	180 - 190	µg/kg	-	-	-	-
SVOC	Phenol	108-95-2	0 / 2	-	-	18 - 19	36 - 37	µg/kg	-	-	-	-
SVOC	Pyridine	110-86-1	0 / 2	-	-	72 - 74	180 - 190	µg/kg	-	-	-	-
TPH-EFH	EFH (C12-C14)	PHCC12C14	0 / 78	-	-	2 - 51	5.1 - 130	mg/kg	-	-	-	-
TPH-EFH	EFH (C15-C20)	PHCC15C20	15 / 78	2.2 J Z 2.2 J Z	48 J Z	2 - 51	5.1 - 130	mg/kg	5D_DG-502	LL	8015M	0 - 0.5
TPH-EFH	EFH (C21-C30)	PHCC21C30	57 / 78	2.6 J Z	870	2 - 51	5.1 - 130	mg/kg	5D_DG-502	LL	8015M	0 - 0.5
TPH-EFH	EFH (C30-C40)	PHCC30C40	57 / 78	5.5 J Z	1400	4 - 100	10 - 260	mg/kg	5D_DG-502	LL	8015M	0 - 0.5
TPH-EFH	EFH (C8-C11)	PHCC8C11	3 / 78	2.2 J Q, Z	3.8 J Z	2 - 51	5.1 - 130	mg/kg	5D_DG-569	LL	8015M	0 - 0.5

Notes
LL - Eurofins Lancaster Laboratory
ug/kg- microgram per kilogram
mg/kg - milligram per kilogram
ng/kg - nanogram per kilogram
J - Result is an estimated value
H - Holding times exceeded
S - Surrogates outside of criteria
C - Calibration recoveries outside of criteria
R - Calibration relative response factors outside of criteria
B - Method blank contamination
L - Laboratory control sample recoveries outside of criteria
Q - Matrix spike recoveries outside of criteria
E - Laboratory control sample and or matrix spike relative percent differences outside of criteria
I - Internal standards outside of criteria
A - Serial dilution results outside of criteria
F - Field blank contamination
Z - Analytes reported below the reporting limits and above the method detection limit
FD - Field duplicate relative percent difference outside of criteria
*# - Unusual problems found with the quality control data. See validation reports in Appendix C for detail.

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	3 / 13	0.471 J Z	1.15 J Z	0.0223 - 0.0849	5.08 - 5.69	ng/kg	5D_DG-520	LL	1613B	8 - 9
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	3 / 13	0.0468 J Z	0.0634 J Z	0.00802 - 0.0294	5.08 - 5.69	ng/kg	5D_DG-530	LL	1613B	2.5 - 3.5
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	0 / 13	-	-	0.0183 - 0.0516	5.08 - 5.69	ng/kg	-	-	-	-
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	2 / 13	0.0454 J Z	0.11 J Z	0.0226 - 0.102	5.08 - 5.69	ng/kg	5D_DG-530	LL	1613B	2.5 - 3.5
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1 / 13	0.0967 J Z	0.0967 J Z	0.0159 - 0.0515	5.08 - 5.69	ng/kg	5D_DG-522	LL	1613B	6 - 7
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	6 / 13	0.0336 J Z	0.15 J Z	0.0243 - 0.106	5.08 - 5.69	ng/kg	5D_DG-522	LL	1613B	6 - 7
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	3 / 13	0.0446 J FD, Z	0.122 J Z	0.0134 - 0.0452	5.08 - 5.69	ng/kg	5D_DG-516	LL	1613B	9 - 10
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	0 / 13	-	-	0.0226 - 0.113	5.08 - 5.69	ng/kg	-	-	-	-
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	3 / 13	0.0384 J Z	0.205 J Z	0.0174 - 0.0623	5.08 - 5.69	ng/kg	5D_DG-516	LL	1613B	9 - 10
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0 / 13	-	-	0.0184 - 0.073	5.08 - 5.69	ng/kg	-	-	-	-
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	6 / 13	0.0548 J Z	0.35 J Z	0.0318 - 0.151	5.08 - 5.69	ng/kg	5D_DG-530	LL	1613B	2.5 - 3.5
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	3 / 13	0.0583 J Z	0.12 J Z	0.0148 - 0.0452	5.08 - 5.69	ng/kg	5D_DG-530	LL	1613B	2.5 - 3.5
Dioxins	2,3,4,7,8-PECDF	57117-31-4	4 / 13	0.0597 J Z	0.0879 J Z	0.0202 - 0.0695	5.08 - 5.69	ng/kg	5D_DG-521	LL	1613B	5.5 - 6.5
Dioxins	2,3,7,8-TCDD	1746-01-6	2 / 13	0.0969 J Z	0.254 J Z	0.0379 - 0.211	1.02 - 1.14	ng/kg	5D_DG-522	LL	1613B	6 - 7
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	4 / 13	0.0495 J Z	0.172 J Z	0.0351 - 0.153	1.02 - 1.14	ng/kg	5D_DG-520	LL	1613B	4 - 5
Dioxins	OCDD	3268-87-9	6 / 13	1.34 J Z	14.4	0.0183 - 0.0863	10.2 - 11.4	ng/kg	5D_DG-520	LL	1613B	8 - 9
Dioxins	OCDF	39001-02-0	0 / 13	-	-	0.0356 - 0.113	10.2 - 11.4	ng/kg	-	-	-	-
Dioxins	TCDD TEQ	TCDD TEQ	12 / 13	0.00129	0.476	0 - 0	0 - 0	ng/kg	5D_DG-530	LL	1613B	2.5 - 3.5
Fluoride	Fluoride	16984-48-8	75 / 75	0.75 J Q, Z	15.8 J Q	0.41 - 0.93	0.54 - 2.3	mg/kg	5D_DG-592	LL	300	10.5 - 11.5
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	0 / 22	-	-	45 - 52	92 - 110	µg/kg	-	-	-	-
Herbicides	2,4,5-T	93-76-5	0 / 22	-	-	0.84 - 0.96	1.7 - 2	µg/kg	-	-	-	-
Herbicides	2,4-D	94-75-7	0 / 22	-	-	12 - 14	37 - 42	µg/kg	-	-	-	-
Herbicides	2,4-DB	94-82-6	0 / 22	-	-	6.3 - 7.3	17 - 20	µg/kg	-	-	-	-
Herbicides	Dicamba	1918-00-9	0 / 22	-	-	4.1 - 4.7	12 - 14	µg/kg	-	-	-	-
Herbicides	Dichlorprop	120-36-5	0 / 22	-	-	9.2 - 11	17 - 20	µg/kg	-	-	-	-
Herbicides	Dinitrobutyl Phenol	88-85-7	0 / 17	-	-	9.3 - 11	25 - 28	µg/kg	-	-	-	-
Herbicides	MCPA	94-74-6	0 / 22	-	-	780 - 890	2600 - 2900	µg/kg	-	-	-	-
Herbicides	MCPP	93-65-2	0 / 22	-	-	770 - 880	2600 - 2900	µg/kg	-	-	-	-
Herbicides	Silvex (2,4,5-TP)	93-72-1	0 / 22	-	-	0.77 - 0.88	1.7 - 2	µg/kg	-	-	-	-
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7 / 9	0.26 J Z	0.78	0.14 - 0.16	0.41 - 0.44	mg/kg	5D_DG-581	LL	7199	2.5 - 3.5
Mercury	Mercury	7439-97-6	49 / 101	0.01 J Z	0.113 J FD	0.0097 - 0.0116	0.0161 - 0.0193	mg/kg	5D_DG-524	LL	7471B	5.5 - 6.5
Metals	Aluminum	7429-90-5	101 / 101	10000	34700	7.17 - 8.48	39.8 - 47	mg/kg	5D_DG-506	LL	6010C	4 - 5
Metals	Antimony	7440-36-0	25 / 101	0.85 J Q, Z	3.5 J Q, Z	0.736 - 0.87	3.98 - 4.7	mg/kg	5D_DG-533	LL	6010C	2.5 - 3.5
Metals	Arsenic	7440-38-2	101 / 101	1.72 J Z	70.2	0.696 - 0.823	3.98 - 4.7	mg/kg	5D_DG-539	LL	6010C	3 - 4
Metals	Barium	7440-39-3	101 / 101	44.7	194	0.0328 - 0.0388	0.994 - 1.18	mg/kg	5D_DG-533	LL	6010C	2.5 - 3.5
Metals	Beryllium	7440-41-7	101 / 101	0.354 J Z	1.63	0.0666 - 0.0788	0.994 - 1.18	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Boron	7440-42-8	90 / 101	1.15 J Z	36.9	0.835 - 0.988	9.94 - 11.8	mg/kg	5D_DG-547	LL	6010C	4 - 5
Metals	Cadmium	7440-43-9	74 / 101	0.0885 J Z	1.5	0.0756 - 0.0894	0.994 - 1.18	mg/kg	5D_DG-535	LL	6010C	2 - 3
Metals	Calcium	7440-70-2	101 / 101	2100 J E	120000	3.32 - 18.5	19.9 - 111	mg/kg	5D_DG-513	LL	6010C	9 - 10
Metals	Chromium	7440-47-3	101 / 101	14.5	131	0.159 - 0.188	2.98 - 3.53	mg/kg	5D_DG-556	LL	6010C	11 - 12
Metals	Cobalt	7440-48-4	101 / 101	2.42	20.9	0.0984 - 0.116	0.994 - 1.18	mg/kg	5D_DG-556	LL	6010C	11 - 12
Metals	Copper	7440-50-8	100 / 101	5.25	36.8	0.288 - 1.63	1.99 - 11.2	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Iron	7439-89-6	101 / 101	15700 J E	51800	3.6 - 21	39.8 - 232	mg/kg	5D_DG-533	LL	6010C	2.5 - 3.5
Metals	Lead	7439-92-1	101 / 101	3.05 J Z	20.4	0.497 - 0.588	2.98 - 3.53	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Lithium	7439-93-2	101 / 101	8.8	74.6	0.34 - 0.4	4 - 4.7	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Magnesium	7439-95-4	101 / 101	2770 J E	26100	1.66 - 1.96	9.94 - 11.8	mg/kg	5D_DG-556	LL	6010C	11 - 12
Metals	Manganese	7439-96-5	101 / 101	103 J Q	1000 J A	0.0825 - 0.0976	0.994 - 1.18	mg/kg	5D_DG-503	LL	6010C	4 - 5
Metals	Molybdenum	7439-98-7	0 / 101	-	-	0.169 - 0.2	1.99 - 2.35	mg/kg	-	-	-	-
Metals	Nickel	7440-02-0	101 / 101	8.12	217	0.129 - 0.153	1.99 - 2.35	mg/kg	5D_DG-556	LL	6010C	11 - 12
Metals	Phosphorus	7723-14-0	101 / 101	101 J Q, E	860	2.87 - 3.4	9.94 - 11.8	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Potassium	7440-09-7	101 / 101	1400 J Q	5390	8.29 - 9.81	99.4 - 118	mg/kg	5D_DG-512	LL	6010C	4 - 5
Metals	Selenium	7782-49-2	57 / 101	0.111 J Z	0.638	0.0994 - 0.118	0.398 - 0.47	mg/kg	5D_DG-567	LL	6020A	3.5 - 4.5
Metals	Silver	7440-22-4	69 / 101	0.0276 J Q, Z	0.199 J Z	0.0259 - 0.0306	0.199 - 0.235	mg/kg	5D_DG-527	LL	6020A	4 - 5
Metals	Sodium	7440-23-5	101 / 101	83 J Z	777	16.6 - 19.6	99.4 - 118	mg/kg	5D_DG-506	LL	6010C	4 - 5
Metals	Strontium	7440-24-6	101 / 101	11.4 J Q, E	220	0.0676 - 0.376	0.398 - 2.21	mg/kg	5D_DG-513	LL	6020A	9 - 10

Table 3-2
Summary of Analytical Results for Chemicals – Validated Data
Subsurface Soils – Subarea 5D – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Metals	Thallium	7440-28-0	98 / 101	0.179 J Z	0.588 J Q	0.0298 - 0.0353	0.199 - 0.235	mg/kg	5D_DG-551	LL	6020A	14 - 15
Metals	Tin	7440-31-5	1 / 101	13.7	13.7	0.219 - 0.259	9.94 - 11.8	mg/kg	5D_DG-516	LL	6010C	13 - 14
Metals	Titanium	7440-32-6	101 / 101	655	2650	0.169 - 0.902	0.994 - 5.31	mg/kg	5D_DG-533	LL	6010C	2.5 - 3.5
Metals	Vanadium	7440-62-2	101 / 101	28.1 J Q	82.6	0.129 - 0.153	0.994 - 1.18	mg/kg	5D_DG-551	LL	6010C	14 - 15
Metals	Zinc	7440-66-6	101 / 101	35.2 J Q	137	0.199 - 0.235	3.98 - 4.7	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Zirconium	7440-67-7	96 / 101	0.908 J Z	10.9	0.835 - 0.988	4.97 - 5.88	mg/kg	5D_DG-564	LL	6010C	4 - 5
Moisture Content	Moisture	MOIST	154 / 154	2.8	15.8	0.1 - 0.1	0.1 - 0.1	%	5D_DG-520	LL	160.3M	4 - 5
PAHs	1-Methylnaphthalene	90-12-0	5 / 103	0.82 J Z	7.4	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-522	LL	8270D SIM	6 - 7
PAHs	2-Methylnaphthalene	91-57-6	12 / 103	0.73 J Z	12 J FD	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-563	LL	8270D SIM	4 - 5
PAHs	Acenaphthene	83-32-9	1 / 103	8.2	8.2	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-562	LL	8270D SIM	4 - 5
PAHs	Acenaphthylene	208-96-8	0 / 103	-	-	0.34 - 3.7	1.7 - 19	µg/kg	-	-	-	-
PAHs	Anthracene	120-12-7	4 / 103	0.38 J Z	32	0.34 - 3.7	1.7 - 19	µg/kg	5D_DG-562	LL	8270D SIM	4 - 5
PAHs	Benzo(a)anthracene	56-55-3	6 / 103	0.75 J Z	8.4	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-508	LL	8270D SIM	14 - 15
PAHs	Benzo(a)pyrene	50-32-8	6 / 103	0.84 J Z	12	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-508	LL	8270D SIM	14 - 15
PAHs	Benzo(b)fluoranthene	205-99-2	13 / 103	0.71 J Z	13	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-508	LL	8270D SIM	14 - 15
PAHs	Benzo(e)pyrene	192-97-2	2 / 103	6.3 J Z	6.9 J Z	3.4 - 37	17 - 190	µg/kg	5D_DG-508	LL	8270D SIM	14 - 15
PAHs	Benzo(g,h,i)perylene	191-24-2	6 / 103	0.81 J Z	9 J Z	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-502	LL	8270D SIM	6.5 - 7.5
PAHs	Benzo(k)fluoranthene	207-08-9	7 / 103	0.96 J Z	7.2	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-508	LL	8270D SIM	14 - 15
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	7 / 103	7.6 J Z	26	6.2 - 67	19 - 200	µg/kg	5D_DG-548	LL	8270D SIM	4 - 5
PAHs	Butylbenzylphthalate	85-68-7	1 / 103	9.6 J Z	9.6 J Z	6.2 - 67	19 - 200	µg/kg	5D_DG-567	LL	8270D SIM	3.5 - 4.5
PAHs	Chrysene	218-01-9	21 / 103	0.45 J Z	12 J Z	0.34 - 3.7	1.7 - 19	µg/kg	5D_DG-502	LL	8270D SIM	6.5 - 7.5
PAHs	Dibenzo(a,h)anthracene	53-70-3	2 / 103	1.2 J Z	2	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-508	LL	8270D SIM	14 - 15
PAHs	Diethylphthalate	84-66-2	0 / 103	-	-	6.2 - 67	19 - 200	µg/kg	-	-	-	-
PAHs	Dimethylphthalate	131-11-3	0 / 103	-	-	6.2 - 67	19 - 200	µg/kg	-	-	-	-
PAHs	Di-n-butylphthalate	84-74-2	0 / 103	-	-	6.2 - 67	19 - 200	µg/kg	-	-	-	-
PAHs	Di-n-octylphthalate	117-84-0	0 / 103	-	-	6.2 - 67	19 - 200	µg/kg	-	-	-	-
PAHs	Fluoranthene	206-44-0	9 / 103	0.74 J Z	9.1	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-508	LL	8270D SIM	14 - 15
PAHs	Fluorene	86-73-7	1 / 103	16	16	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-562	LL	8270D SIM	4 - 5
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	3 / 103	0.85 J Z	6.9	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-508	LL	8270D SIM	14 - 15
PAHs	Naphthalene	91-20-3	23 / 103	0.74 J Z	45	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-522	LL	8270D SIM	6 - 7
PAHs	N-Nitrosodimethylamine	62-75-9	0 / 103	-	-	0.69 - 7.4	1.7 - 19	µg/kg	-	-	-	-
PAHs	Phenanthrene	85-01-8	11 / 103	0.93 J Z	30	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-562	LL	8270D SIM	4 - 5
PAHs	Pyrene	129-00-0	9 / 103	0.77 J Z	8.3	0.69 - 7.4	1.7 - 19	µg/kg	5D_DG-508	LL	8270D SIM	14 - 15
PCB/PCTs	Aroclor 1016	12674-11-2	0 / 101	-	-	3.4 - 3.9	17 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1221	11104-28-2	0 / 101	-	-	5.2 - 6	17 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1232	11141-16-5	0 / 101	-	-	4.2 - 4.9	17 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1242	53469-21-9	0 / 101	-	-	4.2 - 4.9	17 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1248	12672-29-6	0 / 101	-	-	3.4 - 3.9	17 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1254	11097-69-1	4 / 101	7.3 J FD, S, Z	18 J Z	4.5 - 5.2	17 - 20	µg/kg	5D_DG-505	LL	8082A	4 - 5
PCB/PCTs	Aroclor 1260	11096-82-5	0 / 101	-	-	4 - 4.6	17 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1262	37324-23-5	0 / 101	-	-	3.4 - 3.9	17 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1268	11100-14-4	0 / 101	-	-	3.4 - 3.9	17 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5432	63496-31-1	0 / 101	-	-	10 - 12	34 - 39	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5442	12642-23-8	0 / 101	-	-	10 - 12	34 - 39	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5460	11126-42-4	0 / 101	-	-	10 - 12	34 - 39	µg/kg	-	-	-	-
Perchlorate	Perchlorate	14797-73-0	2 / 13	3.4 J Z	8.2 J Q	2.2 - 2.5	5.2 - 5.9	µg/kg	5D_DG-590	LL	6850	4 - 5
Pesticides	4,4'-DDD	72-54-8	0 / 43	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	4,4'-DDE	72-55-9	3 / 43	0.83 J Z	1.6 J FD, Z	0.34 - 0.39	1.8 - 2	µg/kg	5D_DG-524	LL	8081B	5.5 - 6.5
Pesticides	4,4'-DDT	50-29-3	1 / 43	1.8 J Z	1.8 J Z	0.36 - 0.42	1.8 - 2	µg/kg	5D_DG-505	LL	8081B	4 - 5
Pesticides	Aldrin	309-00-2	0 / 43	-	-	0.18 - 0.2	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Alpha-BHC	319-84-6	0 / 43	-	-	0.18 - 0.2	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Beta-BHC	319-85-7	1 / 43	1.4 J Z	1.4 J Z	0.99 - 1.1	2 - 2.3	µg/kg	5D_DG-505	LL	8081B	4 - 5
Pesticides	Chlordane	57-74-9	0 / 43	-	-	4.1 - 4.8	18 - 20	µg/kg	-	-	-	-
Pesticides	Delta-BHC	319-86-8	0 / 43	-	-	0.46 - 0.53	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Dieldrin	60-57-1	0 / 43	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Pesticides	Endosulfan I	959-98-8	0 / 43	-	-	0.23 - 0.26	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Endosulfan II	33213-65-9	0 / 43	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	Endosulfan Sulfate	1031-07-8	0 / 43	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	Endrin	72-20-8	0 / 43	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	Endrin Aldehyde	7421-93-4	0 / 43	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	Endrin Ketone	53494-70-5	0 / 43	-	-	0.62 - 0.71	1.9 - 2.1	µg/kg	-	-	-	-
Pesticides	Gamma-BHC (Lindane)	58-89-9	0 / 43	-	-	0.18 - 0.2	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Heptachlor	76-44-8	0 / 43	-	-	0.18 - 0.2	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Heptachlor Epoxide	1024-57-3	0 / 43	-	-	0.18 - 0.2	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Methoxychlor	72-43-5	0 / 43	-	-	1.8 - 2	6.9 - 8	µg/kg	-	-	-	-
Pesticides	Mirex	2385-85-5	0 / 43	-	-	0.36 - 0.42	1.8 - 2	µg/kg	-	-	-	-
Pesticides	Technical Toxaphene	8001-35-2	0 / 43	-	-	14 - 17	34 - 39	µg/kg	-	-	-	-
pH	pH	pH	131 / 131	6.32	8.56 8.56	0.01 - 0.01	0.01 - 0.01	pH	5D_DG-540 5D_DG-505	LL LL	9045M 9045M	5 - 6 14 - 15
SVOC	1,1'-Biphenyl	92-52-4	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,2,4-Trichlorobenzene	120-82-1	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,2-Dichlorobenzene	95-50-1	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,2-Diphenylhydrazine	122-66-7	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,3-Dichlorobenzene	541-73-1	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,4-Dichlorobenzene	106-46-7	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4,5-Trichlorophenol	95-95-4	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4,6-Trichlorophenol	88-06-2	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dichlorophenol	120-83-2	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dimethylphenol	105-67-9	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dinitrophenol	51-28-5	0 / 4	-	-	310 - 340	680 - 740	µg/kg	-	-	-	-
SVOC	2,6-Dichlorophenol	87-65-0	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Chloronaphthalene	91-58-7	0 / 4	-	-	7 - 8	34 - 37	µg/kg	-	-	-	-
SVOC	2-Chlorophenol	95-57-8	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Methylphenol	95-48-7	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Nitroaniline	88-74-4	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Nitrophenol	88-75-5	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	3,3'-Dichlorobenzidine	91-94-1	0 / 4	-	-	100 - 110	340 - 380	µg/kg	-	-	-	-
SVOC	3,5-Dimethylphenol	108-68-9	0 / 4	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	3-Nitroaniline	99-09-2	0 / 4	-	-	69 - 75	170 - 190	µg/kg	-	-	-	-
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	0 / 4	-	-	170 - 190	520 - 560	µg/kg	-	-	-	-
SVOC	4-Bromophenyl-phenylether	101-55-3	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chloro-3-methylphenol	59-50-7	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chloroaniline	106-47-8	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chlorophenyl-phenylether	7005-72-3	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Methylphenol	106-44-5	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Nitroaniline	100-01-6	0 / 4	-	-	69 - 75	170 - 190	µg/kg	-	-	-	-
SVOC	4-Nitrophenol	100-02-7	0 / 4	-	-	170 - 190	520 - 560	µg/kg	-	-	-	-
SVOC	Aniline	62-53-3	0 / 4	-	-	170 - 190	340 - 380	µg/kg	-	-	-	-
SVOC	Benzidine	92-87-5	0 / 4	-	-	720 - 790	1700 - 1900	µg/kg	-	-	-	-
SVOC	Benzoic Acid	65-85-0	0 / 4	-	-	170 - 190	520 - 560	µg/kg	-	-	-	-
SVOC	Benzyl Alcohol	100-51-6	0 / 4	-	-	170 - 190	340 - 380	µg/kg	-	-	-	-
SVOC	bis(2-chloroethoxy)methane	111-91-1	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	bis(2-chloroethyl) ether	111-44-4	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Carbazole	86-74-8	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Dibenzofuran	132-64-9	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Diphenylamine	NDPA122-39-4	0 / 4	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	Hexachlorobenzene	118-74-1	0 / 4	-	-	3 - 4	18 - 19	µg/kg	-	-	-	-
SVOC	Hexachlorobutadiene	87-68-3	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Hexachlorocyclopentadiene	77-47-4	0 / 4	-	-	170 - 190	520 - 560	µg/kg	-	-	-	-

Table 3-2
Summary of Analytical Results for Chemicals – Validated Data
Subsurface Soils – Subarea 5D – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
SVOC	Hexachloroethane	67-72-1	0 / 4	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	Isophorone	78-59-1	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Nitrobenzene	98-95-3	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	N-Nitroso-di-n-propylamine	621-64-7	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	N-Nitrosodiphenylamine	86-30-6	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Pentachlorophenol	87-86-5	0 / 4	-	-	34 - 38	180 - 190	µg/kg	-	-	-	-
SVOC	Phenol	108-95-2	0 / 4	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Pyridine	110-86-1	0 / 4	-	-	69 - 75	170 - 190	µg/kg	-	-	-	-
TPH-EFH	EFH (C12-C14)	PHCC12C14	0 / 102	-	-	2 - 15	5.1 - 37	mg/kg	-	-	-	-
TPH-EFH	EFH (C15-C20)	PHCC15C20	2 / 102	2.2 J Z	4 J Z	2 - 15	5.1 - 37	mg/kg	5D_DG-505	LL	8015M	4 - 5
TPH-EFH	EFH (C21-C30)	PHCC21C30	16 / 102	2.8 J Z	93	2 - 15	5.1 - 37	mg/kg	5D_DG-536	LL	8015M	3.5 - 4.5
TPH-EFH	EFH (C30-C40)	PHCC30C40	16 / 102	6.9 J Z	420	4.1 - 30	10 - 74	mg/kg	5D_DG-536	LL	8015M	3.5 - 4.5
TPH-EFH	EFH (C8-C11)	PHCC8C11	2 / 102	3.2 J Z	3.4 J Z	2 - 15	5.1 - 37	mg/kg	5D_DG-521	LL	8015M	5.5 - 6.5
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	3 / 102	0.2 J Z	0.4 J FD, Z	0.2 - 0.2	0.9 - 1.2	mg/kg	5D_DG-560	LL	8015M	4 - 5

Notes
LL - Eurofins Lancaster Laboratory
ug/kg- microgram per kilogram
mg/kg - milligram per kilogram
ng/kg - nanogram per kilogram
J - Result is an estimated value
H - Holding times exceeded
S - Surrogates outside of criteria
C - Calibration recoveries outside of criteria
R - Calibration relative response factors outside of criteria
B - Method blank contamination
L - Laboratory control sample recoveries outside of criteria
Q - Matrix spike recoveries outside of criteria
E - Laboratory control sample and or matrix spike relative percent differences outside of criteria
I - Internal standards outside of criteria
A - Serial dilution results outside of criteria
F - Field blank contamination
Z - Analytes reported below the reporting limits and above the method detection limit
FD - Field duplicate relative percent difference outside of criteria
*# - Unusual problems found with the quality control data. See validation reports in Appendix C for detail.

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	58 / 94	0.403 J Z	185	0.0169 - 0.141	4.88 - 5.69	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	49 / 94	0.0152 J FD, Z	18	0.00682 - 0.0723	4.88 - 5.69	ng/kg	5D_DG-537	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	10 / 94	0.105 J Z	1.25 J Z	0.00934 - 0.0966	4.88 - 5.69	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	30 / 94	0.0308 J Z	1.81 J Z	0.0164 - 0.143	4.88 - 5.69	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	26 / 94	0.0546 J Z	0.717 J Z	0.00765 - 0.102	4.88 - 5.69	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	72 / 94	0.0336 J Z	6.78	0.0172 - 0.15	4.88 - 5.69	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	25 / 94	0.0446 J FD, Z	0.773 J Z	0.00627 - 0.094	4.88 - 5.69	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	62 / 94	0.0862 J Z	4.32 J Z	0.0156 - 0.133	4.88 - 5.69	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	59 / 94	0.0384 J Z	1.84 J Z	0.00744 - 0.108	4.88 - 5.69	ng/kg	5D_DG-521	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	40 / 94	0.156 J FD, Z	5.59	0.0116 - 0.126	4.88 - 5.69	ng/kg	5D_DG-583	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	33 / 94	0.0548 J Z	1.37 J Z	0.0213 - 0.186	4.88 - 5.69	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	29 / 94	0.0469 J Z	1.11 J Z	0.00701 - 0.0937	4.88 - 5.69	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	2,3,4,7,8-PECDF	57117-31-4	33 / 94	0.0515 J Z	1.34 J Z	0.0118 - 0.121	4.88 - 5.69	ng/kg	5D_DG-568	LL	1613B	0 - 0.5
Dioxins	2,3,7,8-TCDD	1746-01-6	21 / 94	0.029 J Z	0.254 J Z	0.0256 - 0.265	0.975 - 1.14	ng/kg	5D_DG-522	LL	1613B	6 - 7
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	49 / 94	0.0277 J Z	0.702 J Z	0.0231 - 0.234	0.975 - 1.14	ng/kg	5D_DG-568	LL	1613B	0 - 0.5
Dioxins	OCDD	3268-87-9	69 / 94	1.11 J Z	2690	0.0135 - 0.18	9.75 - 11.4	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Dioxins	OCDF	39001-02-0	33 / 94	0.77 J Z	69.9	0.0131 - 0.222	9.75 - 11.4	ng/kg	5D_DG-537	LL	1613B	0 - 0.5
Dioxins	TCDD TEQ	TCDD TEQ	92 / 94	0.00124	4.91	0 - 0	0 - 0	ng/kg	5D_DG-532	LL	1613B	0 - 0.5
Fluoride	Fluoride	16984-48-8	102 / 102	0.54 J Q, Z	15.8 J Q	0.4 - 1.5	0.51 - 3.8	mg/kg	5D_DG-592	LL	300	10.5 - 11.5
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	0 / 39	-	-	44 - 360	91 - 460	µg/kg	-	-	-	-
Herbicides	2,4,5-T	93-76-5	0 / 39	-	-	0.83 - 0.96	1.7 - 2	µg/kg	-	-	-	-
Herbicides	2,4-D	94-75-7	0 / 39	-	-	12 - 14	36 - 42	µg/kg	-	-	-	-
Herbicides	2,4-DB	94-82-6	0 / 39	-	-	6.3 - 11	17 - 20	µg/kg	-	-	-	-
Herbicides	Dicamba	1918-00-9	0 / 39	-	-	4 - 4.7	12 - 14	µg/kg	-	-	-	-
Herbicides	Dichlorprop	120-36-5	0 / 39	-	-	9.1 - 11	17 - 20	µg/kg	-	-	-	-
Herbicides	Dinitrobutyl Phenol	88-85-7	0 / 32	-	-	9.1 - 11	24 - 28	µg/kg	-	-	-	-
Herbicides	MCPA	94-74-6	0 / 39	-	-	770 - 890	2500 - 2900	µg/kg	-	-	-	-
Herbicides	MCPP	93-65-2	0 / 39	-	-	760 - 900	2500 - 2900	µg/kg	-	-	-	-
Herbicides	Silvex (2,4,5-TP)	93-72-1	0 / 39	-	-	0.76 - 0.88	1.7 - 2	µg/kg	-	-	-	-
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	11 / 15	0.2 J Z	0.78	0.14 - 0.16	0.4 - 0.45	mg/kg	5D_DG-581	LL	7199	2.5 - 3.5
Mercury	Mercury	7439-97-6	95 / 177	0.01 J Z 0.01 J Z	0.277	0.0096 - 0.0116	0.0161 - 0.0193	mg/kg	5D_DG-524	LL	7471B	0 - 0.5
Metals	Aluminum	7429-90-5	177 / 177	10000	35900 J E	7.08 - 8.48	39.3 - 47	mg/kg	5D_DG-560	LL	6010C	0 - 0.5
Metals	Antimony	7440-36-0	49 / 177	0.825 J Q, Z	3.5 J Q, Z	0.726 - 0.87	3.93 - 4.7	mg/kg	5D_DG-533	LL	6010C	2.5 - 3.5
Metals	Arsenic	7440-38-2	177 / 177	1.72 J Z	70.2	0.687 - 0.823	3.93 - 4.7	mg/kg	5D_DG-539	LL	6010C	3 - 4
Metals	Barium	7440-39-3	177 / 177	40.2	194	0.0324 - 0.0388	0.982 - 1.18	mg/kg	5D_DG-533	LL	6010C	2.5 - 3.5
Metals	Beryllium	7440-41-7	177 / 177	0.354 J Z	1.63	0.0658 - 0.0788	0.982 - 1.18	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Boron	7440-42-8	164 / 177	1.03 J Z	36.9	0.825 - 0.988	9.82 - 11.8	mg/kg	5D_DG-547	LL	6010C	4 - 5
Metals	Cadmium	7440-43-9	134 / 177	0.0885 J Z	1.5	0.0746 - 0.0894	0.982 - 1.18	mg/kg	5D_DG-535	LL	6010C	2 - 3
Metals	Calcium	7440-70-2	177 / 177	2060	120000	3.28 - 18.5	19.6 - 111	mg/kg	5D_DG-513	LL	6010C	9 - 10
Metals	Chromium	7440-47-3	177 / 177	14.5	131	0.157 - 0.188	2.95 - 3.53	mg/kg	5D_DG-556	LL	6010C	11 - 12
Metals	Cobalt	7440-48-4	177 / 177	2.42	20.9	0.0972 - 0.116	0.982 - 1.18	mg/kg	5D_DG-556	LL	6010C	11 - 12
Metals	Copper	7440-50-8	175 / 177	5.25	36.8	0.285 - 1.63	1.96 - 11.2	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Iron	7439-89-6	177 / 177	15700 J E	55000 J FD	3.55 - 21	39.3 - 232	mg/kg	5D_DG-565	LL	6010C	0 - 0.5
Metals	Lead	7439-92-1	177 / 177	3.05 J Z	20.4	0.491 - 0.588	2.95 - 3.53	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Lithium	7439-93-2	177 / 177	8.8	74.6	0.33 - 0.4	3.9 - 4.7	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Magnesium	7439-95-4	177 / 177	2770 J E	26100	1.64 - 1.96	9.82 - 11.8	mg/kg	5D_DG-556	LL	6010C	11 - 12
Metals	Manganese	7439-96-5	177 / 177	103 J Q	1000 J A	0.0815 - 0.0976	0.982 - 1.18	mg/kg	5D_DG-503	LL	6010C	4 - 5
Metals	Molybdenum	7439-98-7	1 / 177	0.19 J Z	0.19 J Z	0.167 - 0.2	1.96 - 2.35	mg/kg	5D_DG-607	LL	6010C	0 - 0.5
Metals	Nickel	7440-02-0	177 / 177	8.12	217	0.128 - 0.153	1.96 - 2.35	mg/kg	5D_DG-556	LL	6010C	11 - 12
Metals	Phosphorus	7723-14-0	177 / 177	101 J Q, E	860	2.84 - 3.4	9.82 - 11.8	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Potassium	7440-09-7	177 / 177	1400 J Q	7160 J E, Q	8.19 - 9.81	98.2 - 118	mg/kg	5D_DG-583	LL	6010C	0 - 0.5
Metals	Selenium	7782-49-2	127 / 177	0.109 J Z	0.638	0.0982 - 0.118	0.393 - 0.47	mg/kg	5D_DG-567	LL	6020A	3.5 - 4.5
Metals	Silver	7440-22-4	131 / 177	0.0269 J Z 0.0269 J Z	0.199 J Z	0.0255 - 0.0306	0.196 - 0.235	mg/kg	5D_DG-527	LL	6020A	4 - 5
Metals	Sodium	7440-23-5	177 / 177	63.4 J Z	777	16.4 - 19.6	98.2 - 118	mg/kg	5D_DG-506	LL	6010C	4 - 5

Table 3-3
Summary of Analytical Results for Chemicals – Validated Data
Combined Soils – Subarea 5D – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Metals	Strontium	7440-24-6	177 / 177	11.4 J Q, E	220	0.0668 - 0.376	0.393 - 2.21	mg/kg	5D_DG-513	LL	6020A	9 - 10
Metals	Thallium	7440-28-0	172 / 177	0.179 J Z	0.588 J Q	0.0295 - 0.0353	0.196 - 0.235	mg/kg	5D_DG-551	LL	6020A	14 - 15
Metals	Tin	7440-31-5	1 / 177	13.7	13.7	0.216 - 0.259	9.82 - 11.8	mg/kg	5D_DG-516	LL	6010C	13 - 14
Metals	Titanium	7440-32-6	177 / 177	655	2650	0.168 - 0.902	0.99 - 5.31	mg/kg	5D_DG-533	LL	6010C	2.5 - 3.5
Metals	Vanadium	7440-62-2	177 / 177	28.1 J Q	82.6	0.128 - 0.153	0.982 - 1.18	mg/kg	5D_DG-551	LL	6010C	14 - 15
Metals	Zinc	7440-66-6	177 / 177	35.2 J Q	137	0.196 - 0.235	3.93 - 4.7	mg/kg	5D_DG-536	LL	6010C	3.5 - 4.5
Metals	Zirconium	7440-67-7	170 / 177	0.908 J Z	11	0.825 - 0.988	4.91 - 5.88	mg/kg	5D_DG-568	LL	6010C	0 - 0.5
Moisture Content	Moisture	MOIST	256 / 256	1	15.8	0.1 - 0.1	0.1 - 0.1	%	5D_DG-520	LL	160.3M	4 - 5
PAHs	1-Methylnaphthalene	90-12-0	13 / 184	0.74 J Z	7.4	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-522	LL	8270D SIM	6 - 7
PAHs	2-Methylnaphthalene	91-57-6	43 / 184	0.69 J Z	12 J FD	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-563	LL	8270D SIM	4 - 5
PAHs	Acenaphthene	83-32-9	1 / 184	8.2	8.2	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-562	LL	8270D SIM	4 - 5
PAHs	Acenaphthylene	208-96-8	2 / 184	0.42 J Z	0.45 J Z	0.33 - 3.7	1.7 - 19	µg/kg	5D_DG-566	LL	8270D SIM	0 - 0.5
PAHs	Anthracene	120-12-7	13 / 184	0.37 J Z	32	0.33 - 3.7	1.7 - 19	µg/kg	5D_DG-562	LL	8270D SIM	4 - 5
PAHs	Benzo(a)anthracene	56-55-3	26 / 184	0.75 J Z	210	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Benzo(a)pyrene	50-32-8	23 / 184	0.71 J Z	480	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Benzo(b)fluoranthene	205-99-2	62 / 184	0.71 J Z	590	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Benzo(e)pyrene	192-97-2	10 / 184	3.5 J Z	320	3.3 - 37	17 - 190	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Benzo(g,h,i)perylene	191-24-2	27 / 184	0.69 J Z	280	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Benzo(k)fluoranthene	207-08-9	24 / 184	0.73 J Z	260	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	21 / 184	6.3 J Z	130	6 - 67	18 - 200	µg/kg	5D_DG-578	LL	8270D SIM	0 - 0.5
PAHs	Butylbenzylphthalate	85-68-7	11 / 184	9.6 J Z	110 J Z	6 - 67	18 - 200	µg/kg	5D_DG-568	LL	8270D SIM	0 - 0.5
PAHs	Chrysene	218-01-9	79 / 184	0.36 J Z	320	0.33 - 3.7	1.7 - 19	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Dibenzo(a,h)anthracene	53-70-3	6 / 184	1 J Z	92	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Diethylphthalate	84-66-2	0 / 184	-	-	6 - 67	18 - 200	µg/kg	-	-	-	-
PAHs	Dimethylphthalate	131-11-3	0 / 184	-	-	6 - 67	18 - 200	µg/kg	-	-	-	-
PAHs	Di-n-butylphthalate	84-74-2	0 / 184	-	-	6 - 67	18 - 200	µg/kg	-	-	-	-
PAHs	Di-n-octylphthalate	117-84-0	0 / 184	-	-	6 - 67	18 - 200	µg/kg	-	-	-	-
PAHs	Fluoranthene	206-44-0	51 / 184	0.72 J Z	79	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Fluorene	86-73-7	3 / 184	0.7 J Z	16	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-562	LL	8270D SIM	4 - 5
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	19 / 184	0.71 J Z 0.71 J Z	280	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PAHs	Naphthalene	91-20-3	67 / 184	0.69 J Z	45	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-522	LL	8270D SIM	6 - 7
PAHs	N-Nitrosodimethylamine	62-75-9	0 / 184	-	-	0.67 - 7.4	1.7 - 19	µg/kg				-
PAHs	Phenanthrene	85-01-8	50 / 184	0.7 J Z	30 30	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-567 5D_DG-562	LL LL	8270D SIM 8270D SIM	0 - 0.5 4 - 5
PAHs	Pyrene	129-00-0	47 / 184	0.71 J Z	120	0.67 - 7.4	1.7 - 19	µg/kg	5D_DG-507	LL	8270D SIM	0 - 0.5
PCB/PCTs	Aroclor 1016	12674-11-2	0 / 177	-	-	2.7 - 3.9	14 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1221	11104-28-2	0 / 177	-	-	4.2 - 6	14 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1232	11141-16-5	0 / 177	-	-	3.4 - 4.9	14 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1242	53469-21-9	0 / 177	-	-	3.4 - 4.9	14 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1248	12672-29-6	0 / 177	-	-	2.7 - 3.9	14 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1254	11097-69-1	14 / 177	6.3 J Z	60	3.6 - 5.2	14 - 20	µg/kg	5D_DG-568	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 1260	11096-82-5	1 / 177	7.2 J Z	7.2 J Z	3.2 - 4.6	14 - 20	µg/kg	5D_DG-507	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 1262	37324-23-5	0 / 177	-	-	2.7 - 3.9	14 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1268	11100-14-4	0 / 177	-	-	2.7 - 3.9	14 - 20	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5432	63496-31-1	0 / 177	-	-	8.3 - 12	27 - 39	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5442	12642-23-8	0 / 177	-	-	8.3 - 12	27 - 39	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5460	11126-42-4	2 / 177	13 J Z	15 J L, Z	8.3 - 12	27 - 39	µg/kg	5D_DG-568	LL	8082A	0 - 0.5
Perchlorate	Perchlorate	14797-73-0	2 / 22	3.4 J Z	8.2 J Q	2.1 - 2.5	5.1 - 5.9	µg/kg	5D_DG-590	LL	6850	4 - 5
Pesticides	4,4'-DDD	72-54-8	2 / 78	0.5 J Z	0.54 J Z	0.33 - 0.85	1.7 - 2	µg/kg	5D_DG-532	LL	8081B	0 - 0.5
Pesticides	4,4'-DDE	72-55-9	17 / 78	0.46 J Z	15	0.33 - 1.7	1.7 - 8.9	µg/kg	5D_DG-524	LL	8081B	0 - 0.5
Pesticides	4,4'-DDT	50-29-3	13 / 78	0.4 J Z	5.3	0.35 - 4.5	1.7 - 4.5	µg/kg	5D_DG-505	LL	8081B	0 - 0.5
Pesticides	Aldrin	309-00-2	0 / 78	-	-	0.17 - 0.2	0.83 - 0.99	µg/kg	-	-	-	-
Pesticides	Alpha-BHC	319-84-6	1 / 78	0.28 J Z	0.28 J Z	0.17 - 0.2	0.83 - 0.99	µg/kg	5D_DG-573	LL	8081B	0 - 0.5
Pesticides	Beta-BHC	319-85-7	1 / 78	1.4 J Z	1.4 J Z	0.96 - 1.1	1.9 - 2.3	µg/kg	5D_DG-505	LL	8081B	4 - 5
Pesticides	Chlordane	57-74-9	0 / 78	-	-	4 - 4.8	17 - 20	µg/kg	-	-	-	-

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Pesticides	Delta-BHC	319-86-8	1 / 78	0.51 J Z	0.51 J Z	0.45 - 1.4	0.83 - 1.4	µg/kg	5D_DG-568	LL	8081B	0 - 0.5
Pesticides	Dieldrin	60-57-1	3 / 78	0.38 J Z	0.69 J Z	0.33 - 1.3	1.7 - 2	µg/kg	5D_DG-532	LL	8081B	0 - 0.5
Pesticides	Endosulfan I	959-98-8	0 / 78	-	-	0.22 - 0.46	0.83 - 0.99	µg/kg	-	-	-	-
Pesticides	Endosulfan II	33213-65-9	0 / 78	-	-	0.33 - 0.44	1.7 - 2	µg/kg	-	-	-	-
Pesticides	Endosulfan Sulfate	1031-07-8	0 / 78	-	-	0.33 - 0.68	1.7 - 2	µg/kg	-	-	-	-
Pesticides	Endrin	72-20-8	0 / 78	-	-	0.33 - 0.48	1.7 - 2	µg/kg	-	-	-	-
Pesticides	Endrin Aldehyde	7421-93-4	0 / 78	-	-	0.33 - 0.47	1.7 - 2	µg/kg	-	-	-	-
Pesticides	Endrin Ketone	53494-70-5	1 / 78	1.8	1.8	0.6 - 0.71	1.8 - 2.1	µg/kg	5D_DG-568	LL	8081B	0 - 0.5
Pesticides	Gamma-BHC (Lindane)	58-89-9	1 / 78	0.24 J Z	0.24 J Z	0.17 - 0.21	0.83 - 0.99	µg/kg	5D_DG-572	LL	8081B	0 - 0.5
Pesticides	Heptachlor	76-44-8	1 / 78	0.19 J Z	0.19 J Z	0.17 - 0.2	0.83 - 0.99	µg/kg	5D_DG-573	LL	8081B	0 - 0.5
Pesticides	Heptachlor Epoxide	1024-57-3	3 / 78	0.22 J Z	0.26 J Z	0.17 - 1.2	0.83 - 1.2	µg/kg	5D_DG-532	LL	8081B	0 - 0.5
Pesticides	Methoxychlor	72-43-5	1 / 78	4.1 J Z	4.1 J Z	1.7 - 2	6.7 - 8	µg/kg	5D_DG-568	LL	8081B	0 - 0.5
Pesticides	Mirex	2385-85-5	0 / 78	-	-	0.35 - 0.78	1.7 - 2	µg/kg	-	-	-	-
Pesticides	Technical Toxaphene	8001-35-2	0 / 78	-	-	14 - 76	33 - 76	µg/kg	-	-	-	-
pH	pH	pH	219 / 219	5.81	8.56 8.56	0.01 - 0.01	0.01 - 0.01	pH	5D_DG-540 5D_DG-505	LL LL	9045M 9045M	5 - 6 14 - 15
SVOC	1,1'-Biphenyl	92-52-4	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,2,4-Trichlorobenzene	120-82-1	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,2-Dichlorobenzene	95-50-1	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,2-Diphenylhydrazine	122-66-7	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,3-Dichlorobenzene	541-73-1	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,4-Dichlorobenzene	106-46-7	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4,5-Trichlorophenol	95-95-4	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4,6-Trichlorophenol	88-06-2	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dichlorophenol	120-83-2	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dimethylphenol	105-67-9	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dinitrophenol	51-28-5	0 / 6	-	-	310 - 340	680 - 740	µg/kg	-	-	-	-
SVOC	2,6-Dichlorophenol	87-65-0	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Chloronaphthalene	91-58-7	0 / 6	-	-	7 - 8	34 - 37	µg/kg	-	-	-	-
SVOC	2-Chlorophenol	95-57-8	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Methylphenol	95-48-7	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Nitroaniline	88-74-4	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Nitrophenol	88-75-5	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	3,3'-Dichlorobenzidine	91-94-1	0 / 6	-	-	100 - 110	340 - 380	µg/kg	-	-	-	-
SVOC	3,5-Dimethylphenol	108-68-9	0 / 6	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	3-Nitroaniline	99-09-2	0 / 6	-	-	69 - 75	170 - 190	µg/kg	-	-	-	-
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	0 / 6	-	-	170 - 190	520 - 560	µg/kg	-	-	-	-
SVOC	4-Bromophenyl-phenylether	101-55-3	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chloro-3-methylphenol	59-50-7	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chloroaniline	106-47-8	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chlorophenyl-phenylether	7005-72-3	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Methylphenol	106-44-5	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Nitroaniline	100-01-6	0 / 6	-	-	69 - 75	170 - 190	µg/kg	-	-	-	-
SVOC	4-Nitrophenol	100-02-7	0 / 6	-	-	170 - 190	520 - 560	µg/kg	-	-	-	-
SVOC	Aniline	62-53-3	0 / 6	-	-	170 - 190	340 - 380	µg/kg	-	-	-	-
SVOC	Benzidine	92-87-5	0 / 6	-	-	720 - 790	1700 - 1900	µg/kg	-	-	-	-
SVOC	Benzoic Acid	65-85-0	0 / 6	-	-	170 - 190	520 - 560	µg/kg	-	-	-	-
SVOC	Benzyl Alcohol	100-51-6	0 / 6	-	-	170 - 190	340 - 380	µg/kg	-	-	-	-
SVOC	bis(2-chloroethoxy)methane	111-91-1	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	bis(2-chloroethyl) ether	111-44-4	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Carbazole	86-74-8	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Dibenzofuran	132-64-9	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Diphenylamine	NDPA122-39-4	0 / 6	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	Hexachlorobenzene	118-74-1	0 / 6	-	-	3 - 4	18 - 19	µg/kg	-	-	-	-
SVOC	Hexachlorobutadiene	87-68-3	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-

Table 3-3
Summary of Analytical Results for Chemicals – Validated Data
Combined Soils – Subarea 5D – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
SVOC	Hexachlorocyclopentadiene	77-47-4	0 / 6	-	-	170 - 190	520 - 560	µg/kg	-	-	-	-
SVOC	Hexachloroethane	67-72-1	0 / 6	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	Isophorone	78-59-1	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Nitrobenzene	98-95-3	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	N-Nitroso-di-n-propylamine	621-64-7	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	N-Nitrosodiphenylamine	86-30-6	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Pentachlorophenol	87-86-5	0 / 6	-	-	34 - 38	180 - 190	µg/kg	-	-	-	-
SVOC	Phenol	108-95-2	0 / 6	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Pyridine	110-86-1	0 / 6	-	-	69 - 75	170 - 190	µg/kg	-	-	-	-
TPH-EFH	EFH (C12-C14)	PHCC12C14	0 / 180	-	-	2 - 51	5.1 - 130	mg/kg	-	-	-	-
TPH-EFH	EFH (C15-C20)	PHCC15C20	17 / 180	2.2 J Z 2.2 J Z 2.2 J Z	48 J Z	2 - 51	5.1 - 130	mg/kg	5D_DG-502	LL	8015M	0 - 0.5
TPH-EFH	EFH (C21-C30)	PHCC21C30	73 / 180	2.6 J Z	870	2 - 51	5.1 - 130	mg/kg	5D_DG-502	LL	8015M	0 - 0.5
TPH-EFH	EFH (C30-C40)	PHCC30C40	73 / 180	5.5 J Z	1400	4 - 100	10 - 260	mg/kg	5D_DG-502	LL	8015M	0 - 0.5
TPH-EFH	EFH (C8-C11)	PHCC8C11	5 / 180	2.2 J Q, Z	3.8 J Z	2 - 51	5.1 - 130	mg/kg	5D_DG-569	LL	8015M	0 - 0.5
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	3 / 102	0.2 J Z	0.4 J FD, Z	0.2 - 0.2	0.9 - 1.2	mg/kg	5D_DG-560	LL	8015M	4 - 5

Notes
LL - Eurofins Lancaster Laboratory
ug/kg- microgram per kilogram
mg/kg - milligram per kilogram
ng/kg - nanogram per kilogram
J - Result is an estimated value
H - Holding times exceeded
S - Surrogates outside of criteria
C - Calibration recoveries outside of criteria
R - Calibration relative response factors outside of criteria
B - Method blank contamination
L - Laboratory control sample recoveries outside of criteria
Q - Matrix spike recoveries outside of criteria
E - Laboratory control sample and or matrix spike relative percent differences outside of criteria
I - Internal standards outside of criteria
A - Serial dilution results outside of criteria
F - Field blank contamination
Z - Analytes reported below the reporting limits and above the method detection limit
FD - Field duplicate relative percent difference outside of criteria
*# - Unusual problems found with the quality control data. See validation reports in Appendix C for detail.

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	87 / 95	0.342 J Z	957	0.015 - 0.335	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	83 / 95	0.154 J Z	46.2	0.00551 - 0.102	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	36 / 95	0.023 J Z	5.3	0.00772 - 0.174	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	52 / 95	0.0339 J Z	26.5	0.0129 - 0.202	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	42 / 95	0.0669 J Z	4.75 J Z	0.00628 - 0.137	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	73 / 95	0.0938 J Z	26.2	0.0138 - 0.226	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	54 / 95	0.107 J Z	3.19 J Z	0.00606 - 0.126	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	76 / 95	0.105 J Z	24.9	0.0136 - 0.224	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	56 / 95	0.057 J Z	1.36 J Z	0.00717 - 0.207	4.82 - 6.06	ng/kg	8_DG-581	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	69 / 95	0.114 J Z	13.2	0.0104 - 0.116	4.82 - 6.06	ng/kg	8_DG-595	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	38 / 95	0.044 J Z	8.29	0.0171 - 0.523	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	45 / 95	0.0457 J Z	2.77 J Z	0.00606 - 0.135	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	2,3,4,7,8-PECDF	57117-31-4	53 / 95	0.0531 J Z	7.74	0.00937 - 0.125	4.82 - 6.06	ng/kg	8_DG-595	LL	1613B	0 - 0.5
Dioxins	2,3,7,8-TCDD	1746-01-6	28 / 95	0.0151 J Z	1.12	0.0143 - 0.254	0.964 - 1.21	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	75 / 95	0.0326 J Z	5.17	0.0112 - 0.347	0.964 - 1.21	ng/kg	8_DG-595	LL	1613B	0 - 0.5
Dioxins	OCDD	3268-87-9	87 / 95	1.46 J Z	5590	0.0132 - 0.202	9.64 - 12.1	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	OCDF	39001-02-0	81 / 95	0.0752 J Z	73.7	0.0137 - 0.111	9.64 - 12.1	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	TCDD TEQ	TCDD TEQ	95 / 95	0.000205	29.1	0 - 0	0 - 0	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Fluoride	Fluoride	16984-48-8	2 / 2	0.87 J Q, Z	1.1 J Q	0.4 - 0.4	1 - 1	mg/kg	8_DG-605	LL	300.0	0 - 0.5
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	0 / 10	-	-	45 - 57	91 - 110	µg/kg	-	-	-	-
Herbicides	2,4,5-T	93-76-5	2 / 10	1.7	1.8	0.83 - 0.96	1.7 - 2	µg/kg	8_DG-564	LL	8151A	0 - 0.5
Herbicides	2,4-D	94-75-7	4 / 10	19 J Z	25 J Z	12 - 14	37 - 42	µg/kg	8_DG-590	LL	8151A	0 - 0.5
Herbicides	2,4-DB	94-82-6	2 / 10	28 J S	32	6.4 - 32	18 - 32	µg/kg	8_DG-607	LL	8151A	0 - 0.5
Herbicides	Dicamba	1918-00-9	0 / 11	-	-	4.1 - 4.7	12 - 14	µg/kg	-	-	-	-
Herbicides	Dichlorprop	120-36-5	0 / 11	-	-	9.1 - 11	17 - 20	µg/kg	-	-	-	-
Herbicides	Dinitrobutyl Phenol	88-85-7	0 / 10	-	-	9.1 - 11	24 - 28	µg/kg	-	-	-	-
Herbicides	MCPA	94-74-6	0 / 11	-	-	770 - 890	2500 - 2900	µg/kg	-	-	-	-
Herbicides	MCPP	93-65-2	0 / 11	-	-	760 - 880	2500 - 2900	µg/kg	-	-	-	-
Herbicides	Silvex (2,4,5-TP)	93-72-1	0 / 10	-	-	0.76 - 0.88	1.7 - 2	µg/kg	-	-	-	-
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7 / 8	0.17 J Z	0.52 J E	0.14 - 0.15	0.4 - 0.44	mg/kg	8_DG-504	LL	7199	0 - 0.5
Mercury	Mercury	7439-97-6	68 / 99	0.0108 J Z 0.0108 J Z	1.03	0.0094 - 0.0269	0.0157 - 0.0448	mg/kg	8_DG-513	LL	7471B	0 - 0.5
Metals	Aluminum	7429-90-5	99 / 99	1980 J E	36700	6.99 - 8.41	38.8 - 46.6	mg/kg	8_DG-551	LL	6010C	0 - 0.5
Metals	Antimony	7440-36-0	7 / 99	0.791 J Q, Z	5.52	0.717 - 0.863	3.88 - 4.66	mg/kg	8_DG-612	LL	6010C	0 - 0.5
Metals	Arsenic	7440-38-2	98 / 99	1.72 J Z	11.8	0.678 - 0.816	3.88 - 4.66	mg/kg	8_DG-516	LL	6010C	0 - 0.5
Metals	Barium	7440-39-3	99 / 99	59.4	167	0.032 - 0.0385	0.969 - 1.17	mg/kg	8_DG-514	LL	6010C	0 - 0.5
Metals	Beryllium	7440-41-7	97 / 99	0.14 J Z	1.14 J Z	0.0649 - 0.0781	0.969 - 1.17	mg/kg	8_DG-554	LL	6010C	0 - 0.5
Metals	Boron	7440-42-8	79 / 99	0.814 J Z	32.5	0.814 - 0.979	9.69 - 11.7	mg/kg	8_DG-505	LL	6010C	0 - 0.5
Metals	Cadmium	7440-43-9	93 / 99	0.0927 J Z	1.43	0.0736 - 0.0886	0.969 - 1.17	mg/kg	8_DG-567	LL	6010C	0 - 0.5
Metals	Calcium	7440-70-2	99 / 99	2060	358000	3.24 - 33.6	19.4 - 201	mg/kg	8_DG-604	LL	6010C	0 - 0.5
Metals	Chromium	7440-47-3	99 / 99	2.89 J Z	42.5 42.5	0.155 - 0.187	2.91 - 3.5	mg/kg	8_DG-556 8_DG-567	LL LL	6010C 6010C	0 - 0.5 0 - 0.5
Metals	Cobalt	7440-48-4	99 / 99	0.584 J FD, Z	13.2 J E, A	0.0959 - 0.115	0.969 - 1.17	mg/kg	8_DG-556	LL	6010C	0 - 0.5
Metals	Copper	7440-50-8	99 / 99	2.11 J Z	117	0.281 - 1.46	1.94 - 10.1	mg/kg	8_DG-559	LL	6010C	0 - 0.5
Metals	Iron	7439-89-6	99 / 99	1750 J FD, E	38100	3.51 - 21.1	38.8 - 233	mg/kg	8_DG-556	LL	6010C	0 - 0.5
Metals	Lead	7439-92-1	99 / 99	3.47 J Z	35.3 J FD, E, Q, A	0.484 - 2.52	2.91 - 15.1	mg/kg	8_DG-501	LL	6010C	0 - 0.5
Metals	Lithium	7439-93-2	99 / 99	3.8 J Z	33 J A	0.33 - 1.7	3.9 - 20.1	mg/kg	8_DG-505	LL	6010C	0 - 0.5
Metals	Magnesium	7439-95-4	99 / 99	1930	9350	1.62 - 1.95	9.69 - 11.7	mg/kg	8_DG-609	LL	6010C	0 - 0.5
Metals	Manganese	7439-96-5	99 / 99	31.9 J FD, E	687	0.0804 - 0.0968	0.969 - 1.17	mg/kg	8_DG-572	LL	6010C	0 - 0.5
Metals	Molybdenum	7439-98-7	3 / 99	2.63	14.6	0.165 - 0.198	1.94 - 2.33	mg/kg	8_DG-574	LL	6010C	0 - 0.5
Metals	Nickel	7440-02-0	99 / 99	2.14 J FD	24.5	0.126 - 0.152	1.94 - 2.33	mg/kg	8_DG-556	LL	6010C	0 - 0.5
Metals	Phosphorus	7723-14-0	99 / 99	146	1350	2.8 - 14.5	9.69 - 50.3	mg/kg	8_DG-514	LL	6010C	0 - 0.5
Metals	Potassium	7440-09-7	99 / 99	325 J Q	7800	8.08 - 9.72	96.9 - 117	mg/kg	8_DG-609	LL	6010C	0 - 0.5
Metals	Selenium	7782-49-2	91 / 99	0.102 J FD, Z	0.781	0.0969 - 0.117	0.388 - 0.466	mg/kg	8_DG-522	LL	6020A	0 - 0.5
Metals	Silver	7440-22-4	89 / 99	0.0273 J Z	0.476	0.0252 - 0.0303	0.194 - 0.233	mg/kg	8_DG-507	LL	6020A	0 - 0.5
Metals	Sodium	7440-23-5	99 / 99	62.8 J Z	528	16.2 - 19.5	96.9 - 117	mg/kg	8_DG-570	LL	6010C	0 - 0.5
Metals	Strontium	7440-24-6	99 / 99	14.3	230	0.0659 - 0.372	0.388 - 2.19	mg/kg	8_DG-612	LL	6020A	0 - 0.5
Metals	Thallium	7440-28-0	98 / 99	0.0469 J Z	0.49 J Q, E	0.0291 - 0.035	0.194 - 0.233	mg/kg	8_DG-541	LL	6020A	0 - 0.5

Table 3-4
Summary of Analytical Results for Chemicals – Validated Data
Surface Soils – Subarea 8 – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Metals	Tin	7440-31-5	0 / 99	-	-	0.213 - 0.256	9.69 - 11.7	mg/kg	-	-	-	-
Metals	Titanium	7440-32-6	99 / 99	73 J E, Q	1740	0.165 - 0.991	0.969 - 5.83	mg/kg	8_DG-551	LL	6010C	0 - 0.5
Metals	Vanadium	7440-62-2	99 / 99	5.27 J FD, E	80.7	0.126 - 0.152	0.969 - 1.17	mg/kg	8_DG-551	LL	6010C	0 - 0.5
Metals	Zinc	7440-66-6	99 / 99	6.43 J FD, Z	200 J E	0.194 - 1.01	3.88 - 20.1	mg/kg	8_DG-569	LL	6010C	0 - 0.5
Metals	Zirconium	7440-67-7	93 / 99	0.847 J Z	9.81	0.814 - 0.979	4.84 - 5.83	mg/kg	8_DG-570	LL	6010C	0 - 0.5
Moisture Content	Moisture	MOIST	109 / 109	0.45	16	0.1 - 0.1	0.1 - 0.1	%	8_DG-573	LL	160.3M	0 - 0.5
Nitrates	Nitrite-NO2	14797-65-0	0 / 2	-	-	0.8 - 0.8	1 - 1	mg/kg	-	-	-	-
PAHs	1-Methylnaphthalene	90-12-0	17 / 95	0.72 J Z	23	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	2-Methylnaphthalene	91-57-6	36 / 95	0.69 J Z	87	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Acenaphthene	83-32-9	1 / 95	4.8	4.8	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Acenaphthylene	208-96-8	4 / 95	0.35 J Z	5.8	0.33 - 4	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Anthracene	120-12-7	16 / 95	0.34 J Z	63	0.33 - 4	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Benzo(a)anthracene	56-55-3	36 / 93	0.68 J Z 0.68 J Z	980	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Benzo(a)pyrene	50-32-8	37 / 94	0.7 J Z	810	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Benzo(b)fluoranthene	205-99-2	72 / 94	0.7 J Z	1300	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Benzo(e)pyrene	192-97-2	8 / 95	4 J Z	500	3.3 - 40	17 - 200	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Benzo(g,h,i)perylene	191-24-2	34 / 94	0.71 J Z	130	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Benzo(k)fluoranthene	207-08-9	56 / 93	0.71 J Z	580	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	50 / 94	6.5 J Z 6.5 J Z	270	6 - 72	18 - 210	µg/kg	8_DG-536	LL	8270D SIM	0 - 0.5
PAHs	Butylbenzylphthalate	85-68-7	7 / 94	6.3 J Z	590	6 - 72	18 - 210	µg/kg	8_DG-573	LL	8270D SIM	0 - 0.5
PAHs	Chrysene	218-01-9	87 / 94	0.42 J Z	1200	0.33 - 4	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Dibenzo(a,h)anthracene	53-70-3	10 / 95	1 J Z	67	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Diethylphthalate	84-66-2	0 / 94	-	-	6 - 72	18 - 210	µg/kg	-	-	-	-
PAHs	Dimethylphthalate	131-11-3	0 / 94	-	-	6 - 72	18 - 210	µg/kg	-	-	-	-
PAHs	Di-n-butylphthalate	84-74-2	6 / 94	6.9 J Z	21	6 - 72	18 - 210	µg/kg	8_DG-519	LL	8270D SIM	0 - 0.5
PAHs	Di-n-octylphthalate	117-84-0	6 / 94	7.8 J Z	110	6 - 72	18 - 210	µg/kg	8_DG-587	LL	8270D SIM	0 - 0.5
PAHs	Fluoranthene	206-44-0	62 / 94	0.75 J Z	630	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Fluorene	86-73-7	8 / 95	0.87 J Z	12	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	24 / 95	0.71 J Z 0.71 J Z	150	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Naphthalene	91-20-3	38 / 94	0.93 J Z 0.93 J Z	150	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	N-Nitrosodimethylamine	62-75-9	0 / 95	-	-	0.66 - 7.9	1.7 - 20	µg/kg	-	-	-	-
PAHs	Phenanthrene	85-01-8	58 / 93	0.7 J Z	460	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Pyrene	129-00-0	62 / 94	0.73 J Z	550	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PCB/PCTs	Aroclor 1016	12674-11-2	0 / 101	-	-	3.3 - 67	17 - 340	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1221	11104-28-2	0 / 101	-	-	5.1 - 100	17 - 340	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1232	11141-16-5	0 / 101	-	-	4.1 - 83	17 - 340	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1242	53469-21-9	0 / 101	-	-	4.1 - 83	17 - 340	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1248	12672-29-6	1 / 101	240	240	3.3 - 67	17 - 340	µg/kg	8_DG-559	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 1254	11097-69-1	32 / 101	5 J Z	380	4.4 - 89	17 - 340	µg/kg	8_DG-595	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 1260	11096-82-5	7 / 101	6.2 J Z	31 31 J *#	3.9 - 79	17 - 340	µg/kg	8_DG-610 8_DG-559	LL LL	8082A 8082A	0 - 0.5 0 - 0.5
PCB/PCTs	Aroclor 1262	37324-23-5	0 / 101	-	-	3.3 - 67	17 - 340	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1268	11100-14-4	1 / 101	11 J Z	11 J Z	3.3 - 67	17 - 340	µg/kg	8_DG-539C	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 5432	63496-31-1	0 / 101	-	-	10 - 200	33 - 670	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5442	12642-23-8	0 / 101	-	-	10 - 200	33 - 670	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5460	11126-42-4	10 / 101	12 J Z 12 J Z	140	10 - 200	33 - 670	µg/kg	8_DG-502	LL	8082A	0 - 0.5
Perchlorate	Perchlorate	14797-73-0	2 / 8	3 J FD, Z	3.2 J Z	2.1 - 2.4	5 - 5.7	µg/kg	8_DG-513	LL	6850	0 - 0.5
Pesticides	4,4'-DDD	72-54-8	0 / 11	-	-	0.34 - 0.39	1.7 - 2	µg/kg	-	-	-	-
Pesticides	4,4'-DDE	72-55-9	5 / 11	1 J Z	11 J S	0.34 - 1.8	1.7 - 2	µg/kg	8_DG-607	LL	8081B	0 - 0.5
Pesticides	4,4'-DDT	50-29-3	7 / 11	0.43 J Z	9.8 J S	0.36 - 12	1.7 - 12	µg/kg	8_DG-607	LL	8081B	0 - 0.5
Pesticides	Aldrin	309-00-2	0 / 11	-	-	0.17 - 0.2	0.84 - 0.98	µg/kg	-	-	-	-
Pesticides	Alpha-BHC	319-84-6	0 / 11	-	-	0.17 - 0.2	0.84 - 0.98	µg/kg	-	-	-	-
Pesticides	Beta-BHC	319-85-7	3 / 11	2	3.6	0.98 - 1.1	1.9 - 2.2	µg/kg	8_DG-553	LL	8081B	0 - 0.5

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Pesticides	Chlordane	57-74-9	0 / 11	-	-	4.1 - 4.7	17 - 20	µg/kg	-	-	-	-
Pesticides	Delta-BHC	319-86-8	0 / 11	-	-	0.46 - 0.53	0.84 - 0.98	µg/kg	-	-	-	-
Pesticides	Dieldrin	60-57-1	1 / 11	0.61 J S, Z	0.61 J S, Z	0.34 - 1.2	1.7 - 2	µg/kg	8_DG-607	LL	8081B	0 - 0.5
Pesticides	Endosulfan I	959-98-8	0 / 11	-	-	0.22 - 0.26	0.84 - 0.98	µg/kg	-	-	-	-
Pesticides	Endosulfan II	33213-65-9	1 / 11	1.1 J Z	1.1 J Z	0.34 - 0.39	1.7 - 2	µg/kg	8_DG-610	LL	8081B	0 - 0.5
Pesticides	Endosulfan Sulfate	1031-07-8	0 / 11	-	-	0.34 - 0.39	1.7 - 2	µg/kg	-	-	-	-
Pesticides	Endrin	72-20-8	0 / 11	-	-	0.34 - 1.4	1.7 - 2	µg/kg	-	-	-	-
Pesticides	Endrin Aldehyde	7421-93-4	1 / 11	0.54 J S, Z	0.54 J S, Z	0.34 - 0.99	1.7 - 2	µg/kg	8_DG-607	LL	8081B	0 - 0.5
Pesticides	Endrin Ketone	53494-70-5	0 / 11	-	-	0.61 - 0.71	1.8 - 2.1	µg/kg	-	-	-	-
Pesticides	Gamma-BHC (Lindane)	58-89-9	0 / 11	-	-	0.17 - 0.2	0.84 - 0.98	µg/kg	-	-	-	-
Pesticides	Heptachlor	76-44-8	0 / 11	-	-	0.17 - 0.2	0.84 - 0.98	µg/kg	-	-	-	-
Pesticides	Heptachlor Epoxide	1024-57-3	1 / 11	0.23 J S, Z	0.23 J S, Z	0.17 - 0.37	0.84 - 0.98	µg/kg	8_DG-607	LL	8081B	0 - 0.5
Pesticides	Methoxychlor	72-43-5	0 / 11	-	-	1.7 - 2	6.8 - 7.9	µg/kg	-	-	-	-
Pesticides	Mirex	2385-85-5	0 / 11	-	-	0.36 - 2.6	1.7 - 2.6	µg/kg	-	-	-	-
Pesticides	Technical Toxaphene	8001-35-2	0 / 11	-	-	14 - 17	34 - 39	µg/kg	-	-	-	-
pH	pH	pH	95 / 95	5.46	11.4	0.01 - 0.01	0.01 - 0.01	pH	8_DG-573	LL	9045M	0 - 0.5
Sulfates	Sulfate	14808-79-8	2 / 2	9.8	10.7	5 - 5	5 - 5	mg/kg	8_DG-604	LL	300.0	0 - 0.5
Sulfates	Sulfite	14265-45-3	0 / 2	-	-	30.2 - 30.2	101 - 101	mg/kg	-	-	-	-
SVOC	1,1'-Biphenyl	92-52-4	1 / 9	25 J Z	25 J Z	17 - 18	34 - 37	µg/kg	8_DG-513	LL	8270D	0 - 0.5
SVOC	1,2,4-Trichlorobenzene	120-82-1	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	1,2-Dichlorobenzene	95-50-1	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	1,2-Diphenylhydrazine	122-66-7	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	1,3-Dichlorobenzene	541-73-1	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	1,4-Dichlorobenzene	106-46-7	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	2,4,5-Trichlorophenol	95-95-4	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	2,4,6-Trichlorophenol	88-06-2	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	2,4-Dichlorophenol	120-83-2	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	2,4-Dimethylphenol	105-67-9	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	2,4-Dinitrophenol	51-28-5	0 / 9	-	-	300 - 330	670 - 1100	µg/kg	-	-	-	-
SVOC	2,6-Dichlorophenol	87-65-0	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	2-Chloronaphthalene	91-58-7	0 / 9	-	-	7 - 8	33 - 36	µg/kg	-	-	-	-
SVOC	2-Chlorophenol	95-57-8	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	2-Methylphenol	95-48-7	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	2-Nitroaniline	88-74-4	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	2-Nitrophenol	88-75-5	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	3,3'-Dichlorobenzidine	91-94-1	0 / 9	-	-	100 - 110	340 - 370	µg/kg	-	-	-	-
SVOC	3,5-Dimethylphenol	108-68-9	0 / 9	-	-	34 - 37	170 - 180	µg/kg	-	-	-	-
SVOC	3-Nitroaniline	99-09-2	0 / 9	-	-	68 - 74	170 - 180	µg/kg	-	-	-	-
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	0 / 9	-	-	170 - 180	510 - 550	µg/kg	-	-	-	-
SVOC	4-Bromophenyl-phenylether	101-55-3	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	4-Chloro-3-methylphenol	59-50-7	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	4-Chloroaniline	106-47-8	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	4-Chlorophenyl-phenylether	7005-72-3	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	4-Methylphenol	106-44-5	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	4-Nitroaniline	100-01-6	0 / 9	-	-	68 - 74	170 - 180	µg/kg	-	-	-	-
SVOC	4-Nitrophenol	100-02-7	0 / 9	-	-	170 - 180	510 - 550	µg/kg	-	-	-	-
SVOC	Aniline	62-53-3	0 / 9	-	-	170 - 180	340 - 540	µg/kg	-	-	-	-
SVOC	Benzidine	92-87-5	0 / 7	-	-	710 - 770	1700 - 3600	µg/kg	-	-	-	-
SVOC	Benzo(a)anthracene	56-55-3	2 / 2	5 J Z	7 J Z	3 - 4	17 - 18	µg/kg	8_DG-583	LL	8270D	0 - 0.5
SVOC	Benzo(a)pyrene	50-32-8	1 / 1	9 J Z	9 J Z	4 - 4	18 - 18	µg/kg	8_DG-513	LL	8270D	0 - 0.5
SVOC	Benzo(b)fluoranthene	205-99-2	1 / 1	8 J Z	8 J Z	3 - 3	17 - 17	µg/kg	8_DG-583	LL	8270D	0 - 0.5
SVOC	Benzo(g,h,i)perylene	191-24-2	1 / 1	8 J Z	8 J Z	4 - 4	18 - 18	µg/kg	8_DG-513	LL	8270D	0 - 0.5
SVOC	Benzo(k)fluoranthene	207-08-9	2 / 2	5 J Z	8 J FD, Z	3 - 4	17 - 18	µg/kg	8_DG-583	LL	8270D	0 - 0.5
SVOC	Benzoic Acid	65-85-0	0 / 9	-	-	170 - 180	510 - 550	µg/kg	-	-	-	-
SVOC	Benzyl Alcohol	100-51-6	0 / 9	-	-	170 - 180	340 - 540	µg/kg	-	-	-	-
SVOC	bis(2-chloroethoxy)methane	111-91-1	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	bis(2-chloroethyl) ether	111-44-4	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-

Table 3-4
Summary of Analytical Results for Chemicals – Validated Data
Surface Soils – Subarea 8 – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	0 / 1	-	-	72 - 72	180 - 180	µg/kg	-	-	-	-
SVOC	Butylbenzylphthalate	85-68-7	0 / 1	-	-	72 - 72	180 - 180	µg/kg	-	-	-	-
SVOC	Carbazole	86-74-8	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	Chrysene	218-01-9	1 / 1	7 J Z	7 J Z	3 - 3	17 - 17	µg/kg	8_DG-583	LL	8270D	0 - 0.5
SVOC	Dibenzofuran	132-64-9	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	Diethylphthalate	84-66-2	0 / 1	-	-	72 - 72	180 - 180	µg/kg	-	-	-	-
SVOC	Dimethylphthalate	131-11-3	0 / 1	-	-	72 - 72	180 - 180	µg/kg	-	-	-	-
SVOC	Di-n-butylphthalate	84-74-2	0 / 1	-	-	72 - 72	180 - 180	µg/kg	-	-	-	-
SVOC	Di-n-octylphthalate	117-84-0	0 / 1	-	-	72 - 72	180 - 180	µg/kg	-	-	-	-
SVOC	Diphenylamine	NDPA122-39-4	0 / 9	-	-	34 - 37	170 - 180	µg/kg	-	-	-	-
SVOC	Fluoranthene	206-44-0	1 / 1	4 J FD, Z	4 J FD, Z	3 - 3	17 - 17	µg/kg	8_DG-583	LL	8270D	0 - 0.5
SVOC	Hexachlorobenzene	118-74-1	0 / 9	-	-	3 - 4	17 - 19	µg/kg	-	-	-	-
SVOC	Hexachlorobutadiene	87-68-3	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	Hexachlorocyclopentadiene	77-47-4	0 / 9	-	-	170 - 180	510 - 550	µg/kg	-	-	-	-
SVOC	Hexachloroethane	67-72-1	0 / 9	-	-	34 - 37	170 - 180	µg/kg	-	-	-	-
SVOC	Isophorone	78-59-1	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	Naphthalene	91-20-3	1 / 1	4 J Z	4 J Z	4 - 4	18 - 18	µg/kg	8_DG-513	LL	8270D	0 - 0.5
SVOC	Nitrobenzene	98-95-3	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	N-Nitroso-di-n-propylamine	621-64-7	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	N-Nitrosodiphenylamine	86-30-6	0 / 9	-	-	17 - 18	34 - 37	µg/kg	-	-	-	-
SVOC	Pentachlorophenol	87-86-5	0 / 9	-	-	34 - 37	170 - 190	µg/kg	-	-	-	-
SVOC	Phenanthrene	85-01-8	2 / 2	5 J Z	15 J Z	3 - 4	17 - 18	µg/kg	8_DG-513	LL	8270D	0 - 0.5
SVOC	Phenol	108-95-2	1 / 9	890	890	17 - 18	34 - 37	µg/kg	8_DG-580	LL	8270D	0 - 0.5
SVOC	Pyrene	129-00-0	1 / 1	8 J Z	8 J Z	3 - 3	17 - 17	µg/kg	8_DG-583	LL	8270D	0 - 0.5
SVOC	Pyridine	110-86-1	0 / 9	-	-	68 - 74	170 - 180	µg/kg	-	-	-	-
TPH-EFH	EFH (C12-C14)	PHCC12C14	0 / 94	-	-	2 - 110	5 - 280	mg/kg	-	-	-	-
TPH-EFH	EFH (C15-C20)	PHCC15C20	26 / 94	2.3 J Z 2.3 J Z	7.5 J Z	2 - 110	5 - 280	mg/kg	8_DG-586	LL	8015M	0 - 0.5
TPH-EFH	EFH (C21-C30)	PHCC21C30	87 / 94	2.8 J Z 2.8 J Z	340	2 - 110	5 - 280	mg/kg	8_DG-580	LL	8015M	0 - 0.5
TPH-EFH	EFH (C30-C40)	PHCC30C40	87 / 94	6.1 J Z	1600	4 - 220	10 - 550	mg/kg	8_DG-580	LL	8015M	0 - 0.5
TPH-EFH	EFH (C8-C11)	PHCC8C11	0 / 94	-	-	2 - 110	5 - 280	mg/kg	-	-	-	-

Notes
LL - Eurofins Lancaster Laboratory
ug/kg- microgram per kilogram
mg/kg - milligram per kilogram
ng/kg - nanogram per kilogram
J - Result is an estimated value
H - Holding times exceeded
S - Surrogates outside of criteria
C - Calibration recoveries outside of criteria
R - Calibration relative response factors outside of criteria
B - Method blank contamination
L - Laboratory control sample recoveries outside of criteria
Q - Matrix spike recoveries outside of criteria
E - Laboratory control sample and or matrix spike relative percent differences outside of criteria
I - Internal standards outside of criteria
A - Serial dilution results outside of criteria
F - Field blank contamination
Z - Analytes reported below the reporting limits and above the method detection limit
FD - Field duplicate relative percent difference outside of criteria
*# - Unusual problems found with the quality control data. See validation reports in Appendix C for detail.

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Cyanide	Cyanide	57-12-5	0 / 2	-	-	0.2 - 0.21	0.55 - 0.57	mg/kg	-	-	-	-
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	47 / 91	0.296 J Z	76.6	0.012 - 0.318	4.91 - 5.87	ng/kg	8_DG-502	LL	1613B	4 - 5
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	31 / 91	0.0161 J Z	8.84	0.00508 - 0.124	4.91 - 5.87	ng/kg	8_DG-559	LL	1613B	4 - 5
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	22 / 91	0.0212 J FD, Z	0.655 J Z	0.00915 - 0.205	4.91 - 5.87	ng/kg	8_DG-559	LL	1613B	4 - 5
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	20 / 91	0.0194 J Z	1.75 J Z	0.0114 - 0.167	4.91 - 5.87	ng/kg	8_DG-502	LL	1613B	4 - 5
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	18 / 91	0.0252 J Z	0.715 J Z	0.0051 - 0.137	4.91 - 5.87	ng/kg	8_DG-502	LL	1613B	4 - 5
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	37 / 91	0.0345 J Z	2.3 J Z	0.0118 - 0.174	4.91 - 5.87	ng/kg	8_DG-502	LL	1613B	4 - 5
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	17 / 91	0.0324 J Z	0.648 J Z	0.00521 - 0.124	4.91 - 5.87	ng/kg	8_DG-559	LL	1613B	4 - 5
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	34 / 91	0.029 J Z	2.14 J Z	0.0117 - 0.166	4.91 - 5.87	ng/kg	8_DG-502	LL	1613B	4 - 5
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	32 / 91	0.0155 J Z	0.94 J Z	0.00594 - 0.161	4.91 - 5.87	ng/kg	8_DG-582	LL	1613B	2.5 - 3.5
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	21 / 91	0.0546 J Z	1.75 J Z	0.0074 - 0.131	4.91 - 5.87	ng/kg	8_DG-502	LL	1613B	4 - 5
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	23 / 91	0.0338 J Z	0.906 J Z	0.0168 - 0.202	4.91 - 5.87	ng/kg	8_DG-502	LL	1613B	4 - 5
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	14 / 91	0.0207 J Z	0.422 J Z	0.0049 - 0.121	4.91 - 5.87	ng/kg	8_DG-559	LL	1613B	4 - 5
Dioxins	2,3,4,7,8-PECDF	57117-31-4	33 / 91	0.0155 J Z	0.64 J Z	0.00688 - 0.129	4.91 - 5.87	ng/kg	8_DG-559	LL	1613B	4 - 5
Dioxins	2,3,7,8-TCDD	1746-01-6	24 / 91	0.0192 J Z	0.149 J Z	0.0101 - 0.135	0.983 - 1.17	ng/kg	8_DG-502	LL	1613B	4 - 5
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	39 / 91	0.0117 J Z	0.528 J Z	0.01 - 0.273	0.983 - 1.17	ng/kg	8_DG-559	LL	1613B	4 - 5
Dioxins	OCDD	3268-87-9	54 / 91	1.59 J FD, Z 1.59 J Z	571	0.0151 - 0.144	9.83 - 11.7	ng/kg	8_DG-502	LL	1613B	4 - 5
Dioxins	OCDF	39001-02-0	24 / 91	0.0502 J Z	19.1	0.0168 - 0.18	9.83 - 11.7	ng/kg	8_DG-559	LL	1613B	4 - 5
Dioxins	TCDD TEQ	TCDD TEQ	87 / 91	0.000451	1.97	0 - 0	0 - 0	ng/kg	8_DG-502	LL	1613B	4 - 5
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	0 / 22	-	-	46 - 52	93 - 110	µg/kg	-	-	-	-
Herbicides	2,4,5-T	93-76-5	1 / 22	2.4	2.4	0.85 - 0.97	1.8 - 2	µg/kg	8_DG-567	LL	8151A	4 - 5
Herbicides	2,4-D	94-75-7	1 / 22	20 J Z	20 J Z	12 - 14	37 - 43	µg/kg	8_DG-590	LL	8151A	4 - 5
Herbicides	2,4-DB	94-82-6	2 / 22	22	27	6.4 - 7.3	18 - 20	µg/kg	8_DG-607	LL	8151A	5 - 6
Herbicides	Dicamba	1918-00-9	0 / 22	-	-	4.1 - 4.7	12 - 14	µg/kg	-	-	-	-
Herbicides	Dichlorprop	120-36-5	0 / 22	-	-	9.3 - 11	18 - 20	µg/kg	-	-	-	-
Herbicides	Dinitrobutyl Phenol	88-85-7	0 / 18	-	-	9.3 - 11	25 - 28	µg/kg	-	-	-	-
Herbicides	MCPA	94-74-6	0 / 22	-	-	790 - 900	2600 - 3000	µg/kg	-	-	-	-
Herbicides	MCPP	93-65-2	0 / 22	-	-	780 - 890	2600 - 3000	µg/kg	-	-	-	-
Herbicides	Silvex (2,4,5-TP)	93-72-1	0 / 22	-	-	0.78 - 0.89	1.8 - 2	µg/kg	-	-	-	-
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	3 / 8	0.18 J Z 0.18 J Z	1.4 J FD, E	0.14 - 0.16	0.4 - 0.44	mg/kg	8_DG-504	LL	7199	2.5 - 3.5
Mercury	Mercury	7439-97-6	41 / 116	0.0107 J Z	0.0323	0.0097 - 0.0117	0.0161 - 0.0196	mg/kg	8_DG-511	LL	7471B	6 - 7
Metals	Aluminum	7429-90-5	116 / 116	9650	36500	7.07 - 8.5	39.2 - 47.1	mg/kg	8_DG-543	LL	6010C	4 - 5
Metals	Antimony	7440-36-0	7 / 116	0.859 J Z	7.33 J Q	0.726 - 0.872	3.92 - 4.71	mg/kg	8_DG-514	LL	6010C	4 - 5
Metals	Arsenic	7440-38-2	116 / 116	2.29 J Z	8.53	0.687 - 0.825	3.92 - 4.71	mg/kg	8_DG-606	LL	6010C	4 - 5
Metals	Barium	7440-39-3	116 / 116	48.1	164	0.0324 - 0.0389	0.981 - 1.18	mg/kg	8_DG-565	LL	6010C	4 - 5
Metals	Beryllium	7440-41-7	116 / 116	0.202 J Z	1.14 J Z	0.0657 - 0.0789	0.981 - 1.18	mg/kg	8_DG-567	LL	6010C	9 - 10
Metals	Boron	7440-42-8	85 / 116	1.24 J Z	21.5	0.824 - 0.99	9.81 - 11.8	mg/kg	8_DG-558	LL	6010C	4 - 5
Metals	Cadmium	7440-43-9	98 / 116	0.0842 J Z	1.32	0.0745 - 0.0896	0.981 - 1.18	mg/kg	8_DG-567	LL	6010C	4 - 5
Metals	Calcium	7440-70-2	116 / 116	1750	276000 J E	3.28 - 38.4	19.6 - 230	mg/kg	8_DG-556	LL	6010C	4 - 5
Metals	Chromium	7440-47-3	116 / 116	10.5	43.8	0.157 - 0.189	2.94 - 3.54	mg/kg	8_DG-606	LL	6010C	4 - 5
Metals	Cobalt	7440-48-4	116 / 116	2.13	15.1 J FD, E, A	0.0971 - 0.117	0.981 - 1.18	mg/kg	8_DG-551	LL	6010C	4 - 5
Metals	Copper	7440-50-8	116 / 116	3.65 J Z, A	26.7	0.284 - 1.65	1.96 - 11.4	mg/kg	8_DG-515	LL	6010C	9 - 10
Metals	Iron	7439-89-6	116 / 116	12800	48400	3.55 - 21.3	39.2 - 236	mg/kg	8_DG-551	LL	6010C	19 - 20
Metals	Lead	7439-92-1	116 / 116	3.31	20.5 J E, Q, A	0.49 - 2.85	2.94 - 17.1	mg/kg	8_DG-502	LL	6010C	4 - 5
Metals	Lithium	7439-93-2	116 / 116	6.1	34.9	0.33 - 1.9	3.9 - 22.8	mg/kg	8_DG-614	LL	6010C	4 - 5
Metals	Magnesium	7439-95-4	116 / 116	3380	9030	1.64 - 1.97	9.81 - 11.8	mg/kg	8_DG-614	LL	6010C	4 - 5
Metals	Manganese	7439-96-5	116 / 116	90.2 J E	749	0.0814 - 0.0978	0.981 - 1.18	mg/kg	8_DG-503	LL	6010C	3 - 4
Metals	Molybdenum	7439-98-7	3 / 116	2.3 J Z	2.5	0.167 - 0.2	1.96 - 2.36	mg/kg	8_DG-612	LL	6010C	4 - 5
Metals	Nickel	7440-02-0	116 / 116	6.16	24.2	0.128 - 0.153	1.96 - 2.36	mg/kg	8_DG-558	LL	6010C	4 - 5
Metals	Phosphorus	7723-14-0	116 / 116	91.6	864	2.83 - 16.4	9.81 - 56.9	mg/kg	8_DG-610	LL	6010C	4 - 5
Metals	Potassium	7440-09-7	116 / 116	1100 J Q	7080 J Q	8.18 - 9.83	98.1 - 118	mg/kg	8_DG-541	LL	6010C	4 - 5
Metals	Selenium	7782-49-2	61 / 116	0.105 J Q, E, Z	0.411 J Z	0.0981 - 0.118	0.392 - 0.471	mg/kg	8_DG-607	LL	6020A	5 - 6
Metals	Silver	7440-22-4	83 / 116	0.0299 J Z	0.104 J Z	0.0255 - 0.0306	0.196 - 0.236	mg/kg	8_DG-511	LL	6020A	6 - 7

Table 3-5
Summary of Analytical Results for Chemicals – Validated Data
Subsurface Soils – Subarea 8 – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Metals	Sodium	7440-23-5	116 / 116	69.8 J Z	682	16.4 - 19.7	98.1 - 118	mg/kg	8_DG-554	LL	6010C	4 - 5
Metals	Strontium	7440-24-6	116 / 116	11	399 J E	0.0667 - 0.395	0.392 - 2.32	mg/kg	8_DG-551	LL	6020A	9 - 10
Metals	Thallium	7440-28-0	116 / 116	0.114 J Q, Z	0.459	0.0294 - 0.0354	0.196 - 0.236	mg/kg	8_DG-542	LL	6020A	4 - 5
Metals	Tin	7440-31-5	0 / 116	-	-	0.216 - 0.259	9.81 - 11.8	mg/kg	-	-	-	-
Metals	Titanium	7440-32-6	116 / 116	643 J E, Q	1890	0.167 - 0.948	0.981 - 5.57	mg/kg	8_DG-543	LL	6010C	4 - 5
Metals	Vanadium	7440-62-2	116 / 116	25.3	83.6	0.128 - 0.153	0.981 - 1.18	mg/kg	8_DG-515	LL	6010C	9 - 10
Metals	Zinc	7440-66-6	116 / 116	29.2	91.3	0.196 - 1.14	3.92 - 22.8	mg/kg	8_DG-609	LL	6010C	4 - 5
Metals	Zirconium	7440-67-7	113 / 116	1.23 J Z	8.4	0.824 - 0.99	4.9 - 5.89	mg/kg	8_DG-551	LL	6010C	19 - 20
Moisture Content	Moisture	MOIST	118 / 118	2	16.8	0.1 - 0.1	0.1 - 0.1	%	8_DG-515	LL	160.3M	9 - 10
PAHs	1-Methylnaphthalene	90-12-0	11 / 117	0.89 J Z 0.89 J Z	2.2	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-614	LL	8270D SIM	4 - 5
PAHs	2-Methylnaphthalene	91-57-6	13 / 117	0.83 J Z	2.9	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-614	LL	8270D SIM	4 - 5
PAHs	Acenaphthene	83-32-9	0 / 117	-	-	0.68 - 7.6	1.7 - 19	µg/kg	-	-	-	-
PAHs	Acenaphthylene	208-96-8	1 / 117	0.5 J Z	0.5 J Z	0.34 - 3.8	1.7 - 19	µg/kg	8_DG-505	LL	8270D SIM	4 - 5
PAHs	Anthracene	120-12-7	7 / 117	0.39 J Z	0.77 J Z	0.34 - 3.8	1.7 - 19	µg/kg	8_DG-578	LL	8270D SIM	4 - 5
PAHs	Benzo(a)anthracene	56-55-3	12 / 116	0.8 J Z	8 J Z	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-578	LL	8270D	4 - 5
PAHs	Benzo(a)pyrene	50-32-8	11 / 117	0.93 J Z	9 J Z	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-569	LL	8270D SIM	4 - 5
PAHs	Benzo(b)fluoranthene	205-99-2	25 / 116	0.79 J Z	16 J Z 16 J Z	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-572 8_DG-573	LL LL	8270D SIM 8270D SIM	4 - 5 4 - 5
PAHs	Benzo(e)pyrene	192-97-2	4 / 117	4.7 J Z	6.5 J Z	3.4 - 38	17 - 190	µg/kg	8_DG-525	LL	8270D SIM	4 - 5
PAHs	Benzo(g,h,i)perylene	191-24-2	10 / 117	0.82 J Z	4	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-525	LL	8270D SIM	4 - 5
PAHs	Benzo(k)fluoranthene	207-08-9	14 / 117	0.79 J Z	6	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-502	LL	8270D SIM	4 - 5
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	24 / 116	7.3 J Z 7.3 J FD, Z	44 J L	6.1 - 74	18 - 210	µg/kg	8_DG-559	LL	8270D SIM	4 - 5
PAHs	Butylbenzylphthalate	85-68-7	0 / 116	-	-	6.1 - 74	18 - 210	µg/kg	-	-	-	-
PAHs	Chrysene	218-01-9	46 / 116	0.37 J Z	16 J Z	0.34 - 4	1.7 - 19	µg/kg	8_DG-572	LL	8270D SIM	4 - 5
PAHs	Dibenzo(a,h)anthracene	53-70-3	4 / 117	1 J Z	1.6 J Z	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-525	LL	8270D SIM	4 - 5
PAHs	Diethylphthalate	84-66-2	0 / 116	-	-	6.1 - 74	18 - 210	µg/kg	-	-	-	-
PAHs	Dimethylphthalate	131-11-3	0 / 117	-	-	6.1 - 74	18 - 210	µg/kg	-	-	-	-
PAHs	Di-n-butylphthalate	84-74-2	0 / 116	-	-	6.1 - 74	18 - 210	µg/kg	-	-	-	-
PAHs	Di-n-octylphthalate	117-84-0	0 / 116	-	-	6.1 - 74	18 - 210	µg/kg	-	-	-	-
PAHs	Fluoranthene	206-44-0	20 / 115	0.75 J Z	14	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-525	LL	8270D SIM	4 - 5
PAHs	Fluorene	86-73-7	0 / 117	-	-	0.68 - 7.6	1.7 - 19	µg/kg	-	-	-	-
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	7 / 117	0.77 J Z	4	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-525	LL	8270D SIM	4 - 5
PAHs	Naphthalene	91-20-3	18 / 117	0.9 J Z	4.9	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-614	LL	8270D SIM	4 - 5
PAHs	N-Nitrosodimethylamine	62-75-9	0 / 117	-	-	0.68 - 7.6	1.7 - 19	µg/kg	-	-	-	-
PAHs	Phenanthrene	85-01-8	19 / 116	0.75 J Z	14 J Z	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-572	LL	8270D SIM	4 - 5
PAHs	Pyrene	129-00-0	20 / 115	0.78 J Z	13 J Z	0.68 - 7.6	1.7 - 19	µg/kg	8_DG-572	LL	8270D SIM	4 - 5
PCB/PCTs	Aroclor 1016	12674-11-2	0 / 115	-	-	3.3 - 36	17 - 180	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1221	11104-28-2	0 / 115	-	-	5.1 - 55	17 - 180	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1232	11141-16-5	0 / 115	-	-	4.1 - 44	17 - 180	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1242	53469-21-9	0 / 115	-	-	4.1 - 44	17 - 180	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1248	12672-29-6	0 / 115	-	-	3.3 - 36	17 - 180	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1254	11097-69-1	7 / 115	6.3 J Z	85	4.4 - 47	17 - 180	µg/kg	8_DG-559	LL	8082A	4 - 5
PCB/PCTs	Aroclor 1260	11096-82-5	1 / 115	14 J Z	14 J Z	3.9 - 42	17 - 180	µg/kg	8_DG-559	LL	8082A	4 - 5
PCB/PCTs	Aroclor 1262	37324-23-5	0 / 115	-	-	3.3 - 36	17 - 180	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1268	11100-14-4	0 / 115	-	-	3.3 - 36	17 - 180	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5432	63496-31-1	0 / 115	-	-	10 - 110	33 - 360	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5442	12642-23-8	0 / 115	-	-	10 - 110	33 - 360	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5460	11126-42-4	2 / 115	17 J Z	44	10 - 110	33 - 360	µg/kg	8_DG-502	LL	8082A	4 - 5
Perchlorate	Perchlorate	14797-73-0	1 / 10	3.6 J Z	3.6 J Z	2.1 - 2.5	5.1 - 6	µg/kg	8_DG-513	LL	6850	4 - 5
Pesticides	4,4'-DDD	72-54-8	0 / 22	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	4,4'-DDE	72-55-9	0 / 22	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	4,4'-DDT	50-29-3	1 / 22	0.76 J Z	0.76 J Z	0.36 - 0.42	1.8 - 2	µg/kg	8_DG-514	LL	8081B	4 - 5
Pesticides	Aldrin	309-00-2	0 / 22	-	-	0.18 - 0.2	0.86 - 0.99	µg/kg	-	-	-	-

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Pesticides	Alpha-BHC	319-84-6	1 / 22	0.22 J Z	0.22 J Z	0.18 - 0.2	0.86 - 0.99	µg/kg	8_DG-575	LL	8081B	9 - 10
Pesticides	Beta-BHC	319-85-7	1 / 22	3.8 J Q	3.8 J Q	1 - 1.1	2 - 2.3	µg/kg	8_DG-553	LL	8081B	4 - 5
Pesticides	Chlordane	57-74-9	0 / 22	-	-	4.2 - 4.8	18 - 20	µg/kg	-	-	-	-
Pesticides	Delta-BHC	319-86-8	0 / 22	-	-	0.47 - 0.54	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Dieldrin	60-57-1	0 / 22	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	Endosulfan I	959-98-8	0 / 22	-	-	0.23 - 0.26	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Endosulfan II	33213-65-9	0 / 22	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	Endosulfan Sulfate	1031-07-8	0 / 22	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	Endrin	72-20-8	0 / 22	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	Endrin Aldehyde	7421-93-4	0 / 22	-	-	0.34 - 0.39	1.8 - 2	µg/kg	-	-	-	-
Pesticides	Endrin Ketone	53494-70-5	0 / 22	-	-	0.63 - 0.72	1.9 - 2.2	µg/kg	-	-	-	-
Pesticides	Gamma-BHC (Lindane)	58-89-9	0 / 22	-	-	0.18 - 0.2	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Heptachlor	76-44-8	0 / 22	-	-	0.18 - 0.2	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Heptachlor Epoxide	1024-57-3	0 / 22	-	-	0.18 - 0.2	0.86 - 0.99	µg/kg	-	-	-	-
Pesticides	Methoxychlor	72-43-5	0 / 22	-	-	1.8 - 2	7 - 8	µg/kg	-	-	-	-
Pesticides	Mirex	2385-85-5	0 / 22	-	-	0.36 - 0.42	1.8 - 2	µg/kg	-	-	-	-
Pesticides	Technical Toxaphene	8001-35-2	0 / 22	-	-	15 - 17	34 - 39	µg/kg	-	-	-	-
pH	pH	pH	116 / 116	5.45	8.9	0.01 - 0.01	0.01 - 0.01	pH	8_DG-574	LL	9045M	9 - 10
SVOC	1,1'-Biphenyl	92-52-4	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,2,4-Trichlorobenzene	120-82-1	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,2-Dichlorobenzene	95-50-1	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,2-Diphenylhydrazine	122-66-7	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,3-Dichlorobenzene	541-73-1	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,4-Dichlorobenzene	106-46-7	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4,5-Trichlorophenol	95-95-4	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4,6-Trichlorophenol	88-06-2	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dichlorophenol	120-83-2	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dimethylphenol	105-67-9	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dinitrophenol	51-28-5	0 / 12	-	-	310 - 350	680 - 1100	µg/kg	-	-	-	-
SVOC	2,6-Dichlorophenol	87-65-0	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Chloronaphthalene	91-58-7	0 / 12	-	-	7 - 8	34 - 38	µg/kg	-	-	-	-
SVOC	2-Chlorophenol	95-57-8	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Methylphenol	95-48-7	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Nitroaniline	88-74-4	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Nitrophenol	88-75-5	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	3,3'-Dichlorobenzidine	91-94-1	0 / 12	-	-	100 - 120	340 - 380	µg/kg	-	-	-	-
SVOC	3,5-Dimethylphenol	108-68-9	0 / 12	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	3-Nitroaniline	99-09-2	0 / 12	-	-	68 - 77	170 - 190	µg/kg	-	-	-	-
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	0 / 12	-	-	170 - 190	510 - 580	µg/kg	-	-	-	-
SVOC	4-Bromophenyl-phenylether	101-55-3	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chloro-3-methylphenol	59-50-7	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chloroaniline	106-47-8	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chlorophenyl-phenylether	7005-72-3	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Methylphenol	106-44-5	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Nitroaniline	100-01-6	0 / 12	-	-	68 - 77	170 - 190	µg/kg	-	-	-	-
SVOC	4-Nitrophenol	100-02-7	0 / 12	-	-	170 - 190	510 - 580	µg/kg	-	-	-	-
SVOC	Aniline	62-53-3	0 / 12	-	-	170 - 190	350 - 550	µg/kg	-	-	-	-
SVOC	Benzidine	92-87-5	0 / 10	-	-	720 - 810	1700 - 3700	µg/kg	-	-	-	-
SVOC	Benzo(a)anthracene	56-55-3	1 / 1	8 J Z	8 J Z	4 - 4	19 - 19	µg/kg	8_DG-578	LL	8270D	4 - 5
SVOC	Benzo(b)fluoranthene	205-99-2	1 / 1	7 J Z	7 J Z	4 - 4	19 - 19	µg/kg	8_DG-513	LL	8270D	4 - 5
SVOC	Benzoic Acid	65-85-0	0 / 12	-	-	170 - 190	510 - 580	µg/kg	-	-	-	-
SVOC	Benzyl Alcohol	100-51-6	0 / 12	-	-	170 - 190	350 - 550	µg/kg	-	-	-	-
SVOC	bis(2-chloroethoxy)methane	111-91-1	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	bis(2-chloroethyl) ether	111-44-4	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-

Table 3-5
Summary of Analytical Results for Chemicals – Validated Data
Subsurface Soils – Subarea 8 – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	0 / 1	-	-	74 - 74	190 - 190	µg/kg	-	-	-	-
SVOC	Butylbenzylphthalate	85-68-7	0 / 1	-	-	74 - 74	180 - 180	µg/kg	-	-	-	-
SVOC	Carbazole	86-74-8	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Chrysene	218-01-9	1 / 1	9 J Z	9 J Z	4 - 4	19 - 19	µg/kg	8_DG-578	LL	8270D	4 - 5
SVOC	Dibenzofuran	132-64-9	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Diethylphthalate	84-66-2	0 / 1	-	-	74 - 74	180 - 180	µg/kg	-	-	-	-
SVOC	Dimethylphthalate	131-11-3	0 / 1	-	-	74 - 74	180 - 180	µg/kg	-	-	-	-
SVOC	Di-n-butylphthalate	84-74-2	0 / 1	-	-	74 - 74	180 - 180	µg/kg	-	-	-	-
SVOC	Di-n-octylphthalate	117-84-0	0 / 1	-	-	74 - 74	180 - 180	µg/kg	-	-	-	-
SVOC	Diphenylamine	NDPA122-39-4	0 / 12	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	Fluoranthene	206-44-0	2 / 2	7 J Z	8 J Z	4 - 4	18 - 19	µg/kg	8_DG-578	LL	8270D	4 - 5
SVOC	Hexachlorobenzene	118-74-1	0 / 12	-	-	3 - 4	17 - 20	µg/kg	-	-	-	-
SVOC	Hexachlorobutadiene	87-68-3	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Hexachlorocyclopentadiene	77-47-4	0 / 12	-	-	170 - 190	510 - 580	µg/kg	-	-	-	-
SVOC	Hexachloroethane	67-72-1	0 / 12	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	Isophorone	78-59-1	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Nitrobenzene	98-95-3	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	N-Nitroso-di-n-propylamine	621-64-7	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	N-Nitrosodiphenylamine	86-30-6	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Pentachlorophenol	87-86-5	0 / 12	-	-	34 - 38	170 - 200	µg/kg	-	-	-	-
SVOC	Phenanthrene	85-01-8	1 / 1	5 J Z	5 J Z	4 - 4	19 - 19	µg/kg	8_DG-578	LL	8270D	4 - 5
SVOC	Phenol	108-95-2	0 / 12	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Pyrene	129-00-0	2 / 2	4 J Z	11 J Z	4 - 4	19 - 19	µg/kg	8_DG-578	LL	8270D	4 - 5
SVOC	Pyridine	110-86-1	0 / 12	-	-	68 - 77	170 - 190	µg/kg	-	-	-	-
TPH-EFH	EFH (C12-C14)	PHCC12C14	0 / 116	-	-	2 - 11	5.1 - 28	mg/kg	-	-	-	-
TPH-EFH	EFH (C15-C20)	PHCC15C20	7 / 116	2.2 J Z 2.2 J Z	6.3	2 - 11	5.1 - 28	mg/kg	8_DG-590	LL	8015M	7 - 8
TPH-EFH	EFH (C21-C30)	PHCC21C30	61 / 116	2.5 J Z	110	2 - 11	5.1 - 28	mg/kg	8_DG-569	LL	8015M	4 - 5
TPH-EFH	EFH (C30-C40)	PHCC30C40	61 / 116	4.6 J Z	310	4 - 23	10 - 57	mg/kg	8_DG-573	LL	8015M	4 - 5
TPH-EFH	EFH (C8-C11)	PHCC8C11	1 / 116	3.1 J Z	3.1 J Z	2 - 11	5.1 - 28	mg/kg	8_DG-613	LL	8015M	4 - 5
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	1 / 116	1.9	1.9	0.2 - 0.3	0.8 - 1.6	mg/kg	8_DG-537	LL	8015M	4 - 5
VOC	1,1,1,2-Tetrachloroethane	630-20-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,1-Trichloroethane	71-55-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2,2-Tetrachloroethane	79-34-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2-Trichloroethane	79-00-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloroethane	75-34-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloroethene	75-35-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloropropene	563-58-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,3-Trichlorobenzene	87-61-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,3-Trichloropropane	96-18-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,4-Trichlorobenzene	120-82-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,4-Trimethylbenzene	95-63-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dibromo-3-chloropropane	96-12-8	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dibromoethane	106-93-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dichlorobenzene	95-50-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dichloroethane	107-06-2	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dichloropropane	78-87-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3,5-Trimethylbenzene	108-67-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3-Dichlorobenzene	541-73-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3-Dichloropropane	142-28-9	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,4-Dichlorobenzene	106-46-7	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1-Chlorohexane	544-10-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2,2-Dichloropropane	594-20-7	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2-Butanone (MEK)	78-93-3	0 / 9	-	-	4 - 5	10 - 11	µg/kg	-	-	-	-

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	2-Chloroethyl Vinyl Ether	110-75-8	0 / 9	-	-	2 - 2	10 - 11	µg/kg	-	-	-	-
VOC	2-Chlorotoluene	95-49-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2-Hexanone	591-78-6	0 / 9	-	-	3 - 3	10 - 11	µg/kg	-	-	-	-
VOC	2-Phenylbutane	135-98-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	4-Chlorotoluene	106-43-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	0 / 9	-	-	3 - 3	10 - 11	µg/kg	-	-	-	-
VOC	Acetone	67-64-1	0 / 9	-	-	7 - 8	20 - 23	µg/kg	-	-	-	-
VOC	Acrolein	107-02-8	0 / 9	-	-	20 - 23	98 - 110	µg/kg	-	-	-	-
VOC	Acrylonitrile	107-13-1	0 / 9	-	-	4 - 5	20 - 23	µg/kg	-	-	-	-
VOC	Benzene	71-43-2	0 / 9	-	-	0.5 - 0.6	5 - 6	µg/kg	-	-	-	-
VOC	Bromobenzene	108-86-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromochloromethane	74-97-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromodichloromethane	75-27-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromoform	75-25-2	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromomethane	74-83-9	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Carbon Disulfide	75-15-0	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Carbon Tetrachloride	56-23-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Chlorobenzene	108-90-7	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Chloroethane	75-00-3	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Chloroform	67-66-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Chloromethane	74-87-3	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Chlorotrifluoroethylene	79-38-9	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	cis-1,2-Dichloroethene	156-59-2	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	cis-1,3-Dichloropropene	10061-01-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Cymene	99-87-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Di isopropyl Ether	108-20-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Dibromochloromethane	124-48-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Dibromomethane	74-95-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Dichlorodifluoromethane	75-71-8	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Ethylbenzene	100-41-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Hexachloro-1,3-butadiene	87-68-3	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Isopropylbenzene	98-82-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	m,p-Xylene	179601-23-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Methyl Iodide	74-88-4	0 / 9	-	-	3 - 3	5 - 6	µg/kg	-	-	-	-
VOC	Methyl Tert-Butyl Ether	1634-04-4	0 / 9	-	-	0.5 - 0.6	5 - 6	µg/kg	-	-	-	-
VOC	Methylene Chloride	75-09-2	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	n-Butylbenzene	104-51-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	n-Propylbenzene	103-65-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	o-Xylene	95-47-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Styrene	100-42-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	tert-Butyl ethyl ether	637-92-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	tert-Butylbenzene	98-06-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Tertiary amyl methyl ether	994-05-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Tertiary butyl alcohol	75-65-0	0 / 9	-	-	20 - 23	49 - 57	µg/kg	-	-	-	-
VOC	Tetrachloroethene	127-18-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Toluene	108-88-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	trans-1,2-Dichloroethene	156-60-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	trans-1,3-Dichloropropene	10061-02-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-

Table 3-5
Summary of Analytical Results for Chemicals – Validated Data
Subsurface Soils – Subarea 8 – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
VOC	Trichloroethene	79-01-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Trichlorofluoromethane	75-69-4	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Vinyl Acetate	108-05-4	0 / 9	-	-	2 - 2	10 - 11	µg/kg	-	-	-	-
VOC	Vinyl Chloride	75-01-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-

Notes
LL - Eurofins Lancaster Laboratory
ug/kg- microgram per kilogram
mg/kg - milligram per kilogram
ng/kg - nanogram per kilogram
J - Result is an estimated value
H - Holding times exceeded
S - Surrogates outside of criteria
C - Calibration recoveries outside of criteria
R - Calibration relative response factors outside of criteria
B - Method blank contamination
L - Laboratory control sample recoveries outside of criteria
Q - Matrix spike recoveries outside of criteria
E - Laboratory control sample and or matrix spike relative percent differences outside of criteria
I - Internal standards outside of criteria
A - Serial dilution results outside of criteria
F - Field blank contamination
Z - Analytes reported below the reporting limits and above the method detection limit
FD - Field duplicate relative percent difference outside of criteria
*# - Unusual problems found with the quality control data. See validation reports in Appendix C for detail.

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Cyanide	Cyanide	57-12-5	0 / 2	-	-	0.2 - 0.21	0.55 - 0.57	mg/kg	-	-	-	-
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	134 / 186	0.296 J Z	957	0.012 - 0.335	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	114 / 186	0.0161 J Z	46.2	0.00508 - 0.124	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	58 / 186	0.0212 J FD, Z	5.3	0.00772 - 0.205	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	72 / 186	0.0194 J Z	26.5	0.0114 - 0.202	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	60 / 186	0.0252 J Z	4.75 J Z	0.0051 - 0.137	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	110 / 186	0.0345 J Z	26.2	0.0118 - 0.226	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	71 / 186	0.0324 J Z	3.19 J Z	0.00521 - 0.126	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	110 / 186	0.029 J Z	24.9	0.0117 - 0.224	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	88 / 186	0.0155 J Z	1.36 J Z	0.00594 - 0.207	4.82 - 6.06	ng/kg	8_DG-581	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	90 / 186	0.0546 J Z	13.2	0.0074 - 0.131	4.82 - 6.06	ng/kg	8_DG-595	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	61 / 186	0.0338 J Z	8.29	0.0168 - 0.523	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	59 / 186	0.0207 J Z	2.77 J Z	0.0049 - 0.135	4.82 - 6.06	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	2,3,4,7,8-PECDF	57117-31-4	86 / 186	0.0155 J Z	7.74	0.00688 - 0.129	4.82 - 6.06	ng/kg	8_DG-595	LL	1613B	0 - 0.5
Dioxins	2,3,7,8-TCDD	1746-01-6	52 / 186	0.0151 J Z	1.12	0.0101 - 0.254	0.964 - 1.21	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	114 / 186	0.0117 J Z	5.17	0.01 - 0.347	0.964 - 1.21	ng/kg	8_DG-595	LL	1613B	0 - 0.5
Dioxins	OCDD	3268-87-9	141 / 186	1.46 J Z	5590	0.0132 - 0.202	9.64 - 12.1	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	OCDF	39001-02-0	105 / 186	0.0502 J Z	73.7	0.0137 - 0.18	9.64 - 12.1	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Dioxins	TCDD TEQ	TCDD TEQ	182 / 186	0.000205	29.1	0 - 0	0 - 0	ng/kg	8_DG-502	LL	1613B	0 - 0.5
Fluoride	Fluoride	16984-48-8	2 / 2	0.87 J Q, Z	1.1 J Q	0.4 - 0.4	1 - 1	mg/kg	8_DG-605	LL	300.0	0 - 0.5
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	0 / 32	-	-	45 - 57	91 - 110	µg/kg	-	-	-	-
Herbicides	2,4,5-T	93-76-5	3 / 32	1.7	2.4	0.83 - 0.97	1.7 - 2	µg/kg	8_DG-567	LL	8151A	4 - 5
Herbicides	2,4-D	94-75-7	5 / 32	19 J Z	25 J Z	12 - 14	37 - 43	µg/kg	8_DG-590	LL	8151A	0 - 0.5
Herbicides	2,4-DB	94-82-6	4 / 32	22	32	6.4 - 32	18 - 32	µg/kg	8_DG-607	LL	8151A	0 - 0.5
Herbicides	Dicamba	1918-00-9	0 / 33	-	-	4.1 - 4.7	12 - 14	µg/kg	-	-	-	-
Herbicides	Dichlorprop	120-36-5	0 / 33	-	-	9.1 - 11	17 - 20	µg/kg	-	-	-	-
Herbicides	Dinitrobutyl Phenol	88-85-7	0 / 28	-	-	9.1 - 11	24 - 28	µg/kg	-	-	-	-
Herbicides	MCPA	94-74-6	0 / 33	-	-	770 - 900	2500 - 3000	µg/kg	-	-	-	-
Herbicides	MCPP	93-65-2	0 / 33	-	-	760 - 890	2500 - 3000	µg/kg	-	-	-	-
Herbicides	Silvex (2,4,5-TP)	93-72-1	0 / 32	-	-	0.76 - 0.89	1.7 - 2	µg/kg	-	-	-	-
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	10 / 16	0.17 J Z	1.4 J FD, E	0.14 - 0.16	0.4 - 0.44	mg/kg	8_DG-504	LL	7199	2.5 - 3.5
Mercury	Mercury	7439-97-6	109 / 215	0.0107 J Z	1.03	0.0094 - 0.0269	0.0157 - 0.0448	mg/kg	8_DG-513	LL	7471B	0 - 0.5
Metals	Aluminum	7429-90-5	215 / 215	1980 J E	36700	6.99 - 8.5	38.8 - 47.1	mg/kg	8_DG-551	LL	6010C	0 - 0.5
Metals	Antimony	7440-36-0	14 / 215	0.791 J Q, Z	7.33 J Q	0.717 - 0.872	3.88 - 4.71	mg/kg	8_DG-514	LL	6010C	4 - 5
Metals	Arsenic	7440-38-2	214 / 215	1.72 J Z	11.8	0.678 - 0.825	3.88 - 4.71	mg/kg	8_DG-516	LL	6010C	0 - 0.5
Metals	Barium	7440-39-3	215 / 215	48.1	167	0.032 - 0.0389	0.969 - 1.18	mg/kg	8_DG-514	LL	6010C	0 - 0.5
Metals	Beryllium	7440-41-7	213 / 215	0.14 J Z	1.14 J Z 1.14 J Z	0.0649 - 0.0789	0.969 - 1.18	mg/kg	8_DG-567 8_DG-554	LL LL	6010C 6010C	9 - 10 0 - 0.5
Metals	Boron	7440-42-8	164 / 215	0.814 J Z	32.5	0.814 - 0.99	9.69 - 11.8	mg/kg	8_DG-505	LL	6010C	0 - 0.5
Metals	Cadmium	7440-43-9	191 / 215	0.0842 J Z	1.43	0.0736 - 0.0896	0.969 - 1.18	mg/kg	8_DG-567	LL	6010C	0 - 0.5
Metals	Calcium	7440-70-2	215 / 215	1750	358000	3.24 - 38.4	19.4 - 230	mg/kg	8_DG-604	LL	6010C	0 - 0.5
Metals	Chromium	7440-47-3	215 / 215	2.89 J Z	43.8	0.155 - 0.189	2.91 - 3.54	mg/kg	8_DG-606	LL	6010C	4 - 5
Metals	Cobalt	7440-48-4	215 / 215	0.584 J FD, Z	15.1 J FD, E, A	0.0959 - 0.117	0.969 - 1.18	mg/kg	8_DG-551	LL	6010C	4 - 5
Metals	Copper	7440-50-8	215 / 215	2.11 J Z	117	0.281 - 1.65	1.94 - 11.4	mg/kg	8_DG-559	LL	6010C	0 - 0.5
Metals	Iron	7439-89-6	215 / 215	1750 J FD, E	48400	3.51 - 21.3	38.8 - 236	mg/kg	8_DG-551	LL	6010C	19 - 20
Metals	Lead	7439-92-1	215 / 215	3.31	35.3 J FD, E, Q, A	0.484 - 2.85	2.91 - 17.1	mg/kg	8_DG-501	LL	6010C	0 - 0.5
Metals	Lithium	7439-93-2	215 / 215	3.8 J Z	34.9	0.33 - 1.9	3.9 - 22.8	mg/kg	8_DG-614	LL	6010C	4 - 5
Metals	Magnesium	7439-95-4	215 / 215	1930	9350	1.62 - 1.97	9.69 - 11.8	mg/kg	8_DG-609	LL	6010C	0 - 0.5
Metals	Manganese	7439-96-5	215 / 215	31.9 J FD, E	749	0.0804 - 0.0978	0.969 - 1.18	mg/kg	8_DG-503	LL	6010C	3 - 4
Metals	Molybdenum	7439-98-7	6 / 215	2.3 J Z	14.6	0.165 - 0.2	1.94 - 2.36	mg/kg	8_DG-574	LL	6010C	0 - 0.5
Metals	Nickel	7440-02-0	215 / 215	2.14 J FD	24.5	0.126 - 0.153	1.94 - 2.36	mg/kg	8_DG-556	LL	6010C	0 - 0.5
Metals	Phosphorus	7723-14-0	215 / 215	91.6	1350	2.8 - 16.4	9.69 - 56.9	mg/kg	8_DG-514	LL	6010C	0 - 0.5
Metals	Potassium	7440-09-7	215 / 215	325 J Q	7800	8.08 - 9.83	96.9 - 118	mg/kg	8_DG-609	LL	6010C	0 - 0.5
Metals	Selenium	7782-49-2	152 / 215	0.102 J FD, Z	0.781	0.0969 - 0.118	0.388 - 0.471	mg/kg	8_DG-522	LL	6020A	0 - 0.5
Metals	Silver	7440-22-4	172 / 215	0.0273 J Z	0.476	0.0252 - 0.0306	0.194 - 0.236	mg/kg	8_DG-507	LL	6020A	0 - 0.5

Table 3-6
Summary of Analytical Results for Chemicals – Validated Data
Combined Soils – Subarea 8 – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Metals	Sodium	7440-23-5	215 / 215	62.8 J Z	682	16.2 - 19.7	96.9 - 118	mg/kg	8_DG-554	LL	6010C	4 - 5
Metals	Strontium	7440-24-6	215 / 215	11	399 J E	0.0659 - 0.395	0.388 - 2.32	mg/kg	8_DG-551	LL	6020A	9 - 10
Metals	Thallium	7440-28-0	214 / 215	0.0469 J Z	0.49 J Q, E	0.0291 - 0.0354	0.194 - 0.236	mg/kg	8_DG-541	LL	6020A	0 - 0.5
Metals	Tin	7440-31-5	0 / 215	-	-	0.213 - 0.259	9.69 - 11.8	mg/kg	-	-	-	-
Metals	Titanium	7440-32-6	215 / 215	73 J E, Q	1890	0.165 - 0.991	0.969 - 5.83	mg/kg	8_DG-543	LL	6010C	4 - 5
Metals	Vanadium	7440-62-2	215 / 215	5.27 J FD, E	83.6	0.126 - 0.153	0.969 - 1.18	mg/kg	8_DG-515	LL	6010C	9 - 10
Metals	Zinc	7440-66-6	215 / 215	6.43 J FD, Z	200 J E	0.194 - 1.14	3.88 - 22.8	mg/kg	8_DG-569	LL	6010C	0 - 0.5
Metals	Zirconium	7440-67-7	206 / 215	0.847 J Z	9.81	0.814 - 0.99	4.84 - 5.89	mg/kg	8_DG-570	LL	6010C	0 - 0.5
Moisture Content	Moisture	MOIST	227 / 227	0.45	16.8	0.1 - 0.1	0.1 - 0.1	%	8_DG-515	LL	160.3M	9 - 10
Nitrates	Nitrite-NO2	14797-65-0	0 / 2	-	-	0.8 - 0.8	1 - 1	mg/kg	-	-	-	-
PAHs	1-Methylnaphthalene	90-12-0	28 / 212	0.72 J Z	23	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	2-Methylnaphthalene	91-57-6	49 / 212	0.69 J Z	87	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Acenaphthene	83-32-9	1 / 212	4.8	4.8	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Acenaphthylene	208-96-8	5 / 212	0.35 J Z	5.8	0.33 - 4	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Anthracene	120-12-7	23 / 212	0.34 J Z	63	0.33 - 4	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Benzo(a)anthracene	56-55-3	48 / 209	0.68 J Z 0.68 J Z	980	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Benzo(a)pyrene	50-32-8	48 / 211	0.7 J Z	810	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Benzo(b)fluoranthene	205-99-2	97 / 210	0.7 J Z	1300	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Benzo(e)pyrene	192-97-2	12 / 212	4 J Z	500	3.3 - 40	17 - 200	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Benzo(g,h,i)perylene	191-24-2	44 / 211	0.71 J Z	130	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Benzo(k)fluoranthene	207-08-9	70 / 210	0.71 J Z	580	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	74 / 210	6.5 J Z 6.5 J Z	270	6 - 74	18 - 210	µg/kg	8_DG-536	LL	8270D SIM	0 - 0.5
PAHs	Butylbenzylphthalate	85-68-7	7 / 210	6.3 J Z	590	6 - 74	18 - 210	µg/kg	8_DG-573	LL	8270D SIM	0 - 0.5
PAHs	Chrysene	218-01-9	133 / 210	0.37 J Z	1200	0.33 - 4	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Dibenzo(a,h)anthracene	53-70-3	14 / 212	1 J Z 1 J Z	67	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Diethylphthalate	84-66-2	0 / 210	-	-	6 - 74	18 - 210	µg/kg	-	-	-	-
PAHs	Dimethylphthalate	131-11-3	0 / 210	-	-	6 - 74	18 - 210	µg/kg	-	-	-	-
PAHs	Di-n-butylphthalate	84-74-2	6 / 210	6.9 J Z	21	6 - 74	18 - 210	µg/kg	8_DG-519	LL	8270D SIM	0 - 0.5
PAHs	Di-n-octylphthalate	117-84-0	6 / 210	7.8 J Z	110	6 - 74	18 - 210	µg/kg	8_DG-587	LL	8270D SIM	0 - 0.5
PAHs	Fluoranthene	206-44-0	82 / 209	0.75 J Z 0.75 J Z	630	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Fluorene	86-73-7	8 / 212	0.87 J Z	12	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	31 / 212	0.71 J Z 0.71 J Z	150	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PAHs	Naphthalene	91-20-3	56 / 211	0.9 J Z	150	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	N-Nitrosodimethylamine	62-75-9	0 / 212	-	-	0.66 - 7.9	1.7 - 20	µg/kg	-	-	-	-
PAHs	Phenanthrene	85-01-8	77 / 209	0.7 J Z	460	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-502	LL	8270D SIM	0 - 0.5
PAHs	Pyrene	129-00-0	82 / 209	0.73 J Z	550	0.66 - 7.9	1.7 - 20	µg/kg	8_DG-575	LL	8270D SIM	0 - 0.5
PCB/PCTs	Aroclor 1016	12674-11-2	0 / 216	-	-	3.3 - 67	17 - 340	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1221	11104-28-2	0 / 216	-	-	5.1 - 100	17 - 340	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1232	11141-16-5	0 / 216	-	-	4.1 - 83	17 - 340	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1242	53469-21-9	0 / 216	-	-	4.1 - 83	17 - 340	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1248	12672-29-6	1 / 216	240	240	3.3 - 67	17 - 340	µg/kg	8_DG-559	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 1254	11097-69-1	39 / 216	5 J Z	380	4.4 - 89	17 - 340	µg/kg	8_DG-595	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 1260	11096-82-5	8 / 216	6.2 J Z	31 31 J *#	3.9 - 79	17 - 340	µg/kg	8_DG-610 8_DG-559	LL LL	8082A 8082A	0 - 0.5 0 - 0.5
PCB/PCTs	Aroclor 1262	37324-23-5	0 / 216	-	-	3.3 - 67	17 - 340	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1268	11100-14-4	1 / 216	11 J Z	11 J Z	3.3 - 67	17 - 340	µg/kg	8_DG-539C	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 5432	63496-31-1	0 / 216	-	-	10 - 200	33 - 670	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5442	12642-23-8	0 / 216	-	-	10 - 200	33 - 670	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5460	11126-42-4	12 / 216	12 J Z 12 J Z	140	10 - 200	33 - 670	µg/kg	8_DG-502	LL	8082A	0 - 0.5
Perchlorate	Perchlorate	14797-73-0	3 / 18	3 J FD, Z	3.6 J Z	2.1 - 2.5	5 - 6	µg/kg	8_DG-513	LL	6850	4 - 5

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
Pesticides	4,4'-DDD	72-54-8	0 / 33	-	-	0.34 - 0.39	1.7 - 2	µg/kg	-	-	-	-
Pesticides	4,4'-DDE	72-55-9	5 / 33	1 J Z	11 J S	0.34 - 1.8	1.7 - 2	µg/kg	8_DG-607	LL	8081B	0 - 0.5
Pesticides	4,4'-DDT	50-29-3	8 / 33	0.43 J Z	9.8 J S	0.36 - 12	1.7 - 12	µg/kg	8_DG-607	LL	8081B	0 - 0.5
Pesticides	Aldrin	309-00-2	0 / 33	-	-	0.17 - 0.2	0.84 - 0.99	µg/kg	-	-	-	-
Pesticides	Alpha-BHC	319-84-6	1 / 33	0.22 J Z	0.22 J Z	0.17 - 0.2	0.84 - 0.99	µg/kg	8_DG-575	LL	8081B	9 - 10
Pesticides	Beta-BHC	319-85-7	4 / 33	2	3.8 J Q	0.98 - 1.1	1.9 - 2.3	µg/kg	8_DG-553	LL	8081B	4 - 5
Pesticides	Chlordane	57-74-9	0 / 33	-	-	4.1 - 4.8	17 - 20	µg/kg	-	-	-	-
Pesticides	Delta-BHC	319-86-8	0 / 33	-	-	0.46 - 0.54	0.84 - 0.99	µg/kg	-	-	-	-
Pesticides	Dieldrin	60-57-1	1 / 33	0.61 J S, Z	0.61 J S, Z	0.34 - 1.2	1.7 - 2	µg/kg	8_DG-607	LL	8081B	0 - 0.5
Pesticides	Endosulfan I	959-98-8	0 / 33	-	-	0.22 - 0.26	0.84 - 0.99	µg/kg	-	-	-	-
Pesticides	Endosulfan II	33213-65-9	1 / 33	1.1 J Z	1.1 J Z	0.34 - 0.39	1.7 - 2	µg/kg	8_DG-610	LL	8081B	0 - 0.5
Pesticides	Endosulfan Sulfate	1031-07-8	0 / 33	-	-	0.34 - 0.39	1.7 - 2	µg/kg	-	-	-	-
Pesticides	Endrin	72-20-8	0 / 33	-	-	0.34 - 1.4	1.7 - 2	µg/kg	-	-	-	-
Pesticides	Endrin Aldehyde	7421-93-4	1 / 33	0.54 J S, Z	0.54 J S, Z	0.34 - 0.99	1.7 - 2	µg/kg	8_DG-607	LL	8081B	0 - 0.5
Pesticides	Endrin Ketone	53494-70-5	0 / 33	-	-	0.61 - 0.72	1.8 - 2.2	µg/kg	-	-	-	-
Pesticides	Gamma-BHC (Lindane)	58-89-9	0 / 33	-	-	0.17 - 0.2	0.84 - 0.99	µg/kg	-	-	-	-
Pesticides	Heptachlor	76-44-8	0 / 33	-	-	0.17 - 0.2	0.84 - 0.99	µg/kg	-	-	-	-
Pesticides	Heptachlor Epoxide	1024-57-3	1 / 33	0.23 J S, Z	0.23 J S, Z	0.17 - 0.37	0.84 - 0.99	µg/kg	8_DG-607	LL	8081B	0 - 0.5
Pesticides	Methoxychlor	72-43-5	0 / 33	-	-	1.7 - 2	6.8 - 8	µg/kg	-	-	-	-
Pesticides	Mirex	2385-85-5	0 / 33	-	-	0.36 - 2.6	1.7 - 2.6	µg/kg	-	-	-	-
Pesticides	Technical Toxaphene	8001-35-2	0 / 33	-	-	14 - 17	34 - 39	µg/kg	-	-	-	-
pH	pH	pH	211 / 211	5.45	11.4	0.01 - 0.01	0.01 - 0.01	pH	8_DG-573	LL	9045M	0 - 0.5
Sulfates	Sulfate	14808-79-8	2 / 2	9.8	10.7	5 - 5	5 - 5	mg/kg	8_DG-604	LL	300.0	0 - 0.5
Sulfates	Sulfite	14265-45-3	0 / 2	-	-	30.2 - 30.2	101 - 101	mg/kg	-	-	-	-
SVOC	1,1'-Biphenyl	92-52-4	1 / 21	25 J Z	25 J Z	17 - 19	34 - 38	µg/kg	8_DG-513	LL	8270D	0 - 0.5
SVOC	1,2,4-Trichlorobenzene	120-82-1	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,2-Dichlorobenzene	95-50-1	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,2-Diphenylhydrazine	122-66-7	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,3-Dichlorobenzene	541-73-1	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	1,4-Dichlorobenzene	106-46-7	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4,5-Trichlorophenol	95-95-4	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4,6-Trichlorophenol	88-06-2	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dichlorophenol	120-83-2	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dimethylphenol	105-67-9	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2,4-Dinitrophenol	51-28-5	0 / 21	-	-	300 - 350	670 - 1100	µg/kg	-	-	-	-
SVOC	2,6-Dichlorophenol	87-65-0	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Chloronaphthalene	91-58-7	0 / 21	-	-	7 - 8	33 - 38	µg/kg	-	-	-	-
SVOC	2-Chlorophenol	95-57-8	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Methylphenol	95-48-7	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Nitroaniline	88-74-4	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	2-Nitrophenol	88-75-5	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	3,3'-Dichlorobenzidine	91-94-1	0 / 21	-	-	100 - 120	340 - 380	µg/kg	-	-	-	-
SVOC	3,5-Dimethylphenol	108-68-9	0 / 21	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	3-Nitroaniline	99-09-2	0 / 21	-	-	68 - 77	170 - 190	µg/kg	-	-	-	-
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	0 / 21	-	-	170 - 190	510 - 580	µg/kg	-	-	-	-
SVOC	4-Bromophenyl-phenylether	101-55-3	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chloro-3-methylphenol	59-50-7	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chloroaniline	106-47-8	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Chlorophenyl-phenylether	7005-72-3	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Methylphenol	106-44-5	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	4-Nitroaniline	100-01-6	0 / 21	-	-	68 - 77	170 - 190	µg/kg	-	-	-	-
SVOC	4-Nitrophenol	100-02-7	0 / 21	-	-	170 - 190	510 - 580	µg/kg	-	-	-	-
SVOC	Aniline	62-53-3	0 / 21	-	-	170 - 190	340 - 550	µg/kg	-	-	-	-
SVOC	Benzidine	92-87-5	0 / 17	-	-	710 - 810	1700 - 3700	µg/kg	-	-	-	-
SVOC	Benzo(a)anthracene	56-55-3	3 / 3	5 J Z	8 J Z	3 - 4	17 - 19	µg/kg	8_DG-578	LL	8270D	4 - 5
SVOC	Benzo(a)pyrene	50-32-8	1 / 1	9 J Z	9 J Z	4 - 4	18 - 18	µg/kg	8_DG-513	LL	8270D	0 - 0.5

Table 3-6
Summary of Analytical Results for Chemicals – Validated Data
Combined Soils – Subarea 8 – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
SVOC	Benzo(b)fluoranthene	205-99-2	2 / 2	7 J Z	8 J Z	3 - 4	17 - 19	µg/kg	8_DG-583	LL	8270D	0 - 0.5
SVOC	Benzo(g,h,i)perylene	191-24-2	1 / 1	8 J Z	8 J Z	4 - 4	18 - 18	µg/kg	8_DG-513	LL	8270D	0 - 0.5
SVOC	Benzo(k)fluoranthene	207-08-9	2 / 2	5 J Z	8 J FD, Z	3 - 4	17 - 18	µg/kg	8_DG-583	LL	8270D	0 - 0.5
SVOC	Benzoic Acid	65-85-0	0 / 21	-	-	170 - 190	510 - 580	µg/kg	-	-	-	-
SVOC	Benzyl Alcohol	100-51-6	0 / 21	-	-	170 - 190	340 - 550	µg/kg	-	-	-	-
SVOC	bis(2-chloroethoxy)methane	111-91-1	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	bis(2-chloroethyl) ether	111-44-4	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	0 / 2	-	-	72 - 74	180 - 190	µg/kg	-	-	-	-
SVOC	Butylbenzylphthalate	85-68-7	0 / 2	-	-	72 - 74	180 - 180	µg/kg	-	-	-	-
SVOC	Carbazole	86-74-8	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Chrysene	218-01-9	2 / 2	7 J Z	9 J Z	3 - 4	17 - 19	µg/kg	8_DG-578	LL	8270D	4 - 5
SVOC	Dibenzofuran	132-64-9	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Diethylphthalate	84-66-2	0 / 2	-	-	72 - 74	180 - 180	µg/kg	-	-	-	-
SVOC	Dimethylphthalate	131-11-3	0 / 2	-	-	72 - 74	180 - 180	µg/kg	-	-	-	-
SVOC	Di-n-butylphthalate	84-74-2	0 / 2	-	-	72 - 74	180 - 180	µg/kg	-	-	-	-
SVOC	Di-n-octylphthalate	117-84-0	0 / 2	-	-	72 - 74	180 - 180	µg/kg	-	-	-	-
SVOC	Diphenylamine	NDPA122-39-4	0 / 21	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	Fluoranthene	206-44-0	3 / 3	4 J FD, Z	8 J Z	3 - 4	17 - 19	µg/kg	8_DG-578	LL	8270D	4 - 5
SVOC	Hexachlorobenzene	118-74-1	0 / 21	-	-	3 - 4	17 - 20	µg/kg	-	-	-	-
SVOC	Hexachlorobutadiene	87-68-3	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Hexachlorocyclopentadiene	77-47-4	0 / 21	-	-	170 - 190	510 - 580	µg/kg	-	-	-	-
SVOC	Hexachloroethane	67-72-1	0 / 21	-	-	34 - 38	170 - 190	µg/kg	-	-	-	-
SVOC	Isophorone	78-59-1	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Naphthalene	91-20-3	1 / 1	4 J Z	4 J Z	4 - 4	18 - 18	µg/kg	8_DG-513	LL	8270D	0 - 0.5
SVOC	Nitrobenzene	98-95-3	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	N-Nitroso-di-n-propylamine	621-64-7	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	N-Nitrosodiphenylamine	86-30-6	0 / 21	-	-	17 - 19	34 - 38	µg/kg	-	-	-	-
SVOC	Pentachlorophenol	87-86-5	0 / 21	-	-	34 - 38	170 - 200	µg/kg	-	-	-	-
SVOC	Phenanthrene	85-01-8	3 / 3	5 J Z 5 J Z	15 J Z	3 - 4	17 - 19	µg/kg	8_DG-513	LL	8270D	0 - 0.5
SVOC	Phenol	108-95-2	1 / 21	890	890	17 - 19	34 - 38	µg/kg	8_DG-580	LL	8270D	0 - 0.5
SVOC	Pyrene	129-00-0	3 / 3	4 J Z	11 J Z	3 - 4	17 - 19	µg/kg	8_DG-578	LL	8270D	4 - 5
SVOC	Pyridine	110-86-1	0 / 21	-	-	68 - 77	170 - 190	µg/kg	-	-	-	-
TPH-EFH	EFH (C12-C14)	PHCC12C14	0 / 210	-	-	2 - 110	5 - 280	mg/kg	-	-	-	-
TPH-EFH	EFH (C15-C20)	PHCC15C20	33 / 210	2.2 J Z 2.2 J Z	7.5 J Z	2 - 110	5 - 280	mg/kg	8_DG-586	LL	8015M	0 - 0.5
TPH-EFH	EFH (C21-C30)	PHCC21C30	148 / 210	2.5 J Z	340	2 - 110	5 - 280	mg/kg	8_DG-580	LL	8015M	0 - 0.5
TPH-EFH	EFH (C30-C40)	PHCC30C40	148 / 210	4.6 J Z	1600	4 - 220	10 - 550	mg/kg	8_DG-580	LL	8015M	0 - 0.5
TPH-EFH	EFH (C8-C11)	PHCC8C11	1 / 210	3.1 J Z	3.1 J Z	2 - 110	5 - 280	mg/kg	8_DG-613	LL	8015M	4 - 5
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	1 / 116	1.9	1.9	0.2 - 0.3	0.8 - 1.6	mg/kg	8_DG-537	LL	8015M	4 - 5
VOC	1,1,1,2-Tetrachloroethane	630-20-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,1-Trichloroethane	71-55-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2,2-Tetrachloroethane	79-34-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2-Trichloroethane	79-00-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloroethane	75-34-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloroethene	75-35-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloropropene	563-58-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,3-Trichlorobenzene	87-61-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,3-Trichloropropane	96-18-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,4-Trichlorobenzene	120-82-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,4-Trimethylbenzene	95-63-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dibromo-3-chloropropane	96-12-8	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dibromoethane	106-93-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dichlorobenzene	95-50-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
VOC	1,2-Dichloroethane	107-06-2	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dichloropropane	78-87-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3,5-Trimethylbenzene	108-67-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3-Dichlorobenzene	541-73-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3-Dichloropropane	142-28-9	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,4-Dichlorobenzene	106-46-7	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1-Chlorohexane	544-10-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2,2-Dichloropropane	594-20-7	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2-Butanone (MEK)	78-93-3	0 / 9	-	-	4 - 5	10 - 11	µg/kg	-	-	-	-
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	2-Chloroethyl Vinyl Ether	110-75-8	0 / 9	-	-	2 - 2	10 - 11	µg/kg	-	-	-	-
VOC	2-Chlorotoluene	95-49-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2-Hexanone	591-78-6	0 / 9	-	-	3 - 3	10 - 11	µg/kg	-	-	-	-
VOC	2-Phenylbutane	135-98-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	4-Chlorotoluene	106-43-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	0 / 9	-	-	3 - 3	10 - 11	µg/kg	-	-	-	-
VOC	Acetone	67-64-1	0 / 9	-	-	7 - 8	20 - 23	µg/kg	-	-	-	-
VOC	Acrolein	107-02-8	0 / 9	-	-	20 - 23	98 - 110	µg/kg	-	-	-	-
VOC	Acrylonitrile	107-13-1	0 / 9	-	-	4 - 5	20 - 23	µg/kg	-	-	-	-
VOC	Benzene	71-43-2	0 / 9	-	-	0.5 - 0.6	5 - 6	µg/kg	-	-	-	-
VOC	Bromobenzene	108-86-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromochloromethane	74-97-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromodichloromethane	75-27-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromoform	75-25-2	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromomethane	74-83-9	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Carbon Disulfide	75-15-0	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Carbon Tetrachloride	56-23-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Chlorobenzene	108-90-7	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Chloroethane	75-00-3	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Chloroform	67-66-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Chloromethane	74-87-3	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Chlorotrifluoroethylene	79-38-9	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	cis-1,2-Dichloroethene	156-59-2	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	cis-1,3-Dichloropropene	10061-01-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Cymene	99-87-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Di isopropyl Ether	108-20-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Dibromochloromethane	124-48-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Dibromomethane	74-95-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Dichlorodifluoromethane	75-71-8	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Ethylbenzene	100-41-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Hexachloro-1,3-butadiene	87-68-3	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Isopropylbenzene	98-82-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	m,p-Xylene	179601-23-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Methyl Iodide	74-88-4	0 / 9	-	-	3 - 3	5 - 6	µg/kg	-	-	-	-
VOC	Methyl Tert-Butyl Ether	1634-04-4	0 / 9	-	-	0.5 - 0.6	5 - 6	µg/kg	-	-	-	-
VOC	Methylene Chloride	75-09-2	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	n-Butylbenzene	104-51-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	n-Propylbenzene	103-65-1	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	o-Xylene	95-47-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Styrene	100-42-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	tert-Butyl ethyl ether	637-92-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-

Table 3-6
Summary of Analytical Results for Chemicals – Validated Data
Combined Soils – Subarea 8 – Phase 3

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration (feet)
VOC	tert-Butylbenzene	98-06-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Tertiary amyl methyl ether	994-05-8	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Tertiary butyl alcohol	75-65-0	0 / 9	-	-	20 - 23	49 - 57	µg/kg	-	-	-	-
VOC	Tetrachloroethene	127-18-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Toluene	108-88-3	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	trans-1,2-Dichloroethene	156-60-5	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	trans-1,3-Dichloropropene	10061-02-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Trichloroethene	79-01-6	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Trichlorofluoromethane	75-69-4	0 / 9	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Vinyl Acetate	108-05-4	0 / 9	-	-	2 - 2	10 - 11	µg/kg	-	-	-	-
VOC	Vinyl Chloride	75-01-4	0 / 9	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-

Notes
LL - Eurofins Lancaster Laboratory
ug/kg- microgram per kilogram
mg/kg - milligram per kilogram
ng/kg - nanogram per kilogram
J - Result is an estimated value
H - Holding times exceeded
S - Surrogates outside of criteria
C - Calibration recoveries outside of criteria
R - Calibration relative response factors outside of criteria
B - Method blank contamination
L - Laboratory control sample recoveries outside of criteria
Q - Matrix spike recoveries outside of criteria
E - Laboratory control sample and or matrix spike relative percent differences outside of criteria
I - Internal standards outside of criteria
A - Serial dilution results outside of criteria
F - Field blank contamination
Z - Analytes reported below the reporting limits and above the method detection limit
FD - Field duplicate relative percent difference outside of criteria
*# - Unusual problems found with the quality control data. See validation reports in Appendix C for detail.

Section 4
Data Usability Assessment

The purpose of the DUAR provided in Appendix C and summarized here is to describe the data validation processes performed on the data sets and determine whether the sample results meet the data quality objectives (DQOs) outlined in the Phase 3 Master FSP (CDM Smith 2012a) and QAPP (CDM Smith 2012b).

4.1 Usability Summary

For the Subarea 5D data usability assessment, 28 data sets, or SDGs were reviewed and 34 SDGs were reviewed for Subarea 8. An SDG consists of 20 or fewer samples grouped together by analytical method for analyses depending on the time and date the samples were received by the laboratory. The analyses performed are discussed in Section 2.5.

Samples were collected and analyzed in accordance with the Master FSP (CDM Smith 2012a), and Addendum to the Master FSP (CDM Smith 2012a) for Subareas 5D and 8 with the exception of the field investigation deviations as stated in Section 2.7.

The validated data for Subarea 5D samples are usable as reported except for the rejected data. Seven herbicide results (dinitrobutyl phenol) were rejected due to laboratory control sample criteria. For all Subarea 5D data, 0.039 percent of the results were rejected. For Subarea 8, ten herbicide results (2,4,5-TP, 2,4,5-T, 2,4-D, 2,4-DB, 2,2-dichloropropionic acid and dinitrobutyl phenol) and four SVOC results (benzidine) were rejected. For all Subarea 8 data, 0.062 percent of the results were rejected.

The validated data for Phase 3 Subareas 5D and 8 samples are usable as reported with the exception of the rejected data. These rejected data and any impact to project objectives and goals are being evaluated in the data gap review process. Specific details are provided in the validation reports in Appendix C and Section 4.7.

4.2 Data Validation Procedures

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

The data validation strategy was to validate 10 percent of the data according to EPA Level IV protocols (all QC parameters and raw data) and the remaining 90 percent according to EPA Level III protocols (all QC parameters except calibrations and raw data). The Level IV determination also included reviewing 10 percent of all SDGs for each laboratory and each method. In order to achieve this, the validators chose appropriate samples (samples that were analyzed for all methods) in each SDG. Hence, not all samples in some of the SDGs were Level IV validated but they received a mixture of Level IV and Level III review.

Table 4-1 presents all SDGs that include Subareas 5D and 8 soil samples and the level of review for each SDG. Some SDGs may contain samples from other subareas, but all samples in an SDG were validated together. An index of samples associated with each SDG is presented at the beginning of Appendix C.

Table 4-1 Sample Delivery Groups and Validation Levels for Subarea 5D and Subarea 8

Subarea 5D SDGs		
Sample Delivery Group	Level of Validation Performed	CDM Smith Review
PH093	Level III	
PH095	Level III	X
PH098	Level IV	
PH099	Level III	
PH100	Level III	
PH101	Level III	
PH102	Level IV	X
PH103	Level III	
PH104	Level III	
PH105	Level III	
PH106	Level III	
PH107	Level III	
PH108	Level III	
PH109	Level III	
PH110	Level III	X
PH111	Level III	
PH112	Level III	
PH113	Level III	
PH114	Level III	
PH116	Level III	
PH118	Level III	X
PH119	Level IV	
PH120	Level III	
PH122	Level III	
PH123	Level III	
PH127	Level III	
PH130	Level III	
Subarea 8 SDGs		
Sample Delivery Group	Level of Validation Performed	CDM Smith Review
PH062	Level IIII	
PH063	Level III	
PH064	Level III	
PH065	Level III	
PH066	Level III	X
PH067	Level III	
PH068	Level III	
PH069	Level IV	
PH070	Level III	

Subarea 8 SDGs		
Sample Delivery Group	Level of Validation Performed	CDM Smith Review
PH071	Level III	
PH072	Level III	
PH073	Level III	
PH074	Level III	X
PH075	Level IV	
PH076	Level III	
PH078	Level III	
PH080	Level III	
PH081	Level III	
PH082	Level III	
PH083	Level IV	X
PH084	Level III	
PH085	Level III	
PH086	Level III	
PH087	Level III	
PH088	Level III	
PH089	Level III	
PH090	Level IV	
PH091	Level III	X
PH092	Level III	
PH094	Level III	
PH096	Level III	
PH097	Level IV	
PH115	Level III	
PH117	Level III	

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

To evaluate the quality of the laboratory data and the validation process, CDM Smith's chemists reviewed over 10 percent of the Subarea 5D and Subarea 8 soil sample SDGs. The SDGs reviewed are chosen based on methods and level of validation performed by the validation firm. The purpose of the review was to identify any laboratory QC issues not identified by the validation firm or any discrepancies in validation procedures by the validation firm. No additional qualifiers were applied to the data based on CDM Smith's review. The results of this review are provided in Section 4.8.

4.3 Quality Assurance Objectives

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

A review of the collected data is necessary to determine if DQOs established in the Master FSP (CDM Smith 2012a) have been met. The following data measurement tasks were evaluated:

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

The data validation review determines if the collected data are of sufficient quality to support their intended use.

4.4 Summary of Field and Laboratory QA Activities

Field quality control samples included field duplicates, MS/MSDs, equipment rinsate blanks, field blanks and trip blank samples. Laboratory QA activities consisted of laboratory QC checks, method blanks, spike samples, calibrations and other method specific QC. The following sections discuss the specific field and laboratory QA activities.

4.5 Field Quality QA/QC

The MS/MSDs and field duplicate QC samples were collected at a frequency of approximately 1 per 20 samples (5 percent). During sampling in Subarea 5D, a total of 16 field duplicate/MS/MSD samples were collected equating to approximately six percent. On an individual method basis, the five percent goal was approximately met or exceeded for all analyses.

In Subarea 8, a total of 13 field QC samples (field duplicate and MS/MSD samples) were collected equating to approximately six percent. On an individual method basis, the five percent goal was met or exceeded for all analyses. Field duplicate and MS/MSD samples met the frequency requirements detailed in the Master FSP (CDM Smith 2012a).

Sections 2.4.2 through 2.4.4 discuss the equipment blanks, field blanks and trip blank samples collected in association with the Phase 3 Subareas 5D and 8 soil samples.

Equipment Rinsate and Field Blanks

The 25 equipment rinsate blank results collected are presented in Appendix C and a summary of the detected results is presented in Table 4-2 for Subarea 5D and Table 4-3 for Subarea 8. Field blank samples were collected from each lot number of ASTM International Type II water used for decontamination. One field blank was collected during sampling in Subarea 5D and Subarea 8. Some of the equipment blanks and field blanks applied to samples in both Subarea 5D and Subarea 8. Two of the field blanks were also collected during prior sampling events but are associated with samples

collected in Subarea 5D and Subarea 8. They are listed in each Subarea specific table below for clarification (listed in both tables if applicable). The detected results are presented below in Table 4-4 (Subarea 5D) and Table 4-5 (Subarea 8) and all results are reported in Appendix C.

Table 4-2 Equipment Blank Results for Subarea 5D Soil Samples – Detected Results Only

EB-090413 5D_DG_EB 9/4/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	pg/L	0.614/10.1	J
Barium	mg/L	0.0004/0.01	J
Bis(2-ethylhexyl)phthalate	µg/L	1.6/1	J
Diethylphthalate	µg/L	0.3/1	J
Di-n-butylphthalate	µg/L	0.11/1	J
Manganese	mg/L	0.0011/0.01	J
Naphthalene	µg/L	0.032/0.051	J
TCDD TEQ	pg/L	0.0266/0	
EB-091113 5D_DG_EB 9/11/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
2,3,7,8-TCDD	pg/L	0.813/1.92	J
Bis(2-ethylhexyl)phthalate	µg/L	0.21/1	J
Diethylphthalate	µg/L	0.24/1	J
Di-n-butylphthalate	µg/L	0.2/1	J
Manganese	mg/L	0.0019/0.01	J
Naphthalene	µg/L	0.038/0.051	J
TCDD TEQ	pg/L	0.0111/0	
EB-091213 5D_DG_EB 9/12/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
TCDD TEQ	pg/L	1.61/0	
EB-100813 5D_DG_EB 10/8/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.29/1	J
Di-n-butylphthalate	µg/L	0.17/1	J
TCDD TEQ	pg/L	0.15/0	
EB1-082813 5D_DG_EB 8/28/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Barium	mg/L	0.00035/0.01	J
Diethylphthalate	µg/L	0.37/1	J
TCDD TEQ	pg/L	0.0245/0	
EB1-091813 5D_DG_EB 10/8/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.3/1	J
Di-n-butylphthalate	µg/L	0.2/1	J
TCDD TEQ	pg/L	0.0788/0	

Table 4-2 Equipment Blank Results for Subarea 5D Soil Samples – Detected Results Only

EB1-092513 5D_DG_EB 9/25/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.83/1	J
Di-n-butylphthalate	µg/L	0.22/1	J
TCDD TEQ	pg/L	0.0454/0	
EB1-100213 5D_DG_EB 10/2/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
2,3,7,8-Tetrachlorodibenzofuran	pg/L	0.237/1.94	J
Barium	mg/L	0.00058/0.01	J
Bis-(2-ethylhexyl)phthalate	µg/L	0.059/1	J
Boron	mg/L	0.0098/0.1	J
Calcium	mg/L	0.0427/0.4	J
Copper	mg/L	0.0028/0.02	J
Diethylphthalate	µg/L	0.27/1	J
Di-n-butylphthalate	µg/L	0.18/1	J
TCDD TEQ	pg/L	0.0004/0	
EB1-111213 5D_DG_EB 11/12/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Barium	mg/L	0.00034/0.01	J
Calcium	mg/L	0.0349/0.4	J
TCDD TEQ	pg/L	1.28/0	
EB2-111413 5D_DG_EB 11/14/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	pg/L	0.578/9.78	J
Barium	mg/L	0.366/1.96	J
Beta-BHC	µg/L	0.0037/0.008	J
TCDD TEQ	pg/L	0.227/0	
EB2-082813 5D_DG_EB 8/28/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.36/1.1	J
TCDD TEQ	pg/L	0.49/0	
EB2-091813 5D_DG_EB 9/18/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.3/1	J
Di-n-butylphthalate	µg/L	0.19/1	J
Perchlorate	µg/L	0.25/1	J
TCDD TEQ	pg/L	0.186/0	

Notes:
Blank result greater than RL
TCDD = tetrachlorodibenzo-p-dioxin
TCDD TEQ = Tetrachlorodibenzo-p-dioxin toxic equivalents
RL = Reporting Limit
µg/L = microgram per liter
pg/L = picogram per liter
mg/L = milligram per liter
J = estimated value

Table 4-3 Equipment Blank Results for Subarea 8 Soil Samples – Detected Results Only

EB-080713 8_DG_EB 8/7/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
2-Methylnaphthalene	µg/L	0.012/0.052	J
Acetone	µg/L	8/20	J
Naphthalene	µg/L	0.035/0.052	J
Tin	mg/L	0.0029/0.04	J
TCDD TEQ	pg/L	0.0495/0	
EB-081413 8_DG_EB 11/29/2012			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
2-Methylnaphthalene	µg/L	0.012/0.05	J
Boron	mg/L	0.0106/0.1	J
Diethylphthalate	µg/L	0.31/1.1	J
Di-n-butylphthalate	µg/L	0.2/1.1	J
Naphthalene	µg/L	0.058/0.05	
TCDD TEQ	pg/L	0.103/0	
EB1-070103 EB 11/15/2012			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
2,4,5-T	pg/L	0.089/0.049	
Acetone	µg/L	8/20	J
Molybdenum	mg/L	0.0035/0.02	J
Naphthalene	µg/L	0.034/0.052	J
TCDD TEQ	pg/L	0.0336/0	
EB1-071713 8_DG_EB 7/17/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
2-Methylnaphthalene	µg/L	0.014/0.06	J
Acetone	µg/L	7/20	J
Diethylphthalate	µg/L	0.24/1.1	J
Di-n-butylphthalate	µg/L	0.24/1.1	J
Naphthalene	µg/L	0.046/0.06	J
TCDD TEQ	pg/L	0.0556/0	
EB1-072513 8_DG_EB 7/25/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.24/1	J
Di-n-butylphthalate	µg/L	0.14/1	J
Naphthalene	µg/L	0.037/0.05	J
TCDD TEQ	pg/L	0.0814/0	
EB1-080113 8_DG_EB 8/1/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.43/1	J
TCDD TEQ	pg/L	0.0622/0	

Table 4-3 Equipment Blank Results for Subarea 8 Soil Samples – Detected Results Only

EB2-071013 8_DG_EB 7/10/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	pg/L	0.268/10.2	J
Acetone	µg/L	7/20	J
Naphthalene	µg/L	0.032/0.05	J
TCDD TEQ	pg/L	0.0534/0	
EB2-071713 8_DG_EB 07/17/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	pg/L	0.542/9.97	J
2-Methylnaphthalene	µg/L	0.014/0.05	J
Diethylphthalate	µg/L	0.22/1	J
Di-n-butylphthalate	µg/L	0.14/1	J
Naphthalene	µg/L	0.045/0.05	J
TCDD TEQ	pg/L	0.0896/0	
EB2-080113 8_DG_EB 08/01/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	pg/L	1.92/9.62	J
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	pg/L	1.74/9.62	J
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	pg/L	1.84/9.62	J
Naphthalene	µg/L	0.033/0.05	J
TCDD TEQ	pg/L	2.66/0	
EB2-092513 8_DG_EB 09/25/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.77/1	J
Di-n-butylphthalate	µg/L	0.15/1	J
TCDD TEQ	pg/L	0.0255/0	
EB3-082813 8_DG_EB 08/28/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.36/1.1	J
EB4-082813 8_DG_EB 08/28/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
2-Methylnaphthalene	µg/L	0.011/0.05	J
Diethylphthalate	µg/L	0.4/1	J
Fluorene	µg/L	0.013/0.05	J
Pyrene	µg/L	0.015/0.05	J
TCDD TEQ	pg/L	0.0006/0	

Notes:
Blank result greater than RL
RL = Reporting Limit
TCDD TEQ = Tetrachlorodibenzo-p-dioxin toxic equivalents
µg/L = microgram per liter
mg/L = milligram per liter

Table 4-4 Field Blank Results for Subarea 5D Soil Samples – Detected Results Only

FB-041113 FIELD BLANK 04/11/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	pg/L	0.125/9.76	J
1-Methylnaphthalene	µg/L	0.019/0.05	J
2-Methylnaphthalene	µg/L	0.024/0.05	J
Diethylphthalate	µg/L	0.18/1	J
Di-n-butylphthalate	µg/L	0.17/1	J
Methylene Chloride	µg/L	2/5	J
Naphthalene	µg/L	0.2/0.5	J
TCDD TEQ	pg/L	0.082/0	
FB-041613 FIELD BLANK 04/16/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,4,7,8-HXCDF	pg/L	0.257/9.71	J
2-Methylnaphthalene	µg/L	0.012/0.052	J
Chloroform	µg/L	3/5	J
Di-n-butylphthalate	µg/L	0.11/1	J
Methylene Chloride	µg/L	18/5	
Tin	mg/L	0.0029/0.04	J
TCDD TEQ	pg/L	0.0354/0	

Notes:
Blank result greater than RL
HXCDF = Hexachlorodibenzofuran
RL = Reporting Limit
TCDD TEQ = Tetrachlorodibenzo-p-dioxin toxic equivalents
µg/L = microgram per liter
mg/L = milligram per liter
pg/L =- picogram per liter
J = estimated value

Table 4-5 Field Blank Results for Subarea 8 Soil Samples – Detected Results Only

FB-041113 FIELD BLANK 04/11/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	pg/L	0.125/9.76	J
1-Methylnaphthalene	µg/L	0.019/0.051	J
2-Methylnaphthalene	µg/L	0.024/0.051	J
Diethylphthalate	µg/L	0.18/1	J
Di-n-butylphthalate	µg/L	0.17/1	J
Methylene Chloride	µg/L	2/5	J
Naphthalene	µg/L	0.2/0.5	J
TCDD TEQ	pg/L	0.082/0	

Notes:
Blank result greater than RL
RL = Reporting Limit
TCDD TEQ = Tetrachlorodibenzo-p-dioxin toxic equivalents
µg/L = microgram per liter
pg/L =- picogram per liter
J = estimated value

Trip Blanks
Fifty-nine trip blank samples were shipped with the Subareas 5D and 8 soil samples. The analytical results for the trip blanks collected in association with the Subareas 5D and 8 soil samples are presented in Appendix C. All trip blank results were nondetect.

Temperature Blanks
Temperature blanks were to be included with each shipment of samples. Based on validation results all temperature blanks submitted with the Subarea 5D and 8 samples met criteria.

Data qualifications based on all blank detections and impacts to the data due to contaminants detected in the blanks are discussed in Section 4.7.3 and in the Appendix C validation reports.

Field QC Summary
Field duplicate and MS/MSD samples met the frequency requirements detailed in the Master FSP (CDM Smith 2012a) for the Phase 3 Subareas 5D and 8 sampling program. On an individual method basis, the five percent goal was met or exceeded for all analyses. Further, field QA/QC objectives were attained through the use of appropriate sampling techniques and collection of the required number and frequency of QC samples.

4.6 Laboratory Quality QA/QC

Analytical QA/QC was assessed by laboratory QC checks, method blanks, sample custody tracking, sample preservation, adherence to holding times, laboratory control samples (LCSs), MSs, calibration recoveries, surrogates, tuning criteria, second column confirmations, internal standards, serial dilutions, laboratory duplicates, and interference check standards. The majority of the laboratory QC sample criteria met project requirements as indicated in the data validation reports in Appendix C with the appropriate qualifiers applied. For Subarea 5D seven herbicide results (dinitrobutyl phenol) were rejected due to laboratory control sample criteria. For Subarea 8, 10 herbicide results (2,4,5-TP, 2,4,5-T, 2,4-D, 2,4-DB, 2,2-dichloropropionic acid and dinitrobutyl phenol) and four SVOC results (benzidine) were rejected. Specific details are provided in the validation reports in Appendix C and Section 4.7.

4.7 Data Quality Indicators

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

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

4.7.1 Precision

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

can be expressed in terms of relative percent difference (RPD). RPD is calculated as the absolute difference between the two measurements divided by the average of the two measurements.

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

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

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

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

For the Phase 3 Subarea 5D and 8 soil data sets, precision was evaluated by reviewing RPD results for MS/MSDs, LCS/LCSDs, laboratory duplicates, and field duplicates.

Laboratory RPD control limits are presented in the Master FSP (CDM Smith 2012a) or are laboratory specific. For laboratory duplicates, if one or both of the sample results were less than two times the RL, a control limit of the absolute difference value equal to the RL was used for comparison.

The field duplicate RPD criterion is 50 percent. Field duplicates for this project were validated as follows:

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

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

The following Subarea 5D individual analyte results were qualified as estimated "J/UJ" based on precision criteria:

- Some of the metal analyte results due to laboratory precision criteria

The following Subarea 8 individual analyte results were qualified as estimated "J/UJ" based on precision criteria:

- Some of the metal and hexavalent chromium analyte results due to laboratory precision criteria

Field duplicate precision criteria for Phase 3 Subarea 5D samples required the qualification of some analytes for dioxins, fluoride, metals, hexavalent chromium, mercury, TPH EFH/GRO, pesticides, PCB/PCTs and SVOC SIM results. For Phase 3 Subarea 8 samples, dioxins, metals, perchlorate, hexavalent chromium, mercury, TPH EFH/GRO, pesticides, PCB/PCTs, herbicides, SVOCs and SVOC SIM results were also qualified due to field duplicate precision criteria. No results were rejected based on field duplicate precision criteria. All field duplicate RPD results are presented in Appendix C. In summary, sample results that have been qualified as estimated "J/UJ" due to precision criteria are usable for project decisions with a degree of caution.

There was no discernible pattern or reason for the identified laboratory and field duplicate sample RPD exceedances. No field sampling issues were identified that would cause the RPD results that were outside of criteria. These exceedances are reasonable for this type of sampling activity.

4.7.2 Accuracy

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

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

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

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

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

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

The following QC samples are used to assess laboratory accuracy:

Matrix Spikes: MSs are samples with a known amount of a target analyte added to them. Analysis of the sample that has been spiked and comparison with the results from the

unspiked sample (background) gives information about the ability of the test procedure to generate a correct result from the sample.

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

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

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

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

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

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

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

For the Phase 3 Subareas 5D and 8 soil data sets, accuracy was evaluated by reviewing the %R values and relative response factors of initial and continuing calibration (percent difference or percent drift [%D] for organic analyses), internal standards, surrogate spikes (organic analyses only), MS/MSD, LCS/LCSD, inductively coupled plasma (ICP) interferences, and by performing serial dilution checks during metals analyses, in conjunction with method blank, calibration blank, equipment rinsate blank, and trip blank results. These QC results assist in identifying the type and magnitude of effects that may have contributed to system error introduced from field and/or laboratory procedures.

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

The following Subarea 5D individual analyte results were qualified as estimated "J/UJ" based on accuracy criteria:

- Some of the dioxins, fluoride, metals, perchlorate, TPH EFH/GRO and SVOC SIM results due to MS recoveries
- Some of the PCB/PCTs and herbicide results due to LCS recoveries
- Some of the metal analyte results due to serial dilutions
- Some of the pesticides, PCB/PCTs, and herbicide results based on calibration criteria
- Some of the TPH EFH/GRO and PCB/PCT results due to surrogates
- Some of the TPH EFH/GRO results based on holding times

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

- Seven herbicide results (dinitrobutyl phenol) based on LCSs

The following Subarea 8 individual analyte results were qualified as estimated "J/UJ" based on accuracy criteria:

- Some of the dioxins, fluoride, sulfite, metals, TPH EFH/GRO, pesticides, herbicides, SVOCs, and SVOC SIM results due to MSs
- Some of the PCB/PCTs, herbicides, SVOCs, and SVOC SIM results due to LCSs
- Some of the pesticides and herbicides results due to surrogates
- Some of the metal analyte results due to serial dilutions
- Some of the PCB/PCTs results due to confirmation column results
- Some of the herbicides, VOCs and SVOCs results based on calibration criteria

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

- Ten herbicide results (2,4,5-TP, 2,4,5-T, 2,4-D, 2,4-DB, 2,2-dichloropropionic acid and dinitrobutyl phenol) based on MSs and LCSs
- Four SVOC results (benzidine) based on MSs

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

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

4.7.3 Blank Contamination

Blanks are used to determine the level of laboratory and field contamination introduced into the samples, independent of the level of target analytes found in the sample source. Sources of sample contamination can include the containers and equipment used to collect the sample, preservatives added to the sample, other samples in transport coolers and laboratory sample storage refrigerators, standards and solutions used to calibrate instruments, glassware and reagents used to process samples, airborne contamination in the laboratory preparation area and the analytical instrument sample introduction equipment. Each analyte group has its own particular suite of common laboratory contaminants. Active measures must be performed to continually measure the ambient contamination level and steps taken to discover the source of the contamination to eliminate or minimize the levels. Random spot contamination can also occur from analytes that are not common laboratory problems but that can arise as a problem for a specific project or over a short period of time. Sample equipment decontamination practices are discussed in Section 2.4.5. Field blanks, equipment blanks, trip blanks and laboratory method blanks are analyzed to identify possible sources of contamination. The DUAR and laboratory validation reports in Appendix C discuss the results that were qualified based on field and laboratory blank contamination.

In summary, for Phase 3 Subarea 5D samples, some dioxins, metals and SVOC SIM results were qualified as non-detect due to laboratory blank contamination criteria. For Phase 3 Subarea 8 samples, some dioxins, metals, VOCs and SVOC SIM results were also qualified based on laboratory blank contamination criteria. The percentage of results qualified as non-detect based on laboratory blank contamination was less than 5 percent, as discussed in Appendix C, for all analyses except dioxins for Subarea 5D and Subarea 8 (35 percent and 40 percent respectively). These results were qualified as non-detect "U" due to laboratory blank contamination.

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

Tables 4-2 through 4-5 provide a summary of analytes observed in equipment blanks and field blank samples. Trip blank sample results were nondetect; most of the detected compounds in the other blanks were below the RLs but above the MDLs. Compounds detected above the RL are highlighted yellow in the associated tables. The ASTM International Type II water used to generate the equipment and field blanks. The field blanks (source water) had detections of various analytes for dioxins, SVOC SIM, VOCs, metals and SVOCs (above the RL) indicating inherent low level contamination in the source water used.

ASTM International Type II water is not typically certified “clean” to the low RLs established for the low level methods used for Phase 3 Subarea 5D and Subarea 8 sampling. CDM Smith will continue to monitor ASTM International Type II water field blanks for detected concentrations of analytes throughout the sampling program.

A review of the Phase 3 equipment blanks for Subarea 5D and Subarea 8 was also performed. In general, a variety of analytes were detected above their respective RLs. All Phase 3 equipment blanks will continue to be monitored to determine if these low level detections are consistent, thus indicating a possible deficiency in decontamination procedures and/or source water impacts that need to be addressed and corrected.

For Subarea 5D, some metal results and some SVOC SIM results were qualified based on field/equipment blank criteria. For Subarea 8, some metal results, VOC results and some SVOC SIM results were also qualified based on field/equipment blank criteria. To date, chemical detections in equipment blank samples appear to be random occurrences.

4.7.4 Representativeness, Comparability, and Sensitivity

Representativeness, comparability, and sensitivity are achieved by using EPA-approved sampling procedures and analytical methodologies. By following the procedures described in the Master FSP (CDM Smith 2012a) for this sampling event and future sampling events, sample analysis should yield results representative of environmental conditions at the time of sampling. Similarly, reasonable comparability of analytical results for this and future sampling events can be achieved if approved EPA analytical methods and standardized reporting units are employed.

4.7.4.1 Representativeness

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

Representativeness also can be monitored by reviewing field documentation and/or performing field audits. For this report, a detailed review was performed on the CoC forms, laboratory sample confirmation logs, and data validation packages. Laboratory QA/QC requirements were included in the Master FSP (CDM Smith 2012a) and laboratory statements of work (SOWs) to ensure that the laboratory analytical results were representative of true field conditions.

The most significant measure of representativeness is the accuracy of the sampling network and selection of appropriate locations and depths, etc. Field sampling representativeness was attained through adherence to the approved Master FSP (CDM Smith 2012a) for sample location and collection and by using approved standard operating procedures for field data collection. Therefore the data should represent, as near as possible, the actual field conditions at the time of sampling.

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

4.7.4.2 Comparability

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

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

4.7.4.3 Sensitivity

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

Detection Limits

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

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

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

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

In summary, for all methods analyzed for Subarea 5D, results for some of the analytes were qualified as estimated due to the RL criteria for dioxins, fluoride, metals, perchlorate, hexavalent chromium, mercury, TPH EFH/GRO, pesticides, PCB/PCTs, and SVOC SIM. For Subarea 8, results for some of the analytes were qualified as estimated due to RL criteria for dioxins, fluoride, metals, perchlorate, hexavalent chromium, mercury, TPH-EFH/GRO, pesticides, PCB/PCTs, herbicides, SVOCs and SVOC SIM results. For the data validated in this TM, RLs for a majority of the sample results were low enough to compare to the RLs stated in the Master FSP (CDM Smith 2012a). RLs above those stated in the Master FSP (CDM Smith 2012a) will be evaluated on a case by case basis to see if resampling is required.

4.8 Review of Selected Validation Reports

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

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

4.9 Data Completeness

Completeness of the data collection program is defined as the percentage of samples planned for collection as listed in the Master FSP (CDM Smith 2012a) versus the actual number of samples collected during the field program (see equation A).

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

Equation A.

$$\%\text{Completeness} = C \times \frac{100}{n}$$

Where:

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

Equation B.

$$\%\text{Completeness} = V \times \frac{100}{n'}$$

Where:

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

The overall completeness goal, as defined in the Master FSP (CDM Smith 2012a), for this sampling event is 90 percent for each analytical test for all project data.

A total of 273 soil samples including the field duplicates were collected and analyzed for Subarea 5D and 241 soil samples for Subarea 8. Two mineral grab samples were collected from the hill slope south of ESADA in Subarea 8 to evaluate a potential source of elevated strontium. Four split samples collected with DTSC are also included in the total sample number for Subarea 8. Some locations required only a subsurface sample while other locations required both a surface and a subsurface sample. The number of subsurface samples to be collected at each location was not pre-determined because the total depth of each boring varies depending on the local geology. No subsurface samples were collected at one location due to shallow refusal at less than 2.5 feet bgs in Subarea 8. Two locations in Subarea 5D and 11 locations in Subarea 8 were not sampled because they are planned to be completed as trenches and/or test pits as noted in Section 2.7.1.

The completeness goal for the actual number of samples collected compared to the number of samples planned is considered acceptable as a sample was collected from each location (depending on shallow refusal) and locations for trench samples and near active transformers will be collected during future Phase 3 sampling activities.

The completeness goal achieved for acceptable data was 99.96 percent for Subarea 5D and 99.94 percent for Subarea 8 for the number of measurements judged to be valid versus the total number of measurements made for all samples analyzed. Tables 4-6 and 4-7 summarize all results that were estimated or rejected for Phase 3 Subarea 5D and 8 respectively.

The following Phase 3 Subarea 5D individual analyte results were rejected per analyses:

- Method 8151A
  - Seven out of 390 individual herbicide analyte results (1.79 percent)

The following Phase 3 Subarea 8 individual analyte results were rejected per analyses:

- Method 8151A
  - Ten out of 330 individual herbicide analyte results (3.03 percent)
  - Four out of 1,083 individual SVOC results (0.37 percent)

Table 4-6 Summary of Data Completeness Following Data Validation – Subarea 5D

	Number of Analyte Detections Without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Nondetect Results	Number of Estimated Nondetect Results	Total Analytes Detect and Nondetect	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Dioxins – 1613B	169	621	--	867	35	1,692	100
Fluoride - 300	13	89	--	--	--	102	100
Metals - 6010C	2,853	1,204	--	433	112	4,602	100
Metals – 6020A	249	358	--	99	2	708	100
Perchlorate – 6850	--	2	--	20	--	22	100
Hexavalent Chromium – 7199	5	6	--	3	1	15	100
Mercury – 7471B	36	59	--	82	--	177	100
TPH-EFH/GRO – 8015M	101	70	--	818	13	1,002	100
Pesticides – 8081B	9	36	--	1,589	4	1,638	100
PCB/PCTs – 8082A	5	12	--	2,075	32	2,124	100
Herbicides – 8151A	--	--	7	378	5	390	98.21
SVOCs – 8270D	--	--	--	444	--	444	100
SVOC SIM – 8270C SIM	221	377	--	4,168	18	4,784	100
Completeness Total for Phase 3 Subarea 5D Samples Collected and Judged Valid							**99.96**

Table 4-7 Summary of Data Completeness Following Data Validation – Subarea 8

	Number of Analyte Detections Without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Nondetect Results	Number of Estimated Nondetect Results	Total Analytes Detect and Nondetect	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Dioxins – 1613B	354	1,353	--	1,579	62	3,348	100
Fluoride - 300	2	2	--	2	--	6	100
Sulfite – 377.1	--	--	--	--	2	2	100
Metals - 6010C	3,439	1,439	--	537	175	5,590	100
Metals – 6020A	270	483	--	100	7	860	100
Perchlorate - 6850	--	3	--	15	--	18	100
Hexavalent Chromium - 7199	1	9	--	5	1	16	100
Mercury– 7471B	55	54	--	106	--	215	100
TPH-EFH/GRO – 8015M	229	102	--	832	3	1,166	100
Pesticides – 8081B	4	18	--	671	--	693	100
PCB/PCTs – 8082A	23	38	--	2,530	1	2,592	100
Herbicides – 8151A	6	6	10	280	28	330	96.97
VOCs – 8260B	--	--	--	692	1	693	100
SVOCs – 8270D	1	22	4	1,043	13	1,083	99.63
SVOC SIM – 8270D SIM	379	601	--	4,482	17	5,479	100
Cyanide – 9012B	--	--	--	2	--	2	100
Completeness Total for Phase 3 Subarea 8 Samples Collected and Judged Valid							**99.94**

The completeness goals for both the locations sampled and the number of measurements judged to be valid were met for both Phase 3 Subarea 5D and Subarea 8.

Sampling deviations from procedures described in the Master FSP (CDM Smith 2012a) are discussed in Section 2.7 of this TM and did not impact DQOs for this sampling event. The data reported, and not rejected, are suitable for their intended use for characterization of Area IV of SSFL. The DQIs identified in the Master FSP (CDM Smith 2012a) met appropriate criteria and the achievement of the completeness goals for the data indicates a sufficient amount of usable data has been generated for project decisions.

4.10 Assessment of Data Usability and Reconciliation with Master FSP Goals

Over 99 percent of the data validated for Subareas 5D and 8, and reported in this TM, are suitable for their intended use for site characterization. Rejected sample results are not suitable for project use. The rejected analyte results do not impact achievement of the overall project objectives. The RLs

reported generally met the expected limits proposed by the analytical laboratories in their subcontract agreements with CDM Smith.

Sample results that were qualified as estimated are usable for project decisions.

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

Section 5
References

CDM Smith. 2012a. *Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California.* April 11.

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CDM Smith. 2013a. *Addendum No. 7 to Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, Subarea 8.*

CDM Smith. 2013b. *Addendum No. 8 to Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, Subarea* 5D.

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

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

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

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

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



N

Legend

- Sample Location
- Area IV Subarea
- Site Area

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo and the GIS User Community.

Subarea 5D Phase 3 Sample Locations

0 75 150 300 450 Feet

Santa Susana Field Laboratory
Ventura County, California
Exhibit 1

CDM Smith

C:_projects\SantaSusana\GIS\MXD\SSFL_Phase3_5D_DG_Sampling_Locations_18x24_20140410.mxd 4/10/2014



N

Legend

- DTSC Split Sample Location
- Mineral Sample Location
- Sample Location
- Area IV Subarea
- Site Area

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo and the GIS User Community.

Subarea 8 Phase 3 Sample Locations

0 100 200 400 600 Feet

Santa Susana Field Laboratory
Ventura County, California
Exhibit 2

CDM Smith

C:_projects\SantaSusana\GIS\MXD\SSFL_Phase3_8_DG_Sampling_Locations_18x24_20140404.mxd 5/27/2014

Appendix A
Analytical Results Tables

SSFL Main Qualification Definitions and Notes

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

U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

R – The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.

UJ – The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

SSFL Specific Qualification Definitions

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

Appendix A1
General Analytical Methods, CAS Number and Chemical Name
Subareas 5D and 8

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

Appendix A1
General Analytical Methods, CAS Number and Chemical Name
Subareas 5D and 8

Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
8330A	78-11-5	Pentaerythritol Tetranitrate	
8330A	88-72-2	2-Nitrotoluene	
8330A	99-08-1	3-Nitrotoluene	
8330A	99-35-4	1,3,5-Trinitrobenzene	
8330A	99-99-0	4-Nitrotoluene	
8330A	121-14-2	2,4-Dinitrotoluene	
8330A	98-95-3	Nitrobenzene	
8330A	99-65-0	m-Dinitrobenzene	
8151A	120-36-5	Dichlorprop	
8151A	1918-00-9	Dicamba	
8151A	75-99-0	2,2-Dichlor-Propionic Acid	
8151A	88-85-7	Dinitrobutyl Phenol	
8151A	93-65-2	Methylchlorophenoxypropionic acid	MCPP
8151A	93-72-1	2,4,5-Trichlorophenoxyacetic acid	Silvex (2,4,5-TP)
8151A	93-76-5	2,4,5-Trichlorophenoxyacetic Acid	2,4,5-T
8151A	94-74-6	2-Methyl-4-Chlorophenoxyacetic Acid	MCPA
8151A	94-75-7	Dichlorophenoxyacetic Acid	2,4-D
8151A	94-82-6	4-(2,4-dichlorophenoxy)butanoic acid	2,4 DB
8081A	8001-35-2	Chlorinated Camphene	Toxaphene
8081A	1024-57-3	Heptachlor Epoxide	
8081A	1031-07-8	Endosulfan Sulfate	
8081A	2385-85-5	Mirex	
8081A	309-00-2	Aldrin	
8081A	319-84-6	Alpha-BHC	
8081A	319-85-7	Beta-BHC	
8081A	319-86-8	Delta-BHC	
8081A	33213-65-9	Endosulfan II	
8081A	50-29-3	4,4'-DDT	
8081A	53494-70-5	Endrin Ketone	
8081A	57-74-9	Chlordane	
8081A	58-89-9	Gamma-BHC (Lindane)	
8081A	60-57-1	Dieldrin	
8081A	72-20-8	Endrin	
8081A	72-43-5	Methoxychlor	
8081A	72-54-8	4,4'-DDD	
8081A	72-55-9	4,4'-DDE	
8081A	7421-93-4	Endrin Aldehyde	
8081A	76-44-8	Heptachlor	
8081A	959-98-8	Endosulfan I	
1613B	1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin	2,3,7,8-TCDD
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	1,2,3,7,8,9-HxCDD
1613B	3268-87-9	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	OCDD
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	1,2,3,4,6,7,8-HpCDD
1613B	39001-02-0	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	OCDF
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	1,2,3,4,7,8-HxCDD
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	1,2,3,7,8-PeCDD
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	2,3,7,8-TCDF
1613B	55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,7,8,9-HpCDF
1613B	57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	2,3,4,7,8-PeCDF
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	1,2,3,7,8-PeCDF
1613B	57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-HxCDF
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	1,2,3,6,7,8-HxCDD
1613B	60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	2,3,4,6,7,8-HxCDF
1613B	67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,6,7,8-HpCDF
1613B	70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,4,7,8-HxCDF
1613B	72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8,9-HxCDF
8082	11096-82-5	Aroclor 1260	
8082	11097-69-1	Aroclor 1254	
8082	11100-14-4	Aroclor 1268	
8082	11104-28-2	Aroclor 1221	
8082	11126-42-4	Aroclor 5460	
8082	11141-16-5	Aroclor 1232	

Appendix A1
General Analytical Methods, CAS Number and Chemical Name
Subareas 5D and 8

Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
8082	12642-23-8	Aroclor 5442	
8082	12672-29-6	Aroclor 1248	
8082	12674-11-2	Aroclor 1016	
8082	37324-23-5	Aroclor 1262	
8082	53469-21-9	Aroclor 1242	
8082	63496-31-1	Aroclor 5432	
1625C	62-75-9	N-Nitrosodimethylamine	
8270C SIM	62-75-9	N-Nitrosodimethylamine	
8270C	121-14-2	2,4-Dinitrotoluene	
8270C	98-95-3	Nitrobenzene	
8270C	106-46-7	1,4-Dichlorobenzene	
8270C	120-82-1	1,2,4-Trichlorobenzene	
8270C	541-73-1	1,3-Dichlorobenzene	
8270C	87-68-3	Hexachlorobutadiene	
8270C	95-50-1	1,2-Dichlorobenzene	
8270C	100-01-6	4-Nitroaniline	
8270C	100-02-7	4-Nitrophenol	
8270C	101-55-3	4-Bromophenyl Phenyl Ether	
8270C	105-67-9	2,4-Dimethylphenol	
8270C	106-44-5	4-Methylphenol	
8270C	106-47-8	4-Chloroaniline	
8270C	108-68-9	3,5-Dimethylphenol	
8270C	108-95-2	Phenol	
8270C	111-44-4	Bis(2-Chloroethyl) ether	
8270C	111-91-1	Bis(2-Chloroethoxy) methane	
8270C	117-81-7	Bis(2-Ethylhexyl) phthalate	
8270C SIM	117-81-7	Bis(2-Ethylhexyl) phthalate	
8270C	117-84-0	Di-N-Octyl Phthalate	
8270C SIM	117-84-0	Di-N-Octyl Phthalate	
8270C	118-74-1	Hexachlorobenzene	
8270C SIM	120-12-7	Anthracene	
8270C	120-83-2	2,4-Dichlorophenol	
8270C	122-66-7	1,2-Diphenylhydrazine	
8270C	129-00-0	Pyrene	
8270C SIM	129-00-0	Pyrene	
8270C	131-11-3	Dimethylphthalate	
8270C SIM	131-11-3	Dimethylphthalate	
8270C	132-64-9	Dibenzofuran	
8270C	191-24-2	Benzo(g,h,i)perylene	
8270C SIM	191-24-2	Benzo(g,h,i)perylene	
8270C	193-39-5	Indeno(1,2,3-Cd)Pyrene	
8270C SIM	193-39-5	Indeno(1,2,3-Cd)Pyrene	
8270C	205-99-2	Benzo(b)fluoranthene	
8270C SIM	205-99-2	Benzo(b)fluoranthene	
8270C	206-44-0	Fluoranthene	
8270C SIM	206-44-0	Fluoranthene	
8270C	207-08-9	Benzo(k)fluoranthene	
8270C SIM	207-08-9	Benzo(k)fluoranthene	
8270C SIM	208-96-8	Acenaphthylene	
8270C	218-01-9	Chrysene	
8270C SIM	218-01-9	Chrysene	
8270C	39638-32-9	bis(2-Chloroisopropyl) ether	
8270C	50-32-8	Benzo(a)pyrene	
8270C SIM	50-32-8	Benzo(a)pyrene	
8270C	51-28-5	2,4-Dinitrophenol	
8270C	534-52-1	4,6-Dinitro-2-Methylphenol	
8270C	53-70-3	Dibenzo(a,h)anthracene	
8270C SIM	53-70-3	Dibenzo(a,h)anthracene	
8270C	56-55-3	Benzo(a)anthracene	
8270C SIM	56-55-3	Benzo(a)anthracene	
8270C	59-50-7	4-Chloro-3-Methylphenol	
8270C	621-64-7	N-Nitroso-Di-N-Propylamine	

Appendix A1
General Analytical Methods, CAS Number and Chemical Name
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Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
8270C	62-53-3	Aniline	
8270C	65-85-0	Benzoic Acid	
8270C	67-72-1	Hexachloroethane	
8270C	7005-72-3	4-Chlorophenyl Phenylether	
8270C	77-47-4	Hexachlorocyclopentadiene	
8270C	78-59-1	Isophorone	
8270C SIM	83-32-9	Acenaphthene	
8270C	84-66-2	Diethylphthalate	
8270C SIM	84-66-2	Diethylphthalate	
8270C	84-74-2	Di-N-Butylphthalate	
8270C SIM	84-74-2	Di-N-Butylphthalate	
8270C	85-01-8	Phenanthrene	
8270C SIM	85-01-8	Phenanthrene	
8270C	85-68-7	Butylbenzylphthalate	
8270C SIM	85-68-7	Butylbenzylphthalate	
8270C	86-30-6	N-Nitrosodiphenylamine	
8270C SIM	86-73-7	Fluorene	
8270C	86-74-8	Carbazole	
8270C	87-86-5	Pentachlorophenol	
8270C	88-06-2	2,4,6-Trichlorophenol	
8270C	88-74-4	2-Nitroaniline	
8270C	88-75-5	2-Nitrophenol	
8270C	90-12-0	1-Methylnaphthalene	
8270C SIM	90-12-0	1-Methylnaphthalene	
8270C	91-20-3	Naphthalene	
8270C SIM	91-20-3	Naphthalene	
8270C	91-57-6	2-Methylnaphthalene	
8270C SIM	91-57-6	2-Methylnaphthalene	
8270C	91-58-7	2-Chloronaphthalene	
8270C	91-94-1	3,3`-Dichlorobenzidine	
8270C	92-87-5	Benzidine	
8270C	95-48-7	2-Methylphenol	
8270C	95-57-8	2-Chlorophenol	
8270C	95-95-4	2,4,5-Trichlorophenol	
8270C	99-09-2	3-Nitroaniline	
8270C	100-51-6	Benzyl Alcohol	
8270C	606-20-2	2,6-Dinitrotoluene	
8015B	GROC5C12	Gasoline Range Organices (C5-C12)	GRO (C5-C12)
8015B	PHCC15C20	Extractable Fuel Hydrocarbons (C15-C20)	EFH (C15-C20)
8015B	PHCC21C30	Extractable Fuel Hydrocarbons (C21-C30)	EFH (C21-C30)
8015B	PHCC30C40	Extractable Fuel Hydrocarbons (C30-C40)	EFH (C30-C40)
8015B	PHCC8C11	Extractable Fuel Hydrocarbons (C8-C11)	EFH (C8-C11)
8260B	106-46-7	1,4-Dichlorobenzene	
8260B	120-82-1	1,2,4-Trichlorobenzene	
8260B	541-73-1	1,3-Dichlorobenzene	
8260B	87-68-3	Hexachlorobutadiene	
8260B	95-50-1	1,2-Dichlorobenzene	
8260B	99-87-6	Isopropyltoluene	
8260B	100-41-4	Ethylbenzene	
8260B	100-42-5	Styrene	
8260B	10061-01-5	cis-1,3-Dichloropropene	
8260B	10061-02-6	trans-1,3-Dichloropropene	
8260B	103-65-1	N-Propylbenzene	
8260B	104-51-8	N-Butylbenzene	
8260B	106-43-4	4-Chlorotoluene	
8260B	106-93-4	1,2-Dibromoethane	
8260B	107-06-2	1,2-Dichloroethane	
8260B	108-10-1	4-Methyl-2-Pentanone	
8260B	108-67-8	1,3,5-Trimethylbenzene	
8260B	108-86-1	Bromobenzene	
8260B	108-88-3	Toluene	
8260B	108-90-7	Chlorobenzene	

Appendix A1
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Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
8260B	110-75-8	2-Chloroethyl Vinyl Ether	
8260B SIM	123-91-1	1,4-Dioxane	
8260B	124-48-1	Dibromochloromethane	
8260B	127-18-4	Tetrachloroethene	
8260B	135-98-8	sec-Butylbenzene	
8260B	142-28-9	1,3-Dichloropropane	
8260B	156-59-2	cis-1,2-Dichloroethene	
8260B	156-60-5	trans-1,2-Dichloroethene	
8260B	1634-04-4	Methyl tert-Butyl Ether	
8260B	179601-23-1	m,p-Xylene	
8260B	56-23-5	Carbon tetrachloride	
8260B	563-58-6	1,1-Dichloropropene	
8260B	591-78-6	2-Hexanone	
8260B	594-20-7	2,2-Dichloropropane	
8260B	630-20-6	1,1,1,2-Tetrachloroethane	
8260B	67-64-1	Acetone	
8260B	67-66-3	Chloroform	
8260B	71-43-2	Benzene	
8260B	71-55-6	1,1,1-Trichloroethane	
8260B	74-83-9	Bromomethane	
8260B	74-87-3	Chloromethane	
8260B	74-95-3	Dibromomethane	
8260B	74-97-5	Bromochloromethane	
8260B	75-00-3	Chloroethane	
8260B	75-01-4	Vinyl Chloride	
8260B	75-09-2	Methylene chloride	
8260B	75-25-2	Bromoform	
8260B	75-27-4	Bromodichloromethane	
8260B	75-34-3	1,1-Dichloroethane	
8260B	75-35-4	1,1-Dichloroethene	
8260B	75-69-4	Trichlorofluoromethane	
8260B	75-71-8	Dichlorodifluoromethane	
8260B	75-88-7	1,1,1-Trichloro-2,2,2-trifluoroethane	Freon 113a
8260B	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	Freon 113
8260B	78-87-5	1,2-Dichloropropane	
8260B	78-93-3	2-Butanone	
8260B	79-00-5	1,1,2-Trichloroethane	
8260B	79-01-6	Trichloroethene	
8260B	79-34-5	1,1,2,2-Tetrachloroethane	
8260B	79-38-9	Chlorotrifluoroethene	
8260B	87-61-6	1,2,3-Trichlorobenzene	
8260B	95-47-6	o-Xylene	
8260B	95-49-8	2-Chlorotoluene	
8260B	95-63-6	1,2,4-Trimethylbenzene	
8260B	96-12-8	1,2-Dibromo-3-chloropropane	
8260B	96-18-4	1,2,3-Trichloropropane	
8260B	98-06-6	tert-Butylbenzene	
8260B	98-82-8	Isopropylbenzene	

				Sample Name	SL-501-SA5D-SB-0.0-0.5	SL-501-SA5D-SB-4.0-5.0	SL-502-SA5D-SB-0.0-0.5	SL-503-SA5D-SB-0.0-0.5	SL-504-SA5D-SB-0.0-0.5	SL-505-SA5D-SB-0.0-0.5	SL-506-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N
				Sample Date	09/17/2013	09/17/2013	10/03/2013	09/17/2013	09/17/2013	09/16/2013	09/11/2013
				SDG	PH109	PH109	PH122	PH109	PH109	PH108	PH106
				Start Depth	0	4	0	0	0	0	0
				End Depth	0.5	5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.09 U	1.12 U	0.150 J Z	1.09 U B	1.09 U	1.02 U	1.06 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.687 J Z	5.61 U B	0.807 J Z	0.503 J Z	0.397 J Z	0.870 J Z	0.307 J Z
1613B	3268-87-9	OCDD	ng/kg	7.60 J Z	5.87 J Z	162	5.01 J Z	4.64 J Z	175	10.6 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.858 J Z	5.61 U B	18.4	0.691 J Z	5.46 U B	11.6	5.28 U B
1613B	39001-02-0	OCDF	ng/kg	10.9 U B	11.2 U B	6.33 J Z	10.9 U B	10.9 U B	4.44 J Z	10.6 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.44 U B	5.61 U	0.361 J Z	5.44 U B	5.46 U	5.11 U B	5.28 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.44 U B	5.61 U B	0.442 J Z	5.44 U B	5.46 U	5.11 U	5.28 U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0649 J Z	1.12 U	0.310 J Z	0.0763 J Z	0.162 J Z	0.291 J Z	1.06 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.44 U B	5.61 U B	0.261 J Z	5.44 U B	5.46 U B	5.11 U B	5.28 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.44 U B	5.61 U B	0.575 J Z	5.44 U B	5.46 U B	0.351 J Z	0.0605 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.353 J Z	5.61 U B	0.846 J Z	0.360 J Z	2.65 J Z	5.58	0.563 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.44 U B	5.61 U B	5.07 U B	5.44 U B	5.46 U B	0.535 J Z	5.28 U
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.418 J Z	5.61 U B	0.970 J Z	0.353 J Z	0.223 J Z	0.863 J Z	0.253 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.44 U B	5.61 U B	0.356 J Z	5.44 U B	5.46 U B	0.292 J Z	0.0702 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.44 U B	5.61 U B	2.81 J Z	5.44 U B	5.46 U B	1.90 J Z	5.28 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.44 U B	5.61 U B	0.332 J Z	5.44 U B	5.46 U B	0.341 J Z	0.0546 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.887 J Z	5.61 U B	0.524 J Z	0.674 J Z	0.569 J Z	0.577 J Z	0.665 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.177	0.0296	0.985	0.163	0.162	0.450	0.0738

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-507-SA5D-SB-0.0-0.5	SL-508-SA5D-SB-0.0-0.5	SL-509-SA5D-SB-0.0-0.5	SL-510-SA5D-SB-0.0-0.5	SL-512-SA5D-SB-0.0-0.5	SL-513-SA5D-SB-0.0-0.5	SL-514-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N
				Sample Date	10/03/2013	10/03/2013	09/18/2013	09/18/2013	09/26/2013	09/18/2013	09/18/2013
				SDG	PH122	PH122	PH110	PH110	PH116	PH110	PH110
				Start Depth	0	0	0	0	0	0	0
				End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.04 U	1.06 U	1.07 U B	1.06 U B	1.02 U	1.10 U B	1.10 U B
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	1.41 J Z	0.733 J Z	0.501 J Z	5.30 U B	0.307 J Z	5.49 U B	0.384 J Z
1613B	3268-87-9	OCDD	ng/kg	331	24.7	4.32 J Z	10.6 U B	1.70 J Z	11.0 U B	11.0 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	33.7	2.04 J Z	0.639 J Z	5.30 U B	5.12 U B	5.49 U B	5.51 U B
1613B	39001-02-0	OCDF	ng/kg	12.0	0.947 J Z	10.7 U B	10.6 U B	10.2 U B	11.0 U B	11.0 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.557 J Z	0.0866 J Z	5.35 U B	5.30 U B	5.12 U B	5.49 U B	5.51 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.361 J Z	0.272 J Z	5.35 U B	5.30 U B	5.12 U B	5.49 U B	5.51 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.589 J Z	0.234 J Z	0.116 J Z	1.06 U	1.02 U	1.10 U	0.0607 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.196 J Z	0.105 J Z	5.35 U B	5.30 U B	5.12 U B	5.49 U B	5.51 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.20 U	0.136 J Z	5.35 U B	5.30 U B	5.12 U B	5.49 U B	0.276 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	1.27 J Z	3.31 J Z	0.447 J Z	5.30 U B	5.12 U B	0.350 J Z	0.352 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.20 U B	5.29 U B	5.35 U B	5.30 U B	5.12 U B	5.49 U B	5.51 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	1.60 J Z	0.463 J Z	0.352 J Z	5.30 U B	0.143 J Z	5.49 U B	0.300 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.380 J Z	0.0997 J Z	5.35 U B	5.30 U B	5.12 U B	5.49 U B	5.51 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	4.31 J Z	0.426 J Z	5.35 U B	5.30 U B	5.12 U B	5.49 U B	5.51 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.377 J Z	0.146 J Z	5.35 U B	5.30 U B	5.12 U B	5.49 U B	5.51 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.920 J Z	1.20 J Z	0.891 J Z	0.470 J Z	5.12 U B	0.455 J Z	0.566 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	1.05	0.305	0.270	0.0722	0.110	0.107	0.176

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-515-SA5D-SB-0.0-0.5	SL-815-SA5D-SB-0.0-0.5	SL-516-SA5D-SB-0.0-0.5	SL-516-SA5D-SB-4.0-5.0	SL-816-SA5D-SB-4.0-5.0	SL-516-SA5D-SB-9.0-10.0	SL-516-SA5D-SB-13.0-14.0
			Sample Type	N	FD	N	N	FD	N	N
			Sample Date	09/09/2013	09/09/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013
			SDG	PH104	PH104	PH130	PH130	PH130	PH130	PH130
			Start Depth	0	0	0	4	4	9	13
			End Depth	0.5	0.5	0.5	5	5	10	14
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.05 U	1.08 U	1.06 U	1.09 UJ FD	1.09 UJ B, FD	1.07 U	1.02 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0862 J Z	0.133 J Z	0.421 J Z	5.44 UJ B, FD	5.44 UJ B, FD	5.35 U B	5.10 U B
1613B	3268-87-9	OCDD	ng/kg	3.47 J Z	3.63 J Z	10.6 U B	10.9 UJ B, FD	10.9 UJ B, FD	9.55 J Z	10.2 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.403 J Z	0.529 J Z	5.31 U B	5.44 U B	5.44 U B	5.35 U B	5.10 U B
1613B	39001-02-0	OCDF	ng/kg	10.5 U B	10.8 U B	10.6 U B	10.9 U B	10.9 U B	10.7 U B	10.2 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.24 UJ FD	0.0610 J FD, Z	5.31 U B	5.44 UJ B, FD	5.44 UJ B, FD	5.35 U B	5.10 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.0657 J FD, Z	5.40 UJ FD	0.102 J Z	0.0967 J FD, Z	0.172 J FD, Z	0.0896 J Z	0.0548 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.05 U	1.08 U	1.06 U	1.09 UJ FD	1.09 UJ B, FD	1.07 U B	1.02 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.24 U B	5.40 U B	5.31 U B	5.44 UJ B, FD	5.44 UJ B, FD	5.35 U B	5.10 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.24 UJ FD	0.112 J FD, Z	5.31 U	5.44 UJ B, FD	5.44 UJ B, FD	5.35 U B	5.10 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.156 J FD, Z	5.40 UJ FD	5.31 U B	5.44 U B	5.44 U B	5.35 U B	5.10 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.24 UJ FD	0.101 J FD, Z	0.0549 J Z	0.0446 J FD, Z	0.195 J FD, Z	0.122 J Z	0.0515 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.24 UJ FD	0.151 J FD, Z	5.31 U B	5.44 UJ B, FD	5.44 UJ B, FD	5.35 U B	5.10 U B
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.24 UJ FD	5.40 UJ B, FD	5.31 U B	5.44 UJ B, FD	5.44 UJ B, FD	5.35 U B	5.10 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.159 J Z	0.196 J Z	5.31 U B	5.44 UJ B, FD	5.44 UJ B, FD	5.35 U B	5.10 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.0599 J FD, Z	0.194 J FD, Z	5.31 U B	5.44 UJ B, FD	5.44 UJ B, FD	5.35 U B	5.10 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.174 J Z	0.192 J Z	0.677 J Z	0.146 J Z	0.222 J Z	0.205 J Z	0.0384 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.00518	0.0229	0.128	0.0352	0.236	0.0674	0.0223

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-518-SA5D-SB-0.0-0.5	SL-519-SA5D-SB-0.0-0.5	SL-520-SA5D-SB-0.0-0.5	SL-520-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-8.0-9.0	SL-521-SA5D-SB-0.0-0.5	SL-521-SA5D-SB-5.5-6.5
				Sample Type	N	N	N	N	N	N	N
				Sample Date	09/10/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013
				SDG	PH105	PH106	PH106	PH106	PH106	PH106	PH106
				Start Depth	0	0	0	4	8	0	5.5
				End Depth	0.5	0.5	0.5	5	9	0.5	6.5
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.06 U	1.06 U	1.11 U	1.14 U	1.11 U	1.08 U	1.07 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.209 J Z	0.506 J Z	5.55 U B	5.69 U	5.53 U	1.04 J Z	5.33 U
1613B	3268-87-9	OCDD	ng/kg	29.0	12.5	4.19 J Z	11.4 U B	14.4	14.6	2.46 J Z
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	2.68 J Z	1.03 J Z	0.465 J Z	5.69 U B	1.15 J Z	0.860 J Z	5.33 U B
1613B	39001-02-0	OCDF	ng/kg	0.774 J Z	10.6 U B	11.1 U B	11.4 U B	11.1 U B	10.8 U B	10.7 U
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0869 J Z	5.32 U	5.55 U	5.69 U	5.53 U	5.41 U	5.33 U
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.32 U	5.32 U B	5.55 U	5.69 U	5.53 U	5.41 U B	5.33 U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.06 U	1.06 U	1.11 U	0.172 J Z	1.11 U	1.08 U	1.07 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.32 U B	5.32 U	5.55 U	5.69 U	5.53 U B	5.41 U	5.33 U
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.105 J Z	5.32 U	5.55 U	0.0597 J Z	0.0660 J Z	0.0719 J Z	0.0879 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.487 J Z	5.32 U B	5.55 U B	5.69 U	5.53 U	5.41 U B	5.33 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.165 J Z	5.32 U B	5.55 U	5.69 U	5.53 U	5.41 U B	5.33 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.163 J Z	0.342 J Z	0.0786 J Z	5.69 U	0.0716 J Z	0.725 J Z	0.0601 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.32 U B	0.0469 J Z	5.55 U	5.69 U	5.53 U	5.41 U	5.33 U
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.450 J Z	0.212 J Z	5.55 U B	5.69 U B	5.53 U B	5.41 U B	5.33 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.121 J Z	0.0548 J Z	0.0571 J Z	5.69 U	5.53 U	0.0691 J Z	5.33 U
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.338 J Z	0.727 J Z	0.413 J Z	5.69 U	5.53 U	1.84 J Z	5.33 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.111	0.169	0.0471	0 U	0.00439	0.572	0.00129

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-522-SA5D-SB-0.0-0.5	SL-522-SA5D-SB-6.0-7.0	SL-523-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-0.0-0.5	SL-525-SA5D-SB-0.0-0.5	SL-526-SA5D-SB-0.0-0.5	SL-527-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N
				Sample Date	09/11/2013	09/11/2013	09/11/2013	09/04/2013	09/03/2013	08/29/2013	09/03/2013
				SDG	PH106	PH106	PH106	PH101	PH100	PH098	PH100
				Start Depth	0	6	0	0	0	0	0
				End Depth	0.5	7	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.08 U	0.254 J Z	0.989 U	1.02 U	0.996 U	1.03 U	0.999 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.680 J Z	5.46 U B	4.94 U B	1.61 J Z	1.42 J Z	5.14 U B	1.21 J Z
1613B	3268-87-9	OCDD	ng/kg	4.89 J Z	10.9 U B	9.89 U B	816	197	10.3 U B	509
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.419 J Z	0.471 J Z	4.94 U B	49.1	11.7	5.14 U B	29.4
1613B	39001-02-0	OCDF	ng/kg	10.8 U B	10.9 U	9.89 U B	15.2	4.47 J Z	10.3 U B	9.29 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.40 U B	5.46 U	4.94 U	0.487 J Z	0.201 J Z	5.14 U B	0.366 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.40 U B	5.46 U B	4.94 U	0.371 J Z	0.212 J Z	5.14 U B	0.454 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.08 U	1.09 U	0.989 U	0.247 J Z	0.153 J Z	1.03 U	0.283 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.40 U B	5.46 U	4.94 U B	5.10 U B	4.98 U B	5.14 U B	5.00 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.172 J Z	0.0865 J Z	4.94 U	0.409 J Z	0.543 J Z	5.14 U B	5.00 U
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.40 U B	5.46 U B	4.94 U	0.722 J Z	0.578 J Z	5.14 U B	0.433 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.40 U B	5.46 U B	4.94 U	0.310 J Z	0.271 J Z	5.14 U B	0.288 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.317 J Z	0.150 J Z	0.0733 J Z	2.02 J Z	1.27 J Z	5.14 U B	1.55 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.0928 J Z	5.46 U	4.94 U	0.337 J Z	4.98 U B	5.14 U B	0.331 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.40 U B	5.46 U B	4.94 U B	4.77 J Z	1.74 J Z	5.14 U B	3.32 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.108 J Z	0.0967 J Z	4.94 U	0.349 J Z	4.98 U B	5.14 U B	5.00 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	1.11 J Z	5.46 U B	4.94 U	0.689 J Z	0.827 J Z	5.14 U B	0.529 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.265	0.287	0.00124	0.895	0.696	0.0131	0.716

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-528-SA5D-SB-0.0-0.5	SL-529-SA5D-SB-0.0-0.5	SL-530-SA5D-SB-0.0-0.5	SL-530-SA5D-SB-2.5-3.5	SL-531-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-2.5-3.5
				Sample Type	N	N	N	N	N	N	N
				Sample Date	09/03/2013	09/11/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013
				SDG	PH100	PH106	PH099	PH099	PH099	PH099	PH099
				Start Depth	0	0	0	2.5	0	0	2.5
				End Depth	0.5	0.5	0.5	3.5	0.5	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.02 U	0.141 J Z	1.02 U	0.0969 J Z	0.137 J Z	0.135 J Z	1.05 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	2.15 J Z	0.335 J Z	1.42 J Z	5.08 U B	5.19 U B	4.32 J Z	5.23 U B
1613B	3268-87-9	OCDD	ng/kg	491	30.7	478	10.2 U B	9.70 J Z	2690	1.34 J Z
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	37.4	1.96 J Z	31.5	5.08 U B	0.765 J Z	185	5.23 U B
1613B	39001-02-0	OCDF	ng/kg	8.74 J Z	10.1 U B	5.73 J Z	10.2 U B	10.4 U B	57.0	10.5 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.452 J Z	5.06 U	0.565 J Z	0.110 J Z	0.122 J Z	1.81 J Z	5.23 U
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.351 J Z	5.06 U	0.423 J Z	0.350 J Z	0.370 J Z	1.37 J Z	0.0995 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.204 J Z	1.01 U	0.160 J Z	1.02 U	0.0843 J Z	0.549 J Z	1.05 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.09 U B	5.06 U B	5.08 U B	5.08 U B	5.19 U B	1.25 J Z	5.23 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.09 U	0.0575 J Z	0.316 J Z	5.08 U B	0.305 J Z	1.23 J Z	5.23 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.466 J Z	5.06 U B	0.457 J Z	5.08 U B	0.430 J Z	0.916 J Z	5.23 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.300 J Z	5.06 U B	0.243 J Z	5.08 U B	5.19 U B	0.773 J Z	5.23 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	2.18 J Z	0.283 J Z	1.50 J Z	0.128 J Z	0.175 J Z	6.78	0.0336 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.349 J Z	0.109 J Z	0.263 J Z	0.120 J Z	0.145 J Z	1.11 J Z	0.0647 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	3.61 J Z	0.281 J Z	2.18 J Z	0.0634 J Z	0.0874 J Z	16.9	0.0468 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.09 U B	0.0689 J Z	5.08 U B	5.08 U B	5.19 U B	0.717 J Z	5.23 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.679 J Z	5.06 U B	5.08 U B	5.08 U B	5.19 U B	0.626 J Z	5.23 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	1.47	0.0767	0.850	0.476	0.0265	4.91	0.0119

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-533-SA5D-SB-0.0-0.5	SL-533-SA5D-SB-2.5-3.5	SL-534-SA5D-SB-0.0-0.5	SL-535-SA5D-SB-0.0-0.5	SL-835-SA5D-SB-0.0-0.5	SL-536-SA5D-SB-0.0-0.5	SL-537-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	FD	N	N
				Sample Date	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/28/2013	08/28/2013
				SDG	PH099	PH099	PH099	PH099	PH099	PH095	PH095
				Start Depth	0	2.5	0	0	0	0	0
				End Depth	0.5	3.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.981 U	1.08 U	1.03 U	0.994 UJ FD	0.114 J FD, Z	0.0385 J Z	0.0978 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	3.94 J Z	5.41 U B	1.11 J Z	4.97 UJ B, FD	0.996 J FD, Z	5.10 U B	2.22 J Z
1613B	3268-87-9	OCDD	ng/kg	1880	10.8 U B	151	1.32 J FD, Z	111 J FD	7.52 J Z	1500
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	119	5.41 U B	10.4	4.97 UJ B, FD	6.88 J FD	5.10 U B	87.6
1613B	39001-02-0	OCDF	ng/kg	33.1	10.8 U B	5.14 J Z	9.94 UJ B, FD	1.33 J FD, Z	10.2 U B	69.9
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	1.26 J Z	0.0454 J Z	0.145 J Z	0.0481 J FD, Z	0.169 J FD, Z	5.10 U B	0.748 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	1.13 J Z	0.0627 J Z	0.326 J Z	4.97 UJ FD	0.332 J FD, Z	5.10 U B	0.533 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.225 J Z	0.0803 J Z	0.0672 J Z	0.994 U	0.989 U	0.0360 J Z	0.0942 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.809 J Z	5.41 U B	5.14 U B	4.97 U B	4.94 U B	5.10 U B	0.970 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.582 J Z	5.41 U B	5.14 U	4.97 UJ FD	4.94 UJ B, FD	5.10 U B	5.11 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.549 J Z	5.41 U B	5.14 U B	4.97 UJ B, FD	4.94 UJ B, FD	5.10 U B	0.341 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.553 J Z	5.41 U B	5.14 U B	4.97 UJ B, FD	4.94 UJ B, FD	5.10 U B	0.326 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.75 J Z	0.0475 J Z	0.889 J Z	0.0385 J FD, Z	0.597 J FD, Z	5.10 U B	3.34 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.755 J Z	0.0583 J Z	0.121 J Z	4.97 UJ FD	0.103 J FD, Z	5.10 U B	0.404 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	10.7	0.0531 J Z	1.65 J Z	0.0152 J FD, Z	0.465 J FD, Z	5.10 U B	18.0
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.418 J Z	5.41 U B	5.14 U B	4.97 U B	4.94 U B	5.10 U B	0.490 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.723 J Z	5.41 U B	0.438 J Z	4.97 UJ B, FD	0.502 J FD, Z	5.10 U B	0.654 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	4.25	0.0267	0.435	0.0103	0.398	0.0357	3.06

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J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-538-SA5D-SB-0.0-0.5	SL-539-SA5D-SB-0.0-0.5	SL-540-SA5D-SB-0.0-0.5	SL-541-SA5D-SB-0.0-0.5	SL-542-SA5D-SB-0.0-0.5	SL-543-SA5D-SB-0.0-0.5	SL-544-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N
				Sample Date	08/28/2013	08/29/2013	09/03/2013	09/03/2013	08/29/2013	08/29/2013	09/04/2013
				SDG	PH095	PH098	PH100	PH100	PH098	PH098	PH101
				Start Depth	0	0	0	0	0	0	0
				End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0385 J Z	0.0290 J Z	1.07 U	1.05 U	0.0465 J Z	0.0633 J Z	0.101 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.686 J Z	0.630 J Z	0.629 J Z	0.782 J Z	0.603 J Z	0.865 J Z	0.794 J Z
1613B	3268-87-9	OCDD	ng/kg	265	10.4	23.9	12.0	56.8	48.6	6.62 J Z
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	14.7	0.790 J Z	1.76 J Z	0.924 J Z	3.39 J Z	3.02 J Z	0.562 J Z
1613B	39001-02-0	OCDF	ng/kg	4.33 J Z	10.2 U B	10.7 U B	10.5 U B	10.8 U B	10.4 U B	10.4 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.15 U B	5.12 U B	5.36 U B	5.23 U	5.38 U B	5.18 U B	5.21 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.15 U	5.12 U B	0.0960 J Z	0.186 J Z	5.38 U B	5.18 U B	0.188 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0651 J Z	1.02 U	1.07 U	1.05 U	0.126 J Z	0.147 J Z	1.04 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.15 U B	5.12 U B	5.36 U B	5.23 U B	5.38 U B	5.18 U B	5.21 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.15 U B	5.12 U B	5.36 U	5.23 U B	5.38 U B	5.18 U B	5.21 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.380 J Z	5.12 U B	5.36 U B	5.23 U B	0.313 J Z	0.509 J Z	0.461 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.15 U B	5.12 U B	5.36 U B	5.23 U B	5.38 U B	0.173 J Z	5.21 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.710 J Z	0.443 J Z	0.445 J Z	0.556 J Z	0.517 J Z	0.734 J Z	0.560 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.15 U B	5.12 U B	5.36 U B	5.23 U B	5.38 U B	5.18 U B	5.21 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	1.58 J Z	5.12 U B	0.308 J Z	5.23 U B	0.410 J Z	0.415 J Z	5.21 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.15 U B	5.12 U B	5.36 U B	5.23 U B	5.38 U B	5.18 U B	5.21 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.15 U B	0.448 J Z	1.16 J Z	0.933 J Z	0.777 J Z	1.39 J Z	1.39 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.429	0.191	0.195	0.197	0.464	0.473	0.475

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-545-SA5D-SB-0.0-0.5	SL-546-SA5D-SB-0.0-0.5	SL-547-SA5D-SB-0.0-0.5	SL-548-SA5D-SB-0.0-0.5	SL-549-SA5D-SB-0.0-0.5	SL-549-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-11.0-12.0
				Sample Type	N	N	N	N	N	N	N
				Sample Date	09/03/2013	09/04/2013	09/04/2013	08/26/2013	11/12/2013	11/12/2013	11/12/2013
				SDG	PH100	PH101	PH101	PH093	PH127	PH127	PH127
				Start Depth	0	0	0	0	0	4	11
				End Depth	0.5	0.5	0.5	0.5	0.5	5	12
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.07 U	0.117 J Z	1.04 U	0.0631 J Z	1.06 U	1.12 U B	1.11 U B
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.689 J Z	1.05 J Z	0.831 J Z	0.667 J Z	1.15 J Z	5.61 U B	5.53 U B
1613B	3268-87-9	OCDD	ng/kg	6.06 J Z	18.6	23.6	106	24.1	4.58 J Z	11.1 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.589 J Z	1.97 J Z	1.90 J Z	9.17	2.13 J Z	0.521 J Z	5.53 U B
1613B	39001-02-0	OCDF	ng/kg	10.7 U B	10.1 U B	10.4 U B	4.10 J Z	1.37 J Z	11.2 U B	11.1 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.35 U	0.211 J Z	5.22 U	5.10 U B	5.28 U B	5.61 U B	5.53 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.0851 J Z	0.437 J Z	5.22 U	5.10 U B	5.28 U B	5.61 U B	5.53 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0886 J Z	0.108 J Z	0.106 J Z	0.181 J Z	1.06 U	0.0495 J Z	0.0622 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.35 U B	5.06 U B	5.22 U B	5.10 U B	5.28 U B	5.61 U B	5.53 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.35 U B	0.443 J Z	5.22 U B	0.356 J Z	5.28 U B	5.61 U B	5.53 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.35 U B	0.617 J Z	0.492 J Z	0.468 J Z	0.609 J Z	5.61 U B	5.53 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.35 U B	0.290 J Z	5.22 U B	0.191 J Z	5.28 U B	5.61 U B	5.53 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.458 J Z	0.744 J Z	0.667 J Z	0.669 J Z	0.741 J Z	5.61 U B	5.53 U B
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.35 U B	5.06 U B	5.22 U B	5.10 U B	5.28 U B	5.61 U B	5.53 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.35 U B	0.462 J Z	0.264 J Z	1.48 J Z	0.564 J Z	5.61 U B	5.53 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.35 U B	5.06 U B	5.22 U B	5.10 U B	5.28 U B	5.61 U B	5.53 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	1.14 J Z	1.69 J Z	1.75 J Z	0.534 J Z	1.60 J Z	5.61 U B	5.53 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.123	0.797	0.374	0.779	0.343	0.0345	0.0324

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-550-SA5D-SB-0.0-0.5	SL-551-SA5D-SB-0.0-0.5	SL-552-SA5D-SB-0.0-0.5	SL-553-SA5D-SB-0.0-0.5	SL-853-SA5D-SB-0.0-0.5	SL-554-SA5D-SB-0.0-0.5	SL-555-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N
			Sample Date	09/06/2013	09/12/2013	09/06/2013	09/12/2013	09/12/2013	09/05/2013	09/05/2013
			SDG	PH103	PH107	PH103	PH107	PH107	PH102	PH102
			Start Depth	0	0	0	0	0	0	0
			End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.01 U	1.01 U	1.05 U	1.01 U	0.977 U	1.05 U	1.01 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.747 J Z	5.06 U B	0.723 J Z	0.585 J Z	0.649 J Z	0.588 J Z	0.737 J Z
1613B	3268-87-9	OCDD	ng/kg	23.7	1.11 J Z	42.0	150 J FD	86.0 J FD	2.24 J Z	3.55 J Z
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	1.89 J Z	5.06 U	3.18 J Z	9.20	6.28	5.26 U B	0.442 J Z
1613B	39001-02-0	OCDF	ng/kg	0.772 J Z	10.1 U B	1.54 J Z	4.59 J Z	3.29 J Z	10.5 U B	10.1 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.108 J Z	5.06 U B	0.0823 J Z	5.03 U B	4.89 U B	5.26 U B	5.03 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.217 J Z	5.06 U	5.23 U	5.03 U B	4.89 U B	0.168 J Z	0.0837 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.01 U	1.01 U	1.05 U	1.01 UJ FD	0.127 J FD, Z	1.05 U	1.01 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.06 U B	5.06 U B	5.23 U B	5.03 U B	4.89 U B	5.26 U B	5.03 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.0913 J Z	0.0571 J Z	5.23 U	0.195 J Z	0.223 J Z	5.26 U B	5.03 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.403 J Z	5.06 U B	0.250 J Z	5.03 U B	4.89 U B	5.26 U B	5.03 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.229 J Z	5.06 U B	0.0544 J Z	5.03 U B	0.271 J Z	5.26 U B	5.03 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.599 J Z	0.158 J Z	0.514 J Z	0.581 J Z	0.577 J Z	0.374 J Z	0.489 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.06 U B	5.06 U	5.23 U B	0.207 J FD, Z	0.380 J FD, Z	5.26 U B	5.03 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.357 J Z	5.06 U B	0.546 J Z	1.59 J Z	1.28 J Z	5.26 U B	5.03 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.104 J Z	0.0687 J Z	0.0940 J Z	0.251 J Z	0.352 J Z	5.26 U B	5.03 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	1.38 J Z	5.06 U B	1.12 J Z	0.471 J Z	0.559 J Z	0.939 J Z	0.957 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.325	0.0739	0.302	0.288	0.263	0.379	0.233

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-556-SA5D-SB-0.0-0.5	SL-557-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-0.0-0.5	SL-559-SA5D-SB-0.0-0.5	SL-560-SA5D-SB-0.0-0.5	SL-561-SA5D-SB-0.0-0.5	SL-562-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N
				Sample Date	09/05/2013	09/24/2013	09/24/2013	09/05/2013	11/12/2013	10/08/2013	09/25/2013
				SDG	PH102	PH113	PH113	PH102	PH127	PH124	PH114
				Start Depth	0	0	0	0	0	0	0
				End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.983 U	1.02 U	0.0701 J Z	1.05 U	1.07 U	1.03 U	1.02 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.315 J Z	0.505 J Z	0.324 J Z	0.301 J Z	5.34 U B	0.219 J Z	0.194 J Z
1613B	3268-87-9	OCDD	ng/kg	34.7	114	123	16.3	10.7 U B	35.4	14.1
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	3.07 J Z	7.31	14.1	1.83 J Z	5.34 U B	3.81 J Z	1.95 J Z
1613B	39001-02-0	OCDF	ng/kg	1.40 J Z	1.86 J Z	10.7	10.5 U B	10.7 U B	1.28 J Z	0.770 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.91 U B	5.11 U B	0.267 J Z	5.26 U B	5.34 U	0.116 J Z	5.08 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.0995 J Z	5.11 U B	5.20 U B	0.124 J Z	5.34 U B	5.16 U	5.08 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.231 J Z	0.442 J Z	0.197 J Z	0.130 J Z	1.07 U	0.230 J Z	0.159 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	4.91 U B	5.11 U B	5.20 U B	5.26 U B	5.34 U B	5.16 U B	5.08 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.693 J Z	0.461 J Z	5.20 U B	5.26 U B	5.34 U B	5.16 U	5.08 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.551 J Z	5.11 U B	5.20 U B	0.388 J Z	5.34 U B	5.16 U	5.08 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.173 J Z	5.11 U B	5.20 U B	5.26 U B	5.34 U B	0.0913 J Z	5.08 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.281 J Z	0.464 J Z	0.555 J Z	0.189 J Z	5.34 U B	0.163 J Z	0.138 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	4.91 U B	0.181 J Z	0.250 J Z	5.26 U B	5.34 U B	5.16 U B	5.08 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.636 J Z	0.844 J Z	2.62 J Z	0.391 J Z	5.34 U B	0.629 J Z	0.495 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	4.91 U B	5.11 U B	0.261 J Z	5.26 U B	5.34 U B	5.16 U B	5.08 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.431 J Z	5.11 U B	5.20 U B	5.26 U B	0.298 J Z	5.16 U	5.08 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.436	0.260	0.348	0.0825	0.0221	0.0730	0.148

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-563-SA5D-SB-0.0-0.5	SL-564-SA5D-SB-0.0-0.5	SL-565-SA5D-SB-0.0-0.5	SL-865-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-0.0-0.5	SL-567-SA5D-SB-0.0-0.5	SL-568-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	N	N
				Sample Date	09/25/2013	10/01/2013	09/24/2013	09/24/2013	09/24/2013	10/07/2013	09/23/2013
				SDG	PH114	PH119	PH113	PH113	PH113	PH123	PH112
				Start Depth	0	0	0	0	0	0	0
				End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.06 U	1.04 U B	0.0976 J Z	0.105 J Z	1.01 U	1.01 U	0.102 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.31 U B	5.22 U B	5.25 U B	5.03 U B	0.306 J Z	0.0938 J Z	1.25 J Z
1613B	3268-87-9	OCDD	ng/kg	10.6 U B	10.4 U B	2.22 J FD, Z	4.69 J FD, Z	16.9	57.4	411
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.31 U B	5.22 U B	5.25 U B	0.722 J Z	2.02 J Z	5.88	39.9
1613B	39001-02-0	OCDF	ng/kg	10.6 U B	10.4 U B	10.5 U B	10.1 U B	0.857 J Z	2.28 J Z	12.0
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.31 U B	0.0308 J Z	5.25 U B	5.03 U B	5.06 U B	0.151 J Z	0.713 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.31 U B	5.22 U	5.25 U B	5.03 U B	5.06 U B	0.260 J Z	5.00 U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0419 J Z	1.04 U	0.0682 J Z	0.0816 J Z	0.116 J Z	1.01 U	0.702 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.31 U B	5.22 U B	5.25 U B	5.03 U B	5.06 U B	0.118 J Z	0.444 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.31 U B	5.22 U B	5.25 U B	5.03 U B	5.06 U B	0.237 J Z	1.34 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.31 U B	5.22 U B	5.25 U B	5.03 U B	5.06 U B	1.54 J Z	2.73 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.31 U B	5.22 U B	5.25 U B	5.03 U B	5.06 U B	5.07 U B	0.649 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.31 U B	5.22 U	5.25 U B	0.144 J Z	0.276 J Z	0.248 J Z	1.53 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.31 U B	5.22 U B	5.25 U B	5.03 U B	5.06 U B	0.262 J Z	0.653 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.31 U B	5.22 U B	5.25 U B	5.03 U B	0.360 J Z	1.15 J Z	5.94
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.31 U B	5.22 U B	5.25 U B	5.03 U B	5.06 U B	0.126 J Z	0.679 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.31 U B	5.22 U B	5.25 U B	5.03 U B	5.06 U B	0.357 J Z	0.566 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.168	0.00226	0.218	0.147	0.112	0.222	1.68

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-569-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-0.0-0.5	SL-571-SA5D-SB-0.0-0.5	SL-572-SA5D-SB-0.0-0.5	SL-574-SA5D-SB-0.0-0.5	SL-576-SA5D-SB-0.0-0.5	SL-577-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N
				Sample Date	09/25/2013	10/01/2013	09/23/2013	09/23/2013	09/23/2013	09/19/2013	09/19/2013
				SDG	PH114	PH119	PH112	PH112	PH112	PH111	PH111
				Start Depth	0	0	0	0	0	0	0
				End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.01 U	1.06 U	1.01 U	0.111 J Z	0.0625 J Z	0.982 U	0.996 U B
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.05 U B	5.32 U B	5.04 U B	0.659 J Z	5.00 U B	0.397 J Z	4.98 U B
1613B	3268-87-9	OCDD	ng/kg	16.1	10.6 U B	10.1 U B	24.8	10.0 U B	30.5	9.96 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	1.70 J Z	5.32 U B	5.04 U B	3.11 J Z	5.00 U B	3.44 J Z	4.98 U B
1613B	39001-02-0	OCDF	ng/kg	1.04 J Z	10.6 U B	10.1 U B	1.52 J Z	10.0 U B	1.34 J Z	9.96 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.05 U B	0.0355 J Z	5.04 U B	4.88 U B	5.00 U B	4.91 U B	4.98 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.05 U	5.32 U B	5.04 U B	4.88 U B	5.00 U B	4.91 U B	4.98 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.112 J Z	1.06 U	1.01 U	0.288 J Z	0.0615 J Z	0.278 J Z	0.996 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.05 U B	5.32 U B	5.04 U B	4.88 U B	5.00 U B	4.91 U B	4.98 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.05 U	5.32 U B	5.04 U B	0.460 J Z	5.00 U B	0.475 J Z	4.98 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.05 U B	5.32 U B	5.04 U B	0.511 J Z	5.00 U B	0.366 J Z	4.98 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.05 U B	5.32 U B	5.04 U B	0.274 J Z	5.00 U B	4.91 U B	4.98 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.05 U B	5.32 U B	5.04 U B	0.539 J Z	0.138 J Z	0.377 J Z	4.98 U B
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.05 U B	5.32 U B	5.04 U B	0.207 J Z	5.00 U B	4.91 U B	4.98 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.491 J Z	5.32 U B	5.04 U B	0.744 J Z	5.00 U B	0.748 J Z	4.98 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.05 U B	5.32 U B	5.04 U B	4.88 U B	5.00 U B	4.91 U B	4.98 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.05 U B	5.32 U B	5.04 U B	0.534 J Z	5.00 U B	4.91 U B	4.98 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.0654	0.0641	0.0220	0.298	0.0882	0.369	0.00900

U-Compound not detected above reporting limit
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				Sample Name	SL-578-SA5D-SB-0.0-0.5	SL-579-SA5D-SB-0.0-0.5	SL-879-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-0.0-0.5	SL-583-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-0.0-0.5	SL-607-SA5D-SB-0.0-0.5
				Sample Type	N	N	FD	N	N	N	N
				Sample Date	09/19/2013	09/19/2013	09/19/2013	09/30/2013	09/23/2013	10/02/2013	10/01/2013
				SDG	PH111	PH111	PH111	PH118	PH112	PH120	PH119
				Start Depth	0	0	0	0	0	0	0
				End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.02 U	0.996 UJ FD	0.980 UJ B, FD	1.06 U	0.0878 J Z	1.04 U	1.05 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.348 J Z	0.390 J FD, Z	0.882 J FD, Z	5.29 U B	0.588 J Z	0.0953 J Z	0.256 J Z
1613B	3268-87-9	OCDD	ng/kg	23.2	12.9 J FD, Q	54.4 J FD	10.6 U B	58.0	10.4 U B	10.5 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	2.40 J Z	1.36 J FD, Z	5.30 J FD	5.29 U	4.83 J Z	5.22 U B	5.25 U B
1613B	39001-02-0	OCDF	ng/kg	1.32 J Z	9.96 UJ B, FD	2.82 J FD, Z	10.6 U B	2.79 J Z	10.4 U B	10.5 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.08 U B	4.98 U B	4.90 U B	5.29 U B	0.300 J Z	0.0707 J Z	0.0561 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.08 U B	4.98 UJ FD	4.90 UJ B, FD	5.29 U	5.18 U	5.22 U	5.25 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.175 J Z	0.113 J FD, Z	0.307 J FD, Z	1.06 U	0.582 J Z	1.04 U	0.0277 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.08 U B	4.98 UJ B, FD	4.90 UJ B, FD	5.29 U	5.18 U B	5.22 U	5.25 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.364 J Z	4.98 UJ B, FD	0.664 J FD, Z	0.0515 J Z	0.614 J Z	5.22 U	5.25 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.08 U B	4.98 UJ B, FD	0.588 J FD, Z	5.29 U B	5.59	5.22 U	5.25 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.08 U B	4.98 UJ B, FD	4.90 UJ B, FD	5.29 U B	0.491 J Z	5.22 U	5.25 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.320 J Z	0.316 J FD, Z	0.697 J FD, Z	0.0554 J Z	0.470 J Z	0.133 J Z	5.25 U B
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.08 U B	4.98 U B	4.90 U B	5.29 U B	0.303 J Z	5.22 U	5.25 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.597 J Z	0.422 J FD, Z	1.05 J FD, Z	5.29 U B	1.07 J Z	5.22 U B	5.25 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.08 U B	4.98 UJ B, FD	4.90 UJ B, FD	5.29 U B	0.693 J Z	5.22 U	5.25 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.504 J Z	0.506 J Z	0.745 J Z	0.141 J Z	0.615 J Z	0.139 J Z	0.411 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.215	0.234	0.594	0.0426	0.530	0 U	0.0627

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-608-SA5D-SB-0.0-0.5	SL-609-SA5D-SB-0.0-0.5
			Sample Type	N	N
			Sample Date	10/03/2013	11/15/2013
			SDG	PH122	PH130
			Start Depth	0	0
			End Depth	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit		
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.02 U	1.03 U B
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.285 J Z	0.524 J Z
1613B	3268-87-9	OCDD	ng/kg	1.66 J Z	10.3 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.09 U B	5.17 U B
1613B	39001-02-0	OCDF	ng/kg	10.2 U B	10.3 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.09 U	0.452 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.09 U	0.414 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.02 U	1.03 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.126 J Z	0.439 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.09 U	5.17 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.09 U	0.501 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.09 U	0.481 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.175 J Z	0.397 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.0897 J Z	0.418 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.09 U B	0.544 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.09 U	0.393 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.590 J Z	0.492 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.0899	0.707

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-505-SA5D-SB-9.0-10.0	SL-505-SA5D-SB-14.0-15.0	SL-505-SA5D-SB-19.0-20.0	SL-513-SA5D-SB-0.0-0.5	SL-513-SA5D-SB-4.0-5.0	SL-513-SA5D-SB-9.0-10.0	SL-513-SA5D-SB-16.0-17.0	SL-515-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/16/2013	09/16/2013	09/16/2013	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/09/2013
			SDG	PH108	PH108	PH108	PH110	PH110	PH110	PH110	PH104
			Start Depth	9	14	19	0	4	9	16	0
			End Depth	10	15	20	0.5	5	10	17	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	3.0	3.5	3.4	1.8 J Q	2.0 J Q	1.4 J Q	1.2 J Q	0.91 J Q, Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-815-SA5D-SB-0.0-0.5	SL-515-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-9.0-10.0	SL-515-SA5D-SB-22.0-23.0	SL-518-SA5D-SB-0.0-0.5	SL-518-SA5D-SB-4.0-5.0	SL-518-SA5D-SB-9.0-10.0	SL-518-SA5D-SB-15.0-16.0
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	09/09/2013	09/09/2013	09/09/2013	09/09/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013
			SDG	PH104	PH104	PH104	PH104	PH105	PH105	PH105	PH105
			Start Depth	0	4	9	22	0	4	9	15
			End Depth	0.5	5	10	23	0.5	5	10	16
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	1.0 J Q, Z	1.5 J Q	6.5 J Q	3.7 J Q	1.7 J Q, Z	0.75 J Q, Z	1.3 J Q	1.1 J Q

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-551-SA5D-SB-0.0-0.5	SL-551-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-9.0-10.0	SL-551-SA5D-SB-14.0-15.0	SL-551-SA5D-SB-17.5-18.5	SL-553-SA5D-SB-0.0-0.5	SL-853-SA5D-SB-0.0-0.5	SL-553-SA5D-SB-4.5-5.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013
			SDG	PH107	PH107	PH107	PH107	PH107	PH107	PH107	PH107
			Start Depth	0	4	9	14	17.5	0	0	4.5
			End Depth	0.5	5	10	15	18.5	0.5	0.5	5.5
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	0.68 J Q, Z	1.8 J Q	2.2 J Q	2.7 J Q	4.2 J Q	0.80 J Q, Z	0.86 J Q, Z	3.6 J Q

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-554-SA5D-SB-0.0-0.5	SL-554-SA5D-SB-4.0-5.0	SL-554-SA5D-SB-7.0-8.0	SL-555-SA5D-SB-0.0-0.5	SL-555-SA5D-SB-4.0-5.0	SL-555-SA5D-SB-10.5-11.5	SL-556-SA5D-SB-0.0-0.5	SL-556-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013
			SDG	PH102	PH102	PH102	PH102	PH102	PH102	PH102	PH102
			Start Depth	0	4	7	0	4	10.5	0	4
			End Depth	0.5	5	8	0.5	5	11.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	0.90 J Q, Z	2.0 J Q	1.8	0.83 J Q, Z	2.2 J Q	2.9 J Q	0.97 J Q, Z	3.0 J Q

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-556-SA5D-SB-11.0-12.0	SL-559-SA5D-SB-0.0-0.5	SL-559-SA5D-SB-6.0-7.0	SL-561-SA5D-SB-0.0-0.5	SL-561-SA5D-SB-4.0-5.0	SL-561-SA5D-SB-9.0-10.0	SL-590-SA5D-SB-0.0-0.5	SL-590-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/05/2013	09/05/2013	09/05/2013	10/08/2013	10/08/2013	10/08/2013	09/06/2013	09/06/2013
			SDG	PH102	PH102	PH102	PH124	PH124	PH124	PH103	PH103
			Start Depth	11	0	6	0	4	9	0	4
			End Depth	12	0.5	7	0.5	5	10	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	2.4 J Q	1.3 J Q	1.5 J Q	0.56	1.4	3.1	0.92 J Q, Z	14.2 J Q

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-890-SA5D-SB-4.0-5.0	SL-590-SA5D-SB-11.0-12.0	SL-591-SA5D-SB-0.0-0.5	SL-591-SA5D-SB-6.5-7.5	SL-592-SA5D-SB-0.0-0.5	SL-592-SA5D-SB-4.0-5.0	SL-592-SA5D-SB-10.5-11.5	SL-593-SA5D-SB-0.0-0.5
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	10/07/2013
			SDG	PH103	PH103	PH107	PH107	PH107	PH107	PH107	PH123
			Start Depth	4	11	0	6.5	0	4	10.5	0
			End Depth	5	12	0.5	7.5	0.5	5	11.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	13.4 J Q	9.1 J Q	1.4 J Q	6.6 J Q	0.54 J Q, Z	3.2 J Q	15.8 J Q	0.74 J Q

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-593-SA5D-SB-3.5-4.5	SL-594-SA5D-SB-0.0-0.5	SL-594-SA5D-SB-4.0-5.0	SL-594-SA5D-SB-7.0-8.0	SL-595-SA5D-SB-0.0-0.5	SL-595-SA5D-SB-4.0-5.0	SL-595-SA5D-SB-9.0-10.0	SL-595-SA5D-SB-14.0-15.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/07/2013	10/02/2013	10/02/2013	10/02/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013
			SDG	PH123	PH120	PH120	PH120	PH118	PH118	PH118	PH118
			Start Depth	3.5	0	4	7	0	4	9	14
			End Depth	4.5	0.5	5	8	0.5	5	10	15
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	3.4 J Q	0.76 J Z	2.0	2.3	2.0 J Q	2.2 J Q	6.1 J Q	8.9 J Q

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-595-SA5D-SB-17.0-18.0	SL-596-SA5D-SB-0.0-0.5	SL-596-SA5D-SB-4.0-5.0	SL-596-SA5D-SB-11.5-12.5	SL-597-SA5D-SB-0.0-0.5	SL-597-SA5D-SB-4.0-5.0	SL-597-SA5D-SB-9.0-10.0	SL-597-SA5D-SB-14.0-15.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013
			SDG	PH118	PH118	PH118	PH118	PH118	PH118	PH118	PH118
			Start Depth	17	0	4	11.5	0	4	9	14
			End Depth	18	0.5	5	12.5	0.5	5	10	15
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	5.3 J Q	2.1 J Q	1.9 J Q, Z	2.5 J Q	2.7 J Q	2.8 J Q	4.2 J Q	2.9 J Q

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-597-SA5D-SB-17.0-18.0	SL-598-SA5D-SB-0.0-0.5	SL-598-SA5D-SB-4.0-5.0	SL-598-SA5D-SB-9.0-10.0	SL-598-SA5D-SB-14.0-15.0	SL-598-SA5D-SB-18.0-19.0	SL-599-SA5D-SB-0.0-0.5	SL-599-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/30/2013	10/01/2013	10/01/2013	10/01/2013	10/01/2013	10/01/2013	09/09/2013	09/09/2013
			SDG	PH118	PH119	PH119	PH119	PH119	PH119	PH104	PH104
			Start Depth	17	0	4	9	14	18	0	4
			End Depth	18	0.5	5	10	15	19	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	3.5 J Q	2.2 J Q	2.9 J Q	2.5 J Q	3.1 J Q	3.8 J Q	0.55 J Q, Z	1.4 J Q

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-599-SA5D-SB-9.0-10.0	SL-599-SA5D-SB-14.0-15.0	SL-599-SA5D-SB-19.0-20.0	SL-599-SA5D-SB-22.0-23.0	SL-600-SA5D-SB-0.0-0.5	SL-900-SA5D-SB-0.0-0.5	SL-600-SA5D-SB-4.0-5.0	SL-600-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/09/2013	09/09/2013	09/09/2013	09/09/2013	10/02/2013	10/02/2013	10/02/2013	10/02/2013
			SDG	PH104	PH104	PH104	PH104	PH120	PH120	PH120	PH120
			Start Depth	9	14	19	22	0	0	4	9
			End Depth	10	15	20	23	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	10.9 J Q	9.2 J Q	6.9 J Q	6.1 J Q	0.93 J FD, Q, Z	2.5 J FD	1.3	9.3 J Q

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-600-SA5D-SB-14.0-15.0	SL-600-SA5D-SB-18.5-19.5	SL-601-SA5D-SB-0.0-0.5	SL-601-SA5D-SB-4.0-5.0	SL-601-SA5D-SB-9.0-10.0	SL-601-SA5D-SB-14.0-15.0	SL-601-SA5D-SB-20.5-21.5	SL-602-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/02/2013	10/02/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013	10/08/2013
			SDG	PH120	PH120	PH104	PH104	PH104	PH104	PH104	PH124
			Start Depth	14	18.5	0	4	9	14	20.5	0
			End Depth	15	19.5	0.5	5	10	15	21.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	7.1 J Q	4.1 J Q	1.8 J Q	2.5 J Q	9.0 J Q	10.7 J Q	4.4 J Q	0.73

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-602-SA5D-SB-4.0-5.0	SL-602-SA5D-SB-9.0-10.0	SL-603-SA5D-SB-0.0-0.5	SL-603-SA5D-SB-4.0-5.0	SL-603-SA5D-SB-9.0-10.0	SL-603-SA5D-SB-13.0-14.0	SL-604-SA5D-SB-0.0-0.5	SL-604-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/08/2013	10/08/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013
			SDG	PH124	PH124	PH105	PH105	PH105	PH105	PH105	PH105
			Start Depth	4	9	0	4	9	12	0	4
			End Depth	5	10	0.5	5	10	14	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	1.5	4.0	1.2 J E, Q	3.3 J E, Q	6.5 J E, Q	2.3 J E, Q	1.6 J E, Q	2.0 J E, Q

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-604-SA5D-SB-9.0-10.0	SL-604-SA5D-SB-16.5-17.5	SL-605-SA5D-SB-0.0-0.5	SL-605-SA5D-SB-4.0-5.0	SL-905-SA5D-SB-4.0-5.0	SL-605-SA5D-SB-9.0-10.0	SL-605-SA5D-SB-14.5-15.5	SL-606-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013
			SDG	PH105	PH105	PH105	PH105	PH105	PH105	PH105	PH105
			Start Depth	9	16.5	0	4	4	9	14.5	0
			End Depth	10	17.5	0.5	5	5	10	15.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
300.0	16984-48-8	Fluoride	mg/kg	5.7 J E, Q	2.3 J E, Q	1.9 J E, Q	3.2 J FD, E, Q	1.5 J FD, Q	2.6 J Q	1.6 J Q	0.83 J Q, Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-606-SA5D-SB-4.0-5.0	SL-606-SA5D-SB-9.0-10.0	SL-606-SA5D-SB-13.0-14.0
			Sample Type	N	N	N
			Sample Date	09/10/2013	09/10/2013	09/10/2013
			SDG	PH105	PH105	PH105
			Start Depth	4	9	13
			End Depth	5	10	14
Analytic Method	CAS Number	Chemical Name	Unit			
300.0	16984-48-8	Fluoride	mg/kg	1.4 J Q	2.2 J Q	1.5 J Q

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-513-SA5D-SB-0.0-0.5	SL-513-SA5D-SB-4.0-5.0	SL-513-SA5D-SB-9.0-10.0	SL-513-SA5D-SB-16.0-17.0	SL-516-SA5D-SB-0.0-0.5	SL-516-SA5D-SB-4.0-5.0	SL-816-SA5D-SB-4.0-5.0	SL-516-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013
			SDG	PH110	PH110	PH110	PH110	PH130	PH130	PH130	PH130
			Start Depth	0	4	9	16	0	4	4	9
			End Depth	0.5	5	10	17	0.5	5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
8151A	120-36-5	Dichlorprop	µg/kg	19 U	20 U	19 U	18 U	18 U	19 U	19 U	19 U
8151A	1918-00-9	Dicamba	µg/kg	14 U	14 U	14 U	13 U	13 U	13 U	13 U	13 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	100 U	110 U	100 U	97 U	360 U	99 U	99 U	99 U
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	27 U	28 U	27 U	26 U	25 R	26 R	26 R	26 R
8151A	93-65-2	MCPP	µg/kg	2800 U	2900 U	2800 U	2700 U	2700 U	2800 U	2700 U	2800 U
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	1.9 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U
8151A	93-76-5	2,4,5-T	µg/kg	1.9 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U
8151A	94-74-6	MCPA	µg/kg	2800 U	2900 U	2800 U	2700 U	2700 U	2800 U	2700 U	2800 U
8151A	94-75-7	2,4-D	µg/kg	41 U	42 U	41 U	39 U	38 U	40 U	40 U	40 U
8151A	94-82-6	2,4-DB	µg/kg	19 U	20 U	19 U	18 U	18 U	19 U	19 U	19 U

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				Sample Name	SL-516-SA5D-SB-13.0-14.0	SL-518-SA5D-SB-0.0-0.5	SL-518-SA5D-SB-4.0-5.0	SL-518-SA5D-SB-9.0-10.0	SL-518-SA5D-SB-15.0-16.0	SL-524-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-5.5-6.5	SL-824-SA5D-SB-5.5-6.5
				Sample Type	N	N	N	N	N	N	N	FD
				Sample Date	11/15/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/04/2013	09/04/2013	09/04/2013
				SDG	PH130	PH105	PH105	PH105	PH105	PH101	PH101	PH101
				Start Depth	13	0	4	9	15	0	5.5	5.5
				End Depth	14	0.5	5	10	16	0.5	6.5	6.5
Analytic Method	CAS Number	Chemical Name	Unit									
8151A	120-36-5	Dichlorprop	µg/kg	17 U	19 U	20 U	20 U	19 U	18 U	18 U	18 U
8151A	1918-00-9	Dicamba	µg/kg	12 U	13 U	14 U	14 U	13 U	13 U	13 U	13 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	92 U	98 U	110 U	110 U	99 U	94 U	96 U	96 U
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	25 R	26 U	28 U	28 U	26 U	25 U	26 U	26 U
8151A	93-65-2	MCPP	µg/kg	2600 U	2700 U	2900 U	2900 U	2800 U	2600 U	2700 U	2700 U
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	1.7 U	1.9 U	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U
8151A	93-76-5	2,4,5-T	µg/kg	1.7 U	1.9 U	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U
8151A	94-74-6	MCPA	µg/kg	2600 U	2700 U	2900 U	2900 U	2800 U	2600 U	2700 U	2700 U
8151A	94-75-7	2,4-D	µg/kg	37 U	39 U	42 U	42 U	40 U	38 U	39 U	38 U
8151A	94-82-6	2,4-DB	µg/kg	17 U	19 U	20 U	20 U	19 U	18 U	18 U	18 U

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			Sample Name	SL-553-SA5D-SB-0.0-0.5	SL-853-SA5D-SB-0.0-0.5	SL-553-SA5D-SB-4.5-5.5	SL-556-SA5D-SB-0.0-0.5	SL-556-SA5D-SB-4.0-5.0	SL-556-SA5D-SB-11.0-12.0	SL-560-SA5D-SB-0.0-0.5	SL-560-SA5D-SB-4.0-5.0
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	09/12/2013	09/12/2013	09/12/2013	09/05/2013	09/05/2013	09/05/2013	11/12/2013	11/12/2013
			SDG	PH107	PH107	PH107	PH102	PH102	PH102	PH127	PH127
			Start Depth	0	0	4.5	0	4	11	0	4
			End Depth	0.5	0.5	5.5	0.5	5	12	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8151A	120-36-5	Dichlorprop	µg/kg	17 U	17 U	18 U	17 U	18 U	18 U	19 U	18 U
8151A	1918-00-9	Dicamba	µg/kg	12 U	12 U	13 U	12 U	13 U	13 U	13 U	12 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	91 U	91 U	95 U	92 U	95 U	96 U	100 U	93 U
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	24 U	24 R	25 U	25 UJ C	25 UJ C	26 UJ C	27 U	25 U
8151A	93-65-2	MCPP	µg/kg	2500 U	2500 U	2600 U	2600 U	2600 U	2700 U	2800 U	2600 U
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	1.7 U	1.7 UJ Q	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U
8151A	93-76-5	2,4,5-T	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U
8151A	94-74-6	MCPA	µg/kg	2500 U	2500 U	2600 U	2600 U	2600 U	2700 U	2800 U	2600 U
8151A	94-75-7	2,4-D	µg/kg	37 U	36 U	38 U	37 U	38 U	38 U	40 U	37 U
8151A	94-82-6	2,4-DB	µg/kg	17 U	17 UJ Q	18 U	17 U	18 U	18 U	19 U	18 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-860-SA5D-SB-4.0-5.0	SL-560-SA5D-SB-7.0-8.0	SL-567-SA5D-SB-0.0-0.5	SL-567-SA5D-SB-3.5-4.5	SL-568-SA5D-SB-0.0-0.5	SL-568-SA5D-SB-2.5-3.5	SL-868-SA5D-SB-2.5-3.5	SL-570-SA5D-SB-0.0-0.5
			Sample Type	FD	N	N	N	N	N	FD	N
			Sample Date	11/12/2013	11/12/2013	10/07/2013	10/07/2013	09/23/2013	09/23/2013	09/23/2013	10/01/2013
			SDG	PH127	PH127	PH123	PH123	PH112	PH112	PH112	PH119
			Start Depth	4	7	0	3.5	0	2.5	2.5	0
			End Depth	5	8	0.5	4.5	0.5	3.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8151A	120-36-5	Dichlorprop	µg/kg	18 U	18 U	18 U	18 U	17 U	18 U	17 U	19 U
8151A	1918-00-9	Dicamba	µg/kg	13 U	12 U	13 U	13 U	12 U	13 U	12 U	13 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	94 U	93 U	94 U	98 U	93 U	96 U	91 U	98 U
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	25 U	25 U	25 U	26 U	25 U	26 U	24 U	26 UJ C
8151A	93-65-2	MCPP	µg/kg	2600 U	2600 U	2600 U	2700 U	2600 U	2700 U	2500 U	2700 U
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U
8151A	93-76-5	2,4,5-T	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U
8151A	94-74-6	MCPA	µg/kg	2600 U	2600 U	2600 U	2700 U	2600 U	2700 U	2500 U	2700 U
8151A	94-75-7	2,4-D	µg/kg	38 U	37 U	38 U	39 U	37 U	38 U	37 U	39 U
8151A	94-82-6	2,4-DB	µg/kg	18 U	18 U	18 U	18 U	17 U	18 U	17 U	19 U

U-Compound not detected above reporting limit
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			Sample Name	SL-570-SA5D-SB-4.0-5.0	SL-571-SA5D-SB-0.0-0.5	SL-572-SA5D-SB-0.0-0.5	SL-574-SA5D-SB-0.0-0.5	SL-575-SA5D-SB-0.0-0.5	SL-575-SA5D-SB-3.0-4.0	SL-576-SA5D-SB-0.0-0.5	SL-576-SA5D-SB-3.5-4.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/01/2013	09/23/2013	09/23/2013	09/23/2013	10/07/2013	10/07/2013	09/19/2013	09/19/2013
			SDG	PH119	PH112	PH112	PH112	PH123	PH123	PH111	PH111
			Start Depth	4	0	0	0	0	3	0	3.5
			End Depth	5	0.5	0.5	0.5	0.5	4	0.5	4.5
Analytic Method	CAS Number	Chemical Name	Unit								
8151A	120-36-5	Dichlorprop	µg/kg	19 U	18 U	17 U	17 U	17 U	18 U	17 U	18 U
8151A	1918-00-9	Dicamba	µg/kg	13 U	12 U	12 U	12 U	12 U	13 U	12 U	13 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	100 U	93 U	91 U	91 U	460 U	94 U	91 U	95 U
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	27 UJ C	25 U	24 U	24 U	24 U	25 U	24 U	25 U
8151A	93-65-2	MCPP	µg/kg	2800 U	2600 U	2500 U	2500 U	2500 U	2600 U	2500 U	2700 U
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U
8151A	93-76-5	2,4,5-T	µg/kg	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U
8151A	94-74-6	MCPA	µg/kg	2800 U	2600 U	2500 U	2500 U	2500 U	2600 U	2500 U	2700 U
8151A	94-75-7	2,4-D	µg/kg	40 U	37 U	37 U	36 U	37 U	38 U	37 U	38 U
8151A	94-82-6	2,4-DB	µg/kg	19 U	18 U	17 U	17 U	17 U	18 U	17 U	18 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-578-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-4.0-5.0	SL-882-SA5D-SB-4.0-5.0	SL-582-SA5D-SB-10.0-11.0
			Sample Type	N	N	N	FD	N
			Sample Date	09/19/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013
			SDG	PH111	PH118	PH118	PH118	PH118
			Start Depth	0	0	4	4	10
			End Depth	0.5	0.5	5	5	11
Analytic Method	CAS Number	Chemical Name	Unit					
8151A	120-36-5	Dichlorprop	µg/kg	18 U	18 U	19 U	19 U	19 U
8151A	1918-00-9	Dicamba	µg/kg	13 U	13 U	14 U	14 U	13 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	96 U	94 U	100 U	100 U	100 U
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	26 U	25 R	27 R	27 R	27 R
8151A	93-65-2	MCPP	µg/kg	2700 U	2600 U	2800 U	2800 U	2800 U
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U
8151A	93-76-5	2,4,5-T	µg/kg	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U
8151A	94-74-6	MCPA	µg/kg	2700 U	2600 U	2800 U	2800 U	2800 U
8151A	94-75-7	2,4-D	µg/kg	38 U	38 U	41 U	41 U	40 U
8151A	94-82-6	2,4-DB	µg/kg	18 U	18 U	19 U	19 U	19 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-516-SA5D-SB-0.0-0.5	SL-516-SA5D-SB-4.0-5.0	SL-816-SA5D-SB-4.0-5.0	SL-516-SA5D-SB-9.0-10.0	SL-516-SA5D-SB-13.0-14.0	SL-553-SA5D-SB-0.0-0.5	SL-853-SA5D-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	FD
			Sample Date	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	09/12/2013	09/12/2013
			SDG	PH130	PH130	PH130	PH130	PH130	PH107	PH107
			Start Depth	0	4	4	9	13	0	0
			End Depth	0.5	5	5	10	14	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
7199	18540-29-9	Chromium (Hexavalent Compounds)	mg/kg	0.54	0.44 UJ FD	0.16 J FD, Z	0.44 U	0.26 J Z	0.20 J Z	0.24 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-553-SA5D-SB-4.5-5.5	SL-556-SA5D-SB-0.0-0.5	SL-556-SA5D-SB-4.0-5.0	SL-556-SA5D-SB-11.0-12.0	SL-560-SA5D-SB-0.0-0.5	SL-560-SA5D-SB-4.0-5.0	SL-860-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	FD
			Sample Date	09/12/2013	09/05/2013	09/05/2013	09/05/2013	11/12/2013	11/12/2013	11/12/2013
			SDG	PH107	PH102	PH102	PH102	PH127	PH127	PH127
			Start Depth	4.5	0	4	11	0	4	4
			End Depth	5.5	0.5	5	12	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit							
7199	18540-29-9	Chromium (Hexavalent Compounds)	mg/kg	0.34 J Z	0.62	0.55	0.32 J Z	0.55	0.33 J Z	0.34 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-560-SA5D-SB-7.0-8.0	SL-580-SA5D-SB-0.0-0.5	SL-581-SA5D-SB-0.0-0.5	SL-581-SA5D-SB-2.5-3.5
			Sample Type	N	N	N	N
			Sample Date	11/12/2013	09/19/2013	09/19/2013	09/19/2013
			SDG	PH127	PH111	PH111	PH111
			Start Depth	7	0	0	2.5
			End Depth	8	0.5	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit				
7199	18540-29-9	Chromium (Hexavalent Compounds)	mg/kg	0.32 J Z	0.40 U	0.42 U	0.78

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-501-SA5D-SB-0.0-0.5	SL-501-SA5D-SB-4.0-5.0	SL-501-SA5D-SB-9.0-10.0	SL-501-SA5D-SB-14.0-15.0	SL-501-SA5D-SB-19.0-20.0	SL-501-SA5D-SB-24.0-25.0	SL-501-SA5D-SB-28.0-29.0	SL-502-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	10/03/2013
			SDG	PH109	PH109	PH109	PH109	PH109	PH109	PH109	PH122
			Start Depth	0	4	9	14	19	24	28	0
			End Depth	0.5	5	10	15	20	25	29	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0177 U	0.0185 U	0.0181 U	0.0168 J Z	0.0183 U	0.0173 U	0.0178 U	0.0397

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-502-SA5D-SB-6.5-7.5	SL-503-SA5D-SB-0.0-0.5	SL-503-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-0.0-0.5	SL-504-SA5D-SB-4.0-5.0	SL-804-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-9.0-10.0	SL-504-SA5D-SB-16.0-17.0
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	10/03/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013
			SDG	PH122	PH109	PH109	PH109	PH109	PH109	PH109	PH109
			Start Depth	6.5	0	4	0	4	4	9	16
			End Depth	7.5	0.5	5	0.5	5	5	10	17
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0210	0.0172 U	0.0185 U	0.0183 U	0.0133 J FD, Z	0.0180 UJ FD	0.0176 U	0.0180 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-505-SA5D-SB-0.0-0.5	SL-505-SA5D-SB-4.0-5.0	SL-505-SA5D-SB-9.0-10.0	SL-505-SA5D-SB-14.0-15.0	SL-505-SA5D-SB-19.0-20.0	SL-506-SA5D-SB-0.0-0.5	SL-506-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/11/2013	09/11/2013	10/03/2013
			SDG	PH108	PH108	PH108	PH108	PH108	PH106	PH106	PH122
			Start Depth	0	4	9	14	19	0	4	0
			End Depth	0.5	5	10	15	20	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0147 J Z	0.0112 J Z	0.0183	0.0182 U	0.0184 U	0.0177 U	0.0157 J Z	0.150

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-507-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-10.5-11.5	SL-508-SA5D-SB-0.0-0.5	SL-508-SA5D-SB-4.0-5.0	SL-508-SA5D-SB-9.0-10.0	SL-508-SA5D-SB-14.0-15.0	SL-508-SA5D-SB-19.0-20.0	SL-508-SA5D-SB-23.0-24.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013
			SDG	PH122	PH122	PH122	PH122	PH122	PH122	PH122	PH122
			Start Depth	4	10.5	0	4	9	14	19	23
			End Depth	5	11.5	0.5	5	10	15	20	24
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0160 J Z	0.0127 J Z	0.0172	0.0148 J Z	0.0125 J Z	0.0133 J Z	0.0119 J Z	0.0111 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-509-SA5D-SB-0.0-0.5	SL-509-SA5D-SB-4.0-5.0	SL-510-SA5D-SB-0.0-0.5	SL-510-SA5D-SB-4.0-5.0	SL-512-SA5D-SB-0.0-0.5	SL-512-SA5D-SB-4.0-5.0	SL-513-SA5D-SB-0.0-0.5	SL-513-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/26/2013	09/26/2013	09/18/2013	09/18/2013
			SDG	PH110	PH110	PH110	PH110	PH116	PH116	PH110	PH110
			Start Depth	0	4	0	4	0	4	0	4
			End Depth	0.5	5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0129 J Z	0.0134 J Z	0.0114 J Z	0.0124 J Z	0.0172 U	0.0182 U	0.0176 U	0.0149 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-513-SA5D-SB-9.0-10.0	SL-513-SA5D-SB-16.0-17.0	SL-514-SA5D-SB-0.0-0.5	SL-514-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-0.0-0.5	SL-815-SA5D-SB-0.0-0.5	SL-515-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013
			SDG	PH110	PH110	PH110	PH110	PH104	PH104	PH104	PH104
			Start Depth	9	16	0	4	0	0	4	9
			End Depth	10	17	0.5	5	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0125 J Z	0.0103 J Z	0.0183 U	0.0124 J Z	0.0176 U	0.0178 U	0.0185 U	0.0122 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-515-SA5D-SB-22.0-23.0	SL-516-SA5D-SB-0.0-0.5	SL-516-SA5D-SB-4.0-5.0	SL-816-SA5D-SB-4.0-5.0	SL-516-SA5D-SB-9.0-10.0	SL-516-SA5D-SB-13.0-14.0	SL-518-SA5D-SB-0.0-0.5	SL-518-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	09/09/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	09/10/2013	09/10/2013
			SDG	PH104	PH130	PH130	PH130	PH130	PH130	PH105	PH105
			Start Depth	22	0	4	4	9	13	0	4
			End Depth	23	0.5	5	5	10	14	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0191 U	0.0178 U	0.0337	0.0283	0.0170 U	0.0103 J Z	0.0218	0.0179 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-518-SA5D-SB-9.0-10.0	SL-518-SA5D-SB-15.0-16.0	SL-519-SA5D-SB-0.0-0.5	SL-519-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-0.0-0.5	SL-520-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-8.0-9.0	SL-521-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/10/2013	09/10/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013
			SDG	PH105	PH105	PH106	PH106	PH106	PH106	PH106	PH106
			Start Depth	9	15	0	4	0	4	8	0
			End Depth	10	16	0.5	5	0.5	5	9	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0181 J Z	0.0109 J Z	0.0180 U	0.0185 U	0.0178 U	0.0193 U	0.0184 U	0.0179 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-521-SA5D-SB-5.5-6.5	SL-522-SA5D-SB-0.0-0.5	SL-522-SA5D-SB-6.0-7.0	SL-523-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-5.5-6.5	SL-824-SA5D-SB-5.5-6.5	SL-525-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/04/2013	09/04/2013	09/04/2013	09/03/2013
			SDG	PH106	PH106	PH106	PH106	PH101	PH101	PH101	PH100
			Start Depth	5.5	0	6	0	0	5.5	5.5	0
			End Depth	6.5	0.5	7	0.5	0.5	6.5	6.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0172 U	0.0112 J Z	0.0110 J Z	0.0171 U	0.277	0.113 J FD	0.0172 UJ FD	0.0167 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-525-SA5D-SB-2.5-3.5	SL-526-SA5D-SB-0.0-0.5	SL-526-SA5D-SB-3.0-4.0	SL-527-SA5D-SB-0.0-0.5	SL-527-SA5D-SB-4.0-5.0	SL-528-SA5D-SB-0.0-0.5	SL-528-SA5D-SB-2.5-3.5	SL-529-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013	09/03/2013	09/11/2013
			SDG	PH100	PH098	PH098	PH100	PH100	PH100	PH100	PH106
			Start Depth	2.5	0	3	0	4	0	2.5	0
			End Depth	3.5	0.5	4	0.5	5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0175 U	0.0167 U	0.0106 J Z	0.0196	0.0155 J Z	0.0300	0.0119 J Z	0.0175 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-529-SA5D-SB-3.0-4.0	SL-530-SA5D-SB-0.0-0.5	SL-530-SA5D-SB-2.5-3.5	SL-531-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-2.5-3.5	SL-533-SA5D-SB-0.0-0.5	SL-533-SA5D-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/11/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013
			SDG	PH106	PH099	PH099	PH099	PH099	PH099	PH099	PH099
			Start Depth	3	0	2.5	0	0	2.5	0	2.5
			End Depth	4	0.5	3.5	0.5	0.5	3.5	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0172 U	0.0187	0.0163 U	0.0169 U	0.0997	0.0171 U	0.0831	0.0182

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-534-SA5D-SB-0.0-0.5	SL-534-SA5D-SB-6.5-7.5	SL-535-SA5D-SB-0.0-0.5	SL-835-SA5D-SB-0.0-0.5	SL-535-SA5D-SB-2.0-3.0	SL-536-SA5D-SB-0.0-0.5	SL-536-SA5D-SB-3.5-4.5	SL-537-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/28/2013	08/28/2013	08/28/2013
			SDG	PH099	PH099	PH099	PH099	PH099	PH095	PH095	PH095
			Start Depth	0	6.5	0	0	2	0	3.5	0
			End Depth	0.5	7.5	0.5	0.5	3	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0128 J Z	0.0169 U	0.0172 U	0.0169 U	0.0167 U	0.0112 J Z	0.0140 J Z	0.0130 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-537-SA5D-SB-2.5-3.5	SL-538-SA5D-SB-0.0-0.5	SL-538-SA5D-SB-3.0-4.0	SL-539-SA5D-SB-0.0-0.5	SL-539-SA5D-SB-3.0-4.0	SL-540-SA5D-SB-0.0-0.5	SL-540-SA5D-SB-5.0-6.0	SL-541-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/28/2013	08/28/2013	08/28/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013
			SDG	PH095	PH095	PH095	PH098	PH098	PH100	PH100	PH100
			Start Depth	2.5	0	3	0	3	0	5	0
			End Depth	3.5	0.5	4	0.5	4	0.5	6	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0161 U	0.0124 J Z	0.0165 U	0.0164 U	0.0161 U	0.0169 U	0.0175 U	0.0173 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-541-SA5D-SB-2.5-3.5	SL-542-SA5D-SB-0.0-0.5	SL-542-SA5D-SB-4.0-5.0	SL-543-SA5D-SB-0.0-0.5	SL-543-SA5D-SB-4.0-5.0	SL-544-SA5D-SB-0.0-0.5	SL-544-SA5D-SB-6.5-7.5	SL-545-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	08/29/2013	08/29/2013	08/29/2013	08/29/2013	09/04/2013	09/04/2013	09/03/2013
			SDG	PH100	PH098	PH098	PH098	PH098	PH101	PH101	PH100
			Start Depth	2.5	0	4	0	4	0	6.5	0
			End Depth	3.5	0.5	5	0.5	5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0165 U	0.0142 J Z	0.0164 U	0.0109 J Z	0.0179 U	0.0166 U	0.0171 U	0.0168 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-545-SA5D-SB-6.0-7.0	SL-546-SA5D-SB-0.0-0.5	SL-546-SA5D-SB-4.0-5.0	SL-547-SA5D-SB-0.0-0.5	SL-547-SA5D-SB-4.0-5.0	SL-548-SA5D-SB-0.0-0.5	SL-548-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	09/04/2013	09/04/2013	09/04/2013	09/04/2013	08/26/2013	08/26/2013	11/12/2013
			SDG	PH100	PH101	PH101	PH101	PH101	PH093	PH093	PH127
			Start Depth	6	0	4	0	4	0	4	0
			End Depth	7	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0167 U	0.0132 J Z	0.0184 U	0.0110 J Z	0.0184 U	0.0191	0.0164 J Z	0.0175 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-549-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-11.0-12.0	SL-550-SA5D-SB-0.0-0.5	SL-550-SA5D-SB-4.0-5.0	SL-850-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-0.0-0.5	SL-551-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	11/12/2013	11/12/2013	09/06/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013
			SDG	PH127	PH127	PH103	PH103	PH103	PH107	PH107	PH107
			Start Depth	4	11	0	4	4	0	4	9
			End Depth	5	12	0.5	5	5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0173 U	0.0124 J Z	0.0172 U	0.0185 U	0.0182 U	0.0112 J Z	0.0173 U	0.0138 J Z

U-Compound not detected above reporting limit
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			Sample Name	SL-551-SA5D-SB-14.0-15.0	SL-551-SA5D-SB-17.5-18.5	SL-552-SA5D-SB-0.0-0.5	SL-552-SA5D-SB-4.0-5.0	SL-553-SA5D-SB-0.0-0.5	SL-853-SA5D-SB-0.0-0.5	SL-553-SA5D-SB-4.5-5.5	SL-554-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/12/2013	09/12/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013	09/05/2013
			SDG	PH107	PH107	PH103	PH103	PH107	PH107	PH107	PH102
			Start Depth	14	17.5	0	4	0	0	4.5	0
			End Depth	15	18.5	0.5	5	0.5	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0281	0.0421	0.0162 U	0.0188 U	0.0205	0.0215	0.0119 J Z	0.0110 J Z

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			Sample Name	SL-554-SA5D-SB-4.0-5.0	SL-554-SA5D-SB-7.0-8.0	SL-555-SA5D-SB-0.0-0.5	SL-555-SA5D-SB-4.0-5.0	SL-555-SA5D-SB-10.5-11.5	SL-556-SA5D-SB-0.0-0.5	SL-556-SA5D-SB-4.0-5.0	SL-556-SA5D-SB-11.0-12.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013
			SDG	PH102	PH102	PH102	PH102	PH102	PH102	PH102	PH102
			Start Depth	4	7	0	4	10.5	0	4	11
			End Depth	5	8	0.5	5	11.5	0.5	5	12
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0172 U	0.0212	0.0100 J Z	0.0131 J Z	0.0156 J Z	0.0227	0.0100 J Z	0.0168 U

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			Sample Name	SL-557-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-4.0-5.0	SL-559-SA5D-SB-0.0-0.5	SL-559-SA5D-SB-6.0-7.0	SL-560-SA5D-SB-0.0-0.5	SL-560-SA5D-SB-4.0-5.0	SL-860-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	FD
			Sample Date	09/24/2013	09/24/2013	09/24/2013	09/05/2013	09/05/2013	11/12/2013	11/12/2013	11/12/2013
			SDG	PH113	PH113	PH113	PH102	PH102	PH127	PH127	PH127
			Start Depth	0	0	4	0	6	0	4	4
			End Depth	0.5	0.5	5	0.5	7	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0216	0.0222	0.0174 U	0.0195	0.0177 U	0.0184 U	0.0168 U	0.0165 U

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			Sample Name	SL-560-SA5D-SB-7.0-8.0	SL-561-SA5D-SB-0.0-0.5	SL-561-SA5D-SB-4.0-5.0	SL-561-SA5D-SB-9.0-10.0	SL-562-SA5D-SB-0.0-0.5	SL-562-SA5D-SB-4.0-5.0	SL-563-SA5D-SB-0.0-0.5	SL-563-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/12/2013	10/08/2013	10/08/2013	10/08/2013	09/25/2013	09/25/2013	09/25/2013	09/25/2013
			SDG	PH127	PH124	PH124	PH124	PH114	PH114	PH114	PH114
			Start Depth	7	0	4	9	0	4	0	4
			End Depth	8	0.5	5	10	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0172 U	0.0220	0.0175 U	0.0178 U	0.0243	0.0159 J Z	0.0201	0.0130 J Z

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			Sample Name	SL-863-SA5D-SB-4.0-5.0	SL-564-SA5D-SB-0.0-0.5	SL-564-SA5D-SB-4.0-5.0	SL-565-SA5D-SB-0.0-0.5	SL-865-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-4.0-5.0	SL-567-SA5D-SB-0.0-0.5
			Sample Type	FD	N	N	N	FD	N	N	N
			Sample Date	09/25/2013	10/01/2013	10/01/2013	09/24/2013	09/24/2013	09/24/2013	09/24/2013	10/07/2013
			SDG	PH114	PH119	PH119	PH113	PH113	PH113	PH113	PH123
			Start Depth	4	0	4	0	0	0	4	0
			End Depth	5	0.5	5	0.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0126 J Z	0.0258	0.0202	0.0140 J FD, Z	0.0292 J FD	0.0195	0.0132 J Z	0.0267

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			Sample Name	SL-567-SA5D-SB-3.5-4.5	SL-568-SA5D-SB-0.0-0.5	SL-568-SA5D-SB-2.5-3.5	SL-868-SA5D-SB-2.5-3.5	SL-569-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-4.0-5.0	SL-571-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	10/07/2013	09/23/2013	09/23/2013	09/23/2013	09/25/2013	10/01/2013	10/01/2013	09/23/2013
			SDG	PH123	PH112	PH112	PH112	PH114	PH119	PH119	PH112
			Start Depth	3.5	0	2.5	2.5	0	0	4	0
			End Depth	4.5	0.5	3.5	3.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0274	0.0287	0.0123 J FD, Z	0.0158 UJ FD	0.0191	0.0179 U	0.0185 U	0.0160 J Z

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			Sample Name	SL-577-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-4.0-5.0	SL-882-SA5D-SB-4.0-5.0	SL-582-SA5D-SB-10.0-11.0	SL-583-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	09/19/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/23/2013	10/02/2013	10/02/2013
			SDG	PH111	PH118	PH118	PH118	PH118	PH112	PH120	PH120
			Start Depth	0	0	4	4	10	0	0	4
			End Depth	0.5	0.5	5	5	11	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0225	0.0173 U	0.0186 U	0.0181 U	0.0178 U	0.0237	0.0182	0.0179 U

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			Sample Name	SL-607-SA5D-SB-0.0-0.5	SL-607-SA5D-SB-4.0-5.0	SL-608-SA5D-SB-0.0-0.5	SL-608-SA5D-SB-4.0-5.0	SL-609-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N
			Sample Date	10/01/2013	10/01/2013	10/03/2013	10/03/2013	11/15/2013
			SDG	PH119	PH119	PH122	PH122	PH130
			Start Depth	0	4	0	4	0
			End Depth	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit					
7471B	7439-97-6	Mercury	mg/kg	0.0121 J Z	0.0191 U	0.0102 J Z	0.0123 J Z	0.0172 U

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			Sample Name	SL-501-SA5D-SB-0.0-0.5	SL-501-SA5D-SB-4.0-5.0	SL-501-SA5D-SB-9.0-10.0	SL-501-SA5D-SB-14.0-15.0	SL-501-SA5D-SB-19.0-20.0	SL-501-SA5D-SB-24.0-25.0	SL-501-SA5D-SB-28.0-29.0	SL-502-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	10/03/2013
			SDG	PH109	PH109	PH109	PH109	PH109	PH109	PH109	PH122
			Start Depth	0	4	9	14	19	24	28	0
			End Depth	0.5	5	10	15	20	25	29	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	31000 J A	31600 J A	23600 J A	20300 J A	14100 J A	12800 J A	13600 J A	23900
6010C	7439-89-6	Iron	mg/kg	35300 J E	38100 J E	27800 J E	25500 J E	20400 J E	19400 J E	20800 J E	30600
6010C	7439-92-1	Lead	mg/kg	11.3	12.1	8.61	6.14	5.50	4.93	4.53	13.5
6010C	7439-93-2	Lithium	mg/kg	25.4	29.6	24.9	22.0	19.0	19.6	21.5	24.3
6010C	7439-95-4	Magnesium	mg/kg	7210 J A	8340 J A	5510 J A	5280 J A	4130 J A	4010 J A	4320 J A	6420
6010C	7439-96-5	Manganese	mg/kg	507 J A	532 J A	394 J A	262 J A	390 J A	329 J A	201 J A	451
6010C	7439-98-7	Molybdenum	mg/kg	2.10 U F	2.28 U	2.19 U	2.13 U	2.20 U	2.14 U	2.11 U	2.02 U F
6010C	7440-02-0	Nickel	mg/kg	22.7 J A	25.0 J A	16.7 J A	14.1 J A	12.8 J A	12.2 J A	10.1 J A	19.2
6010C	7440-09-7	Potassium	mg/kg	5360 J Q	3970 J Q	3470 J Q	3460 J Q	2720 J Q	2540 J Q	2630 J Q	4930
6010C	7440-23-5	Sodium	mg/kg	97.6 J Z	259	224	200	187	131	150	109
6010C	7440-31-5	Tin	mg/kg	10.5 U B	11.4 U B	11.0 U B	10.6 U B	11.0 U B	10.7 U B	10.6 U B	10.1 U B
6010C	7440-32-6	Titanium	mg/kg	1440	1560	1450	1390	1180	1190	1300	842
6010C	7440-36-0	Antimony	mg/kg	4.19 UJ Q	4.56 UJ Q	4.38 UJ Q	4.26 UJ Q	4.40 UJ Q	4.28 UJ Q	4.23 UJ Q	4.04 U
6010C	7440-38-2	Arsenic	mg/kg	6.53	6.72	7.25	4.86	4.76	4.50	6.19	4.29
6010C	7440-39-3	Barium	mg/kg	142 J A	138 J A	88.0 J A	78.6 J A	73.3 J A	64.6 J A	65.9 J A	126
6010C	7440-41-7	Beryllium	mg/kg	1.03 J Z	1.03 J Z	0.862 J Z	0.703 J Z	0.512 J Z	0.472 J Z	0.546 J Z	0.849 J Z
6010C	7440-42-8	Boron	mg/kg	11.2	13.4	7.28 J Z	6.38 J Z	4.84 J Z	4.04 J Z	4.09 J Z	12.9
6010C	7440-43-9	Cadmium	mg/kg	1.05 U	1.14 U	1.10 U	1.06 U	1.10 U	1.07 U	1.06 U	0.518 J Z
6010C	7440-47-3	Chromium	mg/kg	40.9 J A	40.8 J A	28.2 J A	25.5 J A	18.3 J A	18.4 J A	19.0 J A	30.9
6010C	7440-48-4	Cobalt	mg/kg	10.3 J A	11.9 J A	8.82 J A	4.93 J A	5.98 J A	5.02 J A	3.86 J A	9.42
6010C	7440-50-8	Copper	mg/kg	19.6	19.2	14.0	11.9	8.64	10.7	9.36	20.6
6010C	7440-62-2	Vanadium	mg/kg	74.1	75.9	52.8	45.9	37.1	34.3	37.7	58.6
6010C	7440-66-6	Zinc	mg/kg	77.1	79.8	62.8	60.3	52.8	60.5	54.2	70.7
6010C	7440-67-7	Zirconium	mg/kg	4.36 J Z	3.70 J Z	2.82 J Z	2.81 J Z	1.52 J Z	1.46 J Z	1.38 J Z	6.96
6010C	7440-70-2	Calcium	mg/kg	6660 J E	10600 J E	16000 J E	15700 J E	5850 J E	4210 J E	5940 J E	6680
6010C	7723-14-0	Phosphorus	mg/kg	341	351	299	384	340	361	368	416
6020A	7440-22-4	Silver	mg/kg	0.0600 J Q, Z	0.0541 J Q, Z	0.0397 J Q, Z	0.0442 J Q, Z	0.0321 J Q, Z	0.214 U	0.0661 J Q, Z	0.0591 J Z
6020A	7440-24-6	Strontium	mg/kg	46.1	58.2	40.8	39.0	26.0	27.1	37.3	33.4
6020A	7440-28-0	Thallium	mg/kg	0.476 J Q	0.487 J Q	0.422 J Q	0.359 J Q	0.300 J Q	0.290 J Q	0.344 J Q	0.424
6020A	7782-49-2	Selenium	mg/kg	0.292 J Z	0.154 J Z	0.438 U	0.426 U	0.440 U	0.428 U	0.423 U	0.462

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				Sample Name	SL-502-SA5D-SB-6.5-7.5	SL-503-SA5D-SB-0.0-0.5	SL-503-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-0.0-0.5	SL-504-SA5D-SB-4.0-5.0	SL-804-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-9.0-10.0	SL-504-SA5D-SB-16.0-17.0
				Sample Type	N	N	N	N	N	FD	N	N
				Sample Date	10/03/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013
				SDG	PH122	PH109	PH109	PH109	PH109	PH109	PH109	PH109
				Start Depth	6.5	0	4	0	4	4	9	16
				End Depth	7.5	0.5	5	0.5	5	5	10	17
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	25100	32700 J A	27700 J A	30400 J A	32000 J A	28600 J A	23800 J A	15200 J A
6010C	7439-89-6	Iron	mg/kg	36100	36300 J E	31000 J E	41600 J E	32700 J E	29400 J E	28500 J E	22300 J E
6010C	7439-92-1	Lead	mg/kg	11.4	11.3	9.48	10.8	9.51	9.49	7.81	5.96
6010C	7439-93-2	Lithium	mg/kg	35.5	27.3	30.4	25.6	26.7	25.9	24.3	20.7
6010C	7439-95-4	Magnesium	mg/kg	7040	7290 J A	6180 J A	7110 J A	6260 J A	6460 J A	5730 J A	4460 J A
6010C	7439-96-5	Manganese	mg/kg	343	505 J A	1000 J A	505 J A	291 J A	368 J A	382 J A	303 J A
6010C	7439-98-7	Molybdenum	mg/kg	2.19 U	2.15 U	2.31 U	2.18 U F	2.22 UJ F, FD	2.23 UJ FD	2.17 U	2.09 U
6010C	7440-02-0	Nickel	mg/kg	17.4	22.0 J A	27.1 J A	22.2 J A	20.8 J A	16.8 J A	17.9 J A	13.9 J A
6010C	7440-09-7	Potassium	mg/kg	2400	4320 J Q	3610 J Q	4860 J Q	2780 J Q	3190 J Q	3130 J Q	2630 J Q
6010C	7440-23-5	Sodium	mg/kg	100 J Z	127	443	203	700	610	499	291
6010C	7440-31-5	Tin	mg/kg	10.9 U B	10.7 U B	11.6 U B	10.9 U B	11.1 U B	11.1 U B	10.8 U B	10.4 U B
6010C	7440-32-6	Titanium	mg/kg	1150	1570	1700	1480	1260	1360	1410	1240
6010C	7440-36-0	Antimony	mg/kg	4.37 U	4.30 UJ Q	4.62 UJ Q	4.35 UJ Q	4.45 UJ Q	4.46 UJ Q	4.33 UJ Q	4.18 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	8.04	6.27	6.02	6.07	7.48	7.15	6.58	5.17
6010C	7440-39-3	Barium	mg/kg	117	144 J A	146 J A	133 J A	111 J A	127 J A	97.5 J A	68.0 J A
6010C	7440-41-7	Beryllium	mg/kg	1.10	1.04 J Z	0.942 J Z	1.03 J Z	1.04 J Z	0.862 J Z	0.817 J Z	0.559 J Z
6010C	7440-42-8	Boron	mg/kg	9.05 J Z	11.4	10.2 J Z	11.1	8.90 J Z	10.5 J Z	6.57 J Z	4.74 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.343 J Z	1.07 U	0.210 J Z	1.09 U	1.11 U	1.11 U	1.08 U	1.04 U
6010C	7440-47-3	Chromium	mg/kg	32.9	40.8 J A	33.1 J A	38.5 J A	35.6 J A	33.4 J A	30.1 J A	21.3 J A
6010C	7440-48-4	Cobalt	mg/kg	11.3	10.7 J A	10.2 J A	10.1 J A	8.09 J A	8.27 J A	7.83 J A	5.56 J A
6010C	7440-50-8	Copper	mg/kg	24.9	17.9	14.6	18.9	16.0	16.5	13.0	11.3
6010C	7440-62-2	Vanadium	mg/kg	62.0	76.1	65.7	71.4	65.0	63.6	56.8	41.5
6010C	7440-66-6	Zinc	mg/kg	69.4	74.0	66.8	74.3	59.2	60.8	60.7	51.6
6010C	7440-67-7	Zirconium	mg/kg	5.65	4.71 J Z	3.63 J Z	3.86 J Z	3.53 J Z	3.33 J Z	3.19 J Z	2.27 J Z
6010C	7440-70-2	Calcium	mg/kg	19600	6590 J E	5790 J E	12500 J E	36200 J FD, E	65200 J FD, E	12200 J E	6510 J E
6010C	7723-14-0	Phosphorus	mg/kg	290	289	324	352	176	271	279	345
6020A	7440-22-4	Silver	mg/kg	0.0566 J Z	0.0623 J Q, Z	0.0687 J Q, Z	0.0479 J Q, Z	0.0832 J Q, Z	0.0665 J Q, Z	0.0433 J Q, Z	0.0276 J Q, Z
6020A	7440-24-6	Strontium	mg/kg	47.2	52.0	41.2	52.8	55.8	83.7	50.7	31.5
6020A	7440-28-0	Thallium	mg/kg	0.378	0.477 J Q	0.425 J Q	0.397 J Q	0.333 J Q	0.467 J Q	0.464 J Q	0.301 J Q
6020A	7782-49-2	Selenium	mg/kg	0.188 J Z	0.283 J Z	0.462 U	0.304 J Z	0.445 UJ FD	0.127 J FD, Z	0.433 U	0.418 U

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				Sample Name	SL-505-SA5D-SB-0.0-0.5	SL-505-SA5D-SB-4.0-5.0	SL-505-SA5D-SB-9.0-10.0	SL-505-SA5D-SB-14.0-15.0	SL-505-SA5D-SB-19.0-20.0	SL-506-SA5D-SB-0.0-0.5	SL-506-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/11/2013	09/11/2013	10/03/2013
				SDG	PH108	PH108	PH108	PH108	PH108	PH106	PH106	PH122
				Start Depth	0	4	9	14	19	0	4	0
				End Depth	0.5	5	10	15	20	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	24700 J A	28600 J A	29600 J A	21900 J A	23800 J A	26800	34700	20500
6010C	7439-89-6	Iron	mg/kg	30900 J E	33200 J E	33000 J E	27800 J E	31100 J E	35500	37400	25500
6010C	7439-92-1	Lead	mg/kg	15.3	12.9	9.50	7.17	10.3	11.3	10.1	15.6
6010C	7439-93-2	Lithium	mg/kg	21.4	24.6	27.0	24.7	27.3	23.0	32.7	20.2
6010C	7439-95-4	Magnesium	mg/kg	6300 J A	7040 J A	6820 J A	5680 J A	6140 J A	6700	7730	6230
6010C	7439-96-5	Manganese	mg/kg	477 J A	470 J A	455 J A	315 J A	627 J A	581	295	415
6010C	7439-98-7	Molybdenum	mg/kg	2.04 U F	2.17 U F	2.23 U F	2.17 U	2.16 U F	2.21 U	2.27 U	2.05 U F
6010C	7440-02-0	Nickel	mg/kg	19.8 J A	21.7 J A	23.4 J A	16.9 J A	25.0 J A	22.0	19.4	17.5
6010C	7440-09-7	Potassium	mg/kg	5560 J Q	5000 J Q	4020 J Q	3290 J Q	3360 J Q	3930	3870	5180
6010C	7440-23-5	Sodium	mg/kg	102	192	584	388	350	181	777	84.3 J Z
6010C	7440-31-5	Tin	mg/kg	10.2 U B	10.9 U B	11.2 U B	10.9 U B	10.8 U B	11.1 U B	11.4 U B	10.3 U B
6010C	7440-32-6	Titanium	mg/kg	1310	1440	1350	1460	1520	910	1370	781
6010C	7440-36-0	Antimony	mg/kg	4.09 UJ Q	4.35 UJ Q	4.47 UJ Q	4.35 UJ Q	4.32 UJ Q	0.910 J Q, Z	1.26 J Q, Z	4.11 U
6010C	7440-38-2	Arsenic	mg/kg	9.67	8.23	6.95	6.31	6.26	4.57	5.96	3.51 J Z
6010C	7440-39-3	Barium	mg/kg	121 J A	136 J A	132 J A	91.6 J A	106 J A	144	132	115
6010C	7440-41-7	Beryllium	mg/kg	0.880 J Z	0.946 J Z	0.973 J Z	0.784 J Z	0.876 J Z	1.00 J Z	1.06 J Z	0.785 J Z
6010C	7440-42-8	Boron	mg/kg	12.5	11.9	9.81 J Z	7.03 J Z	7.33 J Z	13.7	16.6	11.6
6010C	7440-43-9	Cadmium	mg/kg	0.175 J Z	1.09 U	1.12 U	1.09 U	1.08 U	0.617 J Z	0.325 J Z	0.690 J Z
6010C	7440-47-3	Chromium	mg/kg	37.4 J A	39.8 J A	35.8 J A	30.9 J A	32.7 J A	35.9 J Q	41.0 J Q	28.7
6010C	7440-48-4	Cobalt	mg/kg	9.64 J A	9.46 J A	10.9 J A	6.72 J A	10.4 J A	11.8 J A	8.91 J A	8.35
6010C	7440-50-8	Copper	mg/kg	18.7	18.6	16.3	13.5	16.0	15.9	16.6	20.2
6010C	7440-62-2	Vanadium	mg/kg	61.7	67.9	66.6	53.3	61.3	65.1 J Q	75.0 J Q	49.5
6010C	7440-66-6	Zinc	mg/kg	97.1	89.1	71.9	63.0	70.0	69.9	69.2	127
6010C	7440-67-7	Zirconium	mg/kg	4.22 J Z	3.72 J Z	2.68 J Z	2.68 J Z	3.02 J Z	1.78 J Z	4.15 J Z	6.24
6010C	7440-70-2	Calcium	mg/kg	10400 J E	9050 J E	17600 J E	8130 J E	15200 J E	6790	6860	6500
6010C	7723-14-0	Phosphorus	mg/kg	484	419	307	344	437	238	289	373
6020A	7440-22-4	Silver	mg/kg	0.0615 J Q, Z	0.0571 J Q, Z	0.0492 J Q, Z	0.0543 J Q, Z	0.0460 J Q, Z	0.0511 J Z	0.0670 J Z	0.110 J Z
6020A	7440-24-6	Strontium	mg/kg	45.9	48.2	55.8	41.8	59.3	42.9 J A	42.9 J A	29.6
6020A	7440-28-0	Thallium	mg/kg	0.414 J Q	0.394 J Q	0.416 J Q	0.342 J Q	0.392 J Q	0.380	0.350	0.382
6020A	7782-49-2	Selenium	mg/kg	0.285 J Z	0.214 J Z	0.447 U	0.435 U	0.432 U	0.196 J Z	0.454 U	0.260 J Z

U-Compound not detected above reporting limit
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				Sample Name	SL-507-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-10.5-11.5	SL-508-SA5D-SB-0.0-0.5	SL-508-SA5D-SB-4.0-5.0	SL-508-SA5D-SB-9.0-10.0	SL-508-SA5D-SB-14.0-15.0	SL-508-SA5D-SB-19.0-20.0	SL-508-SA5D-SB-23.0-24.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013
				SDG	PH122	PH122	PH122	PH122	PH122	PH122	PH122	PH122
				Start Depth	4	10.5	0	4	9	14	19	23
				End Depth	5	11.5	0.5	5	10	15	20	24
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	31000	15300	27900	26500	25700	21000	19500	14100
6010C	7439-89-6	Iron	mg/kg	35700	19600	33300	34000	25300	26600	24700	21800
6010C	7439-92-1	Lead	mg/kg	10.5	5.26	10.9	9.86	7.87	6.73	6.70	6.16
6010C	7439-93-2	Lithium	mg/kg	27.7	21.3	23.6	25.6	27.3	24.6	23.2	19.7
6010C	7439-95-4	Magnesium	mg/kg	8110	4070	6910	7670	5620	5440	5240	4460
6010C	7439-96-5	Manganese	mg/kg	474	210	448	470	327	406	394	410
6010C	7439-98-7	Molybdenum	mg/kg	2.21 U	2.09 U	2.06 U F	2.24 U	2.23 U	2.19 U	2.16 U	2.11 U
6010C	7440-02-0	Nickel	mg/kg	21.4	11.1	19.5	20.8	17.7	15.6	15.7	14.4
6010C	7440-09-7	Potassium	mg/kg	3840	1920	6340	3810	3220	3030	2860	2350
6010C	7440-23-5	Sodium	mg/kg	173	141	82.0 J Z	213	295	292	252	186
6010C	7440-31-5	Tin	mg/kg	11.0 U B	10.5 U B	10.3 U B	11.2 U B	11.2 U B	11.0 U B	10.8 U B	10.5 U B
6010C	7440-32-6	Titanium	mg/kg	1280	891	1140	698	1070	1120	1160	796
6010C	7440-36-0	Antimony	mg/kg	4.42 U	4.18 U	4.13 U	4.49 U	4.46 U	4.39 U	4.31 U	4.21 U
6010C	7440-38-2	Arsenic	mg/kg	4.07 J Z	4.71	3.72 J Z	3.46 J Z	4.26 J Z	4.39	4.22 J Z	3.45 J Z
6010C	7440-39-3	Barium	mg/kg	143	66.1	124	140	98.0	86.3	83.5	73.7
6010C	7440-41-7	Beryllium	mg/kg	1.01 J Z	0.546 J Z	0.959 J Z	0.957 J Z	0.843 J Z	0.764 J Z	0.722 J Z	0.574 J Z
6010C	7440-42-8	Boron	mg/kg	16.2	7.72 J Z	13.8	11.5	10.7 J Z	8.07 J Z	8.19 J Z	6.19 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.423 J Z	0.224 J Z	0.474 J Z	0.395 J Z	0.510 J Z	0.214 J Z	0.302 J Z	0.272 J Z
6010C	7440-47-3	Chromium	mg/kg	38.2	21.4	35.0	33.3	28.2	26.4	25.3	20.5
6010C	7440-48-4	Cobalt	mg/kg	10.3	4.24	9.68	10.6	7.02	7.70	6.80	7.92
6010C	7440-50-8	Copper	mg/kg	21.8	14.2	22.6	19.1	17.8	17.2	17.1	14.6
6010C	7440-62-2	Vanadium	mg/kg	71.8	37.7	65.7	56.6	54.7	51.0	50.1	39.4
6010C	7440-66-6	Zinc	mg/kg	72.6	43.8	72.0	70.6	53.6	55.3	55.4	50.8
6010C	7440-67-7	Zirconium	mg/kg	7.80	3.82 J Z	7.04	5.97	6.12	5.56	5.71	3.76 J Z
6010C	7440-70-2	Calcium	mg/kg	9760	14700	6450	9630	49000	6440	9940	5570
6010C	7723-14-0	Phosphorus	mg/kg	349	252	355	297	246	254	354	350
6020A	7440-22-4	Silver	mg/kg	0.0418 J Z	0.209 U	0.0578 J Z	0.0664 J Z	0.0426 J Z	0.0300 J Z	0.0399 J Z	0.0406 J Z
6020A	7440-24-6	Strontium	mg/kg	47.2	28.0	35.4	45.4	35.5	26.9	31.8	22.9
6020A	7440-28-0	Thallium	mg/kg	0.401	0.313	0.466	0.547	0.323	0.337	0.312	0.291
6020A	7782-49-2	Selenium	mg/kg	0.127 J Z	0.418 U	0.314 J Z	0.189 J Z	0.446 U	0.439 U	0.431 U	0.421 U

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				Sample Name	SL-509-SA5D-SB-0.0-0.5	SL-509-SA5D-SB-4.0-5.0	SL-510-SA5D-SB-0.0-0.5	SL-510-SA5D-SB-4.0-5.0	SL-512-SA5D-SB-0.0-0.5	SL-512-SA5D-SB-4.0-5.0	SL-513-SA5D-SB-0.0-0.5	SL-513-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/26/2013	09/26/2013	09/18/2013	09/18/2013
				SDG	PH110	PH110	PH110	PH110	PH116	PH116	PH110	PH110
				Start Depth	0	4	0	4	0	4	0	4
				End Depth	0.5	5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	26100	27300	27600	27200	25600	31200	26800	29200
6010C	7439-89-6	Iron	mg/kg	33600 J E	38200 J E	34100 J E	35400 J E	35600	40200	35300 J E	37700 J E
6010C	7439-92-1	Lead	mg/kg	11.0	10.7	10.9	10.7	11.1	12.2	10.7	11.3
6010C	7439-93-2	Lithium	mg/kg	22.3	27.1	24.5	25.5	23.0	30.0	24.7	28.1
6010C	7439-95-4	Magnesium	mg/kg	6870	8120	7770	7510	6990	8450	7130	8080
6010C	7439-96-5	Manganese	mg/kg	482	461	495	456	457	510	447	449
6010C	7439-98-7	Molybdenum	mg/kg	2.15 U F, B	2.30 U	2.18 U F, B	2.32 U F, B	2.06 U	2.24 U	2.24 U	2.32 U F, B
6010C	7440-02-0	Nickel	mg/kg	21.1	23.0	22.0	21.9	20.5	22.7	21.3	21.8
6010C	7440-09-7	Potassium	mg/kg	5560	3600	6770	4680	5490	5390	5400	4730
6010C	7440-23-5	Sodium	mg/kg	89.8 J Z	162	85.1 J Z	117	117	157	102 J Z	106 J Z
6010C	7440-31-5	Tin	mg/kg	10.7 U B	11.5 U B	10.9 U B	11.6 U B	10.3 U B	11.2 U B	11.2 U B	11.6 U B
6010C	7440-32-6	Titanium	mg/kg	1080	1020	1230	1040	857	1250	845	1150
6010C	7440-36-0	Antimony	mg/kg	4.30 UJ Q	4.60 UJ Q	4.37 UJ Q	4.64 UJ Q	4.11 U	4.48 U	4.49 UJ Q	4.65 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	5.83	6.74	6.35	6.00	5.15	5.68	4.92	6.82
6010C	7440-39-3	Barium	mg/kg	127	140	132	133	130	142	136	130
6010C	7440-41-7	Beryllium	mg/kg	0.946 J Z	0.981 J Z	0.964 J Z	0.955 J Z	0.948 J Z	1.03 J Z	0.983 J Z	0.953 J Z
6010C	7440-42-8	Boron	mg/kg	10.3 J Z	11.0 J Z	11.8	10.9 J Z	5.74 J Z	7.63 J Z	8.61 J Z	12.2
6010C	7440-43-9	Cadmium	mg/kg	1.07 U	1.15 U	1.09 U	1.16 U	0.347 J Z	0.270 J Z	1.12 U	1.16 U
6010C	7440-47-3	Chromium	mg/kg	36.3	38.4	37.0	36.7	34.8	40.0	36.4	39.4
6010C	7440-48-4	Cobalt	mg/kg	9.98	10.6	10.3	10.4	10.5	11.0	10.6	10.7
6010C	7440-50-8	Copper	mg/kg	18.7	18.5	20.5	18.5	21.0	23.3	18.2	18.4
6010C	7440-62-2	Vanadium	mg/kg	65.9 J Q	69.6 J Q	69.4 J Q	67.2 J Q	59.8	72.2	61.4 J Q	71.7 J Q
6010C	7440-66-6	Zinc	mg/kg	72.6	76.4	81.4	78.3	76.5	86.7	77.7	83.5
6010C	7440-67-7	Zirconium	mg/kg	3.79 J Z	3.27 J Z	4.32 J Z	3.15 J Z	3.68 J Z	4.72 J Z	1.81 J Z	3.52 J Z
6010C	7440-70-2	Calcium	mg/kg	6400	9170	7720	10300	9970	8200	9320	10500
6010C	7723-14-0	Phosphorus	mg/kg	332 J Q	321 J Q	433 J Q	347 J Q	381	399	317 J Q	346 J Q
6020A	7440-22-4	Silver	mg/kg	0.0515 J Z	0.0371 J Z	0.0452 J Z	0.0380 J Z	0.0482 J Z	0.0436 J Z	0.0537 J Z	0.0439 J Z
6020A	7440-24-6	Strontium	mg/kg	35.4	54.1	34.1	47.9	45.4	54.4	43.2	45.9
6020A	7440-28-0	Thallium	mg/kg	0.440	0.382	0.396	0.401	0.466	0.444	0.410	0.403
6020A	7782-49-2	Selenium	mg/kg	0.268 J Z	0.146 J Z	0.298 J Z	0.165 J Z	0.198 J Z	0.148 J Z	0.157 J Z	0.176 J Z

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			Sample Name	SL-513-SA5D-SB-9.0-10.0	SL-513-SA5D-SB-16.0-17.0	SL-514-SA5D-SB-0.0-0.5	SL-514-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-0.0-0.5	SL-815-SA5D-SB-0.0-0.5	SL-515-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013
			SDG	PH110	PH110	PH110	PH110	PH104	PH104	PH104	PH104
			Start Depth	9	16	0	4	0	0	4	9
			End Depth	10	17	0.5	5	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	17100	12700	30200	23100	24700	24600	32700	28600
6010C	7439-89-6	Iron	mg/kg	23600 J E	21200 J E	36600 J E	32100 J E	33100	31800	37800	34700
6010C	7439-92-1	Lead	mg/kg	7.20	5.80	10.3	9.78	9.92	9.96	10.5	9.81
6010C	7439-93-2	Lithium	mg/kg	19.7	18.9	27.1	25.0	23.8	23.6	27.1	26.2
6010C	7439-95-4	Magnesium	mg/kg	5900	4400	7930	7240	7600	7620	7470	7480
6010C	7439-96-5	Manganese	mg/kg	414	311	460	435	421	424	447	390
6010C	7439-98-7	Molybdenum	mg/kg	2.21 U	2.16 U	2.24 U	2.24 U	2.14 UJ F, FD	2.12 UJ F, FD	2.35 U	2.30 U
6010C	7440-02-0	Nickel	mg/kg	13.8	12.1	22.3	20.0	18.4	18.4	20.4	18.7
6010C	7440-09-7	Potassium	mg/kg	2900	2120	4930	3450	6910	7150	5320	4010
6010C	7440-23-5	Sodium	mg/kg	139	92.5 J Z	173	236	111	109	116 J Z	263
6010C	7440-31-5	Tin	mg/kg	11.0 U B	10.8 U B	11.2 U B	11.2 U B	10.7 U B	10.6 U B	11.7 U B	11.5 U B
6010C	7440-32-6	Titanium	mg/kg	952	1190	1240	1040	1250	1250	1530	958
6010C	7440-36-0	Antimony	mg/kg	4.41 UJ Q	4.32 UJ Q	4.48 UJ Q	4.48 UJ Q	1.25 J Q, Z	1.25 J Q, Z	1.17 J Q, Z	0.958 J Q, Z
6010C	7440-38-2	Arsenic	mg/kg	6.11	7.10	6.41	5.95	5.42	5.34	5.81	5.30
6010C	7440-39-3	Barium	mg/kg	65.5	61.3	138	110	102	100	136	127
6010C	7440-41-7	Beryllium	mg/kg	0.556 J Z	0.638 J Z	0.979 J Z	0.810 J Z	0.841 J Z	0.829 J Z	1.03 J Z	0.929 J Z
6010C	7440-42-8	Boron	mg/kg	9.71 J Z	3.44 J Z	9.56 J Z	10.6 J Z	20.1	19.1	17.8	13.1
6010C	7440-43-9	Cadmium	mg/kg	0.289 J Z	1.08 U	1.12 U	0.149 J Z	0.623 J Z	0.648 J Z	0.558 J Z	0.508 J Z
6010C	7440-47-3	Chromium	mg/kg	24.2	18.6	37.7	31.7	34.7 J Q	33.8 J Q	40.0 J Q	34.2 J Q
6010C	7440-48-4	Cobalt	mg/kg	6.28	5.97	10.4	9.51	9.13 J A	9.08 J A	10.5 J A	9.88 J A
6010C	7440-50-8	Copper	mg/kg	13.3	12.0	18.6	17.5	17.6	17.6	17.0	15.8
6010C	7440-62-2	Vanadium	mg/kg	46.5 J Q	34.8 J Q	68.9 J Q	59.3 J Q	65.9 J Q	64.7 J Q	78.8 J Q	63.5 J Q
6010C	7440-66-6	Zinc	mg/kg	55.1	56.1	77.7	70.7	81.6	81.2	77.6	70.5
6010C	7440-67-7	Zirconium	mg/kg	2.61 J Z	1.10 J Z	4.19 J Z	3.34 J Z	2.64 J Z	1.93 J Z	4.45 J Z	2.56 J Z
6010C	7440-70-2	Calcium	mg/kg	120000	5650	11400	47300	45600	37200	17700	46200
6010C	7723-14-0	Phosphorus	mg/kg	482 J Q	448 J Q	300 J Q	474 J Q	720	737	300	279
6020A	7440-22-4	Silver	mg/kg	0.221 U	0.216 U	0.0455 J Z	0.0401 J Z	0.0315 J Z	0.0321 J Z	0.0433 J Z	0.0376 J Z
6020A	7440-24-6	Strontium	mg/kg	220	24.3	51.3	100	89.4 J A	82.8 J A	49.2 J A	49.0 J A
6020A	7440-28-0	Thallium	mg/kg	0.270	0.376	0.422	0.369	0.329	0.356	0.396	0.359
6020A	7782-49-2	Selenium	mg/kg	0.208 J Z	0.432 U	0.187 J Z	0.448 U	0.327 J Z	0.346 J Z	0.220 J Z	0.140 J Z

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				Sample Name	SL-515-SA5D-SB-22.0-23.0	SL-516-SA5D-SB-0.0-0.5	SL-516-SA5D-SB-4.0-5.0	SL-816-SA5D-SB-4.0-5.0	SL-516-SA5D-SB-9.0-10.0	SL-516-SA5D-SB-13.0-14.0	SL-518-SA5D-SB-0.0-0.5	SL-518-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	09/09/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	09/10/2013	09/10/2013
				SDG	PH104	PH130	PH130	PH130	PH130	PH130	PH105	PH105
				Start Depth	22	0	4	4	9	13	0	4
				End Depth	23	0.5	5	5	10	14	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	27900	22800 J E	26200 J E	24400 J E	23900 J E	15700 J E	25900	30100
6010C	7439-89-6	Iron	mg/kg	31700	25900	25400	26500	26700	23500	33800	34200
6010C	7439-92-1	Lead	mg/kg	10.0	9.00	7.84	8.66	8.54	6.84	15.4	9.52
6010C	7439-93-2	Lithium	mg/kg	25.6	20.5	20.5	19.0	19.5	17.2	24.0	25.2
6010C	7439-95-4	Magnesium	mg/kg	5980	5140	4960	5110	4890	4910	7280	6440
6010C	7439-96-5	Manganese	mg/kg	298	366 J E	425 J FD, E	243 J FD, E	274 J E	273 J E	504	356
6010C	7439-98-7	Molybdenum	mg/kg	2.34 U	2.10 U F	2.19 UJ F, FD	2.16 UJ F, FD	2.16 U F	2.00 U F	2.16 U F	2.30 U F
6010C	7440-02-0	Nickel	mg/kg	18.2	16.6	14.3	12.9	12.4	11.1	20.1	19.5
6010C	7440-09-7	Potassium	mg/kg	2370	3480	2220	2270	2430	2750	6920	3740
6010C	7440-23-5	Sodium	mg/kg	543	122	481	539	545	360	90.4 J Z	99.5 J Z
6010C	7440-31-5	Tin	mg/kg	11.7 U B	10.5 U B	10.9 U B	10.8 U B	10.8 U B	13.7	10.8 U B	11.5 U B
6010C	7440-32-6	Titanium	mg/kg	916	1180	1140	1050	1090	1130	1270	1210
6010C	7440-36-0	Antimony	mg/kg	4.67 UJ Q	4.19 UJ Q	4.38 UJ Q	4.32 UJ Q	4.31 UJ Q	4.00 UJ Q	4.32 UJ Q	4.59 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	6.25	6.83	7.49	7.34	7.33	12.0	4.96	5.13
6010C	7440-39-3	Barium	mg/kg	102	118 J Q	136 J Q	106 J Q	97.3 J Q	77.0 J Q	121	153
6010C	7440-41-7	Beryllium	mg/kg	0.915 J Z	0.899 J Z	0.984 J Z	1.01 J Z	1.01 J Z	0.650 J Z	0.983 J Z	1.07 J Z
6010C	7440-42-8	Boron	mg/kg	11.6 J Z	3.75 J E, Z	2.58 J E, Z	1.71 J E, Z	1.67 J E, Z	1.78 J E, Z	5.36 J Z	2.63 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.504 J Z	1.05 U	1.09 U	1.08 U	1.08 U	1.44	0.513 J Z	0.352 J Z
6010C	7440-47-3	Chromium	mg/kg	32.9 J Q	29.9	25.2	25.6	23.9	25.2	33.5	33.8
6010C	7440-48-4	Cobalt	mg/kg	9.46 J A	8.50	7.02	6.98	7.43	7.37	9.33 J A	7.61 J A
6010C	7440-50-8	Copper	mg/kg	11.7	14.0	12.1	11.4	11.4	11.6	21.1	14.6
6010C	7440-62-2	Vanadium	mg/kg	61.3 J Q	51.3	49.7	48.6	48.7	42.9	63.4	63.7
6010C	7440-66-6	Zinc	mg/kg	57.3	62.2	48.1	51.9	50.1	53.8	84.0	68.7
6010C	7440-67-7	Zirconium	mg/kg	2.13 J Z	4.90 J Z	4.99 J Z	5.10 J Z	4.73 J Z	3.74 J Z	6.36	7.16
6010C	7440-70-2	Calcium	mg/kg	31600	3220 J E	4330 J E	3670 J E	2990 J E	4020 J E	7670	21200
6010C	7723-14-0	Phosphorus	mg/kg	180	248	132	124	135	513	647	292
6020A	7440-22-4	Silver	mg/kg	0.0505 J Z	0.210 U B	0.219 U B	0.216 U B	0.216 U B	0.200 U	0.0639 J Q, Z	0.0557 J Q, Z
6020A	7440-24-6	Strontium	mg/kg	37.4 J A	25.7 J Q, E	27.8 J Q, E	25.9 J Q, E	23.0 J Q, E	19.3 J Q, E	36.2 J Q, A	54.0 J Q, A
6020A	7440-28-0	Thallium	mg/kg	0.307	0.210 U B	0.219 U B	0.216 U B	0.216 U B	0.200 U B	0.437 J Q	0.453 J Q
6020A	7782-49-2	Selenium	mg/kg	0.467 U	0.253 J Z	0.167 J Z	0.147 J Z	0.146 J Z	0.160 J Z	0.265 J Z	0.116 J Z

U-Compound not detected above reporting limit
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				Sample Name	SL-518-SA5D-SB-9.0-10.0	SL-518-SA5D-SB-15.0-16.0	SL-519-SA5D-SB-0.0-0.5	SL-519-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-0.0-0.5	SL-520-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-8.0-9.0	SL-521-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/10/2013	09/10/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013
				SDG	PH105	PH105	PH106	PH106	PH106	PH106	PH106	PH106
				Start Depth	9	15	0	4	0	4	8	0
				End Depth	10	16	0.5	5	0.5	5	9	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	27500	15600	26700	31900	29100	28600	15900	23900
6010C	7439-89-6	Iron	mg/kg	32300	24600	33700	37000	36200	35500	19700	28900
6010C	7439-92-1	Lead	mg/kg	9.67	4.42	10.8	10.6	10.5	10.4	6.34	9.01
6010C	7439-93-2	Lithium	mg/kg	23.1	18.1	23.8	28.8	24.9	28.1	18.5	19.6
6010C	7439-95-4	Magnesium	mg/kg	5810	4520	6990	8080	7130	7670	3910	5700
6010C	7439-96-5	Manganese	mg/kg	554	229	523	452	468	496	278	532
6010C	7439-98-7	Molybdenum	mg/kg	2.31 U F	2.16 U	2.14 U F	2.22 U	2.21 U	2.35 U	2.25 U	2.15 U F
6010C	7440-02-0	Nickel	mg/kg	18.8	10.6	21.3	22.2	21.6	22.8	10.8	19.4
6010C	7440-09-7	Potassium	mg/kg	3190	1900	6330	4100	4610	3550	2030	5410
6010C	7440-23-5	Sodium	mg/kg	98.0 J Z	87.7 J Z	87.6 J Z	134	102 J Z	167	119	96.1 J Z
6010C	7440-31-5	Tin	mg/kg	11.6 U B	10.8 U B	10.7 U B	11.1 U B	11.1 U B	11.8 U B	11.2 U B	10.7 U B
6010C	7440-32-6	Titanium	mg/kg	1340	1220	1310	1270	1290	1350	1070	1320
6010C	7440-36-0	Antimony	mg/kg	4.63 UJ Q	4.32 UJ Q	1.04 J Q, Z	0.850 J Q, Z	1.16 J Q, Z	1.21 J Q, Z	4.50 UJ Q	4.30 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	6.30	4.38	5.52	5.72	5.50	6.39	3.59 J Z	4.44
6010C	7440-39-3	Barium	mg/kg	110	75.9	133	145	152	127	88.3	129
6010C	7440-41-7	Beryllium	mg/kg	1.04 J Z	0.665 J Z	0.938 J Z	1.03 J Z	1.04 J Z	0.958 J Z	0.546 J Z	0.858 J Z
6010C	7440-42-8	Boron	mg/kg	11.6 U	10.8 U	15.7	16.5	14.8	16.6	8.62 J Z	13.0
6010C	7440-43-9	Cadmium	mg/kg	0.212 J Z	0.196 J Z	0.628 J Z	0.417 J Z	0.495 J Z	0.600 J Z	0.470 J Z	0.559 J Z
6010C	7440-47-3	Chromium	mg/kg	31.5	22.5	35.7 J Q	39.3 J Q	37.2 J Q	37.1 J Q	19.2 J Q	31.3 J Q
6010C	7440-48-4	Cobalt	mg/kg	10.1 J A	4.38 J A	10.1 J A	10.5 J A	10.3 J A	10.7 J A	5.45 J A	9.77 J A
6010C	7440-50-8	Copper	mg/kg	16.2	8.66	18.7	16.7	16.1	16.2	7.75	17.1
6010C	7440-62-2	Vanadium	mg/kg	59.1	42.4	65.7 J Q	71.6 J Q	68.3 J Q	69.1 J Q	37.5 J Q	58.6 J Q
6010C	7440-66-6	Zinc	mg/kg	63.9	47.1	79.0	78.5	79.8	74.9	45.7	67.0
6010C	7440-67-7	Zirconium	mg/kg	5.90	3.64 J Z	4.49 J Z	3.54 J Z	4.08 J Z	3.92 J Z	2.48 J Z	2.99 J Z
6010C	7440-70-2	Calcium	mg/kg	6290	3650	6860	9650	6560	7820	32000	4360
6010C	7723-14-0	Phosphorus	mg/kg	317	257	462	379	362	459	346	346
6020A	7440-22-4	Silver	mg/kg	0.0508 J Q, Z	0.216 U	0.0463 J Z	0.0493 J Z	0.0488 J Z	0.0489 J Z	0.0388 J Z	0.0373 J Z
6020A	7440-24-6	Strontium	mg/kg	36.8 J Q, A	25.9 J Q, A	32.9 J A	39.7 J A	33.7 J A	37.7 J A	30.4 J A	30.1 J A
6020A	7440-28-0	Thallium	mg/kg	0.345 J Q	0.322 J Q	0.385	0.369	0.366	0.355	0.241	0.375
6020A	7782-49-2	Selenium	mg/kg	0.463 U	0.432 U	0.243 J Z	0.127 J Z	0.274 J Z	0.470 U	0.450 U	0.208 J Z

U-Compound not detected above reporting limit
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				Sample Name	SL-521-SA5D-SB-5.5-6.5	SL-522-SA5D-SB-0.0-0.5	SL-522-SA5D-SB-6.0-7.0	SL-523-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-5.5-6.5	SL-824-SA5D-SB-5.5-6.5	SL-525-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	FD	N
				Sample Date	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/04/2013	09/04/2013	09/04/2013	09/03/2013
				SDG	PH106	PH106	PH106	PH106	PH101	PH101	PH101	PH100
				Start Depth	5.5	0	6	0	0	5.5	5.5	0
				End Depth	6.5	0.5	7	0.5	0.5	6.5	6.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	12400	21900	21200	12800	22000	13100	12800	18600
6010C	7439-89-6	Iron	mg/kg	21000	26600	35700	22000	26100	20000	20800	22700
6010C	7439-92-1	Lead	mg/kg	3.78	7.98	13.1	4.69	11.8	4.53	3.96	6.91
6010C	7439-93-2	Lithium	mg/kg	26.6	18.1	37.5	28.1	20.4	21.8	24.5	20.1
6010C	7439-95-4	Magnesium	mg/kg	5410	6240	7490	5930	4940	4290	4660	4320
6010C	7439-96-5	Manganese	mg/kg	294	447	376	276	374 J Q	182 J Q	225 J Q	352
6010C	7439-98-7	Molybdenum	mg/kg	2.11 U	2.14 U F	2.15 U	2.07 U	2.08 U F	2.14 U	2.11 U	2.09 U F
6010C	7440-02-0	Nickel	mg/kg	10.0	24.1	31.1	14.9	16.8	8.39	9.18	15.3
6010C	7440-09-7	Potassium	mg/kg	2480	4590	3150	2160	3250	1690	1850	3760 J Q
6010C	7440-23-5	Sodium	mg/kg	85.4 J Z	124	189	132	106	160	141	95.0 J Z
6010C	7440-31-5	Tin	mg/kg	10.6 U B	10.7 U B	10.8 U B	10.4 U B	10.4 U B	10.7 U B	10.6 U B	10.4 U B
6010C	7440-32-6	Titanium	mg/kg	1300	1310	1330	1330	1160	1250	1310	1210
6010C	7440-36-0	Antimony	mg/kg	4.23 UJ Q	4.28 UJ Q	1.04 J Q, Z	4.15 UJ Q	4.15 UJ Q	4.28 UJ Q	4.22 UJ Q	1.86 J Q, Z
6010C	7440-38-2	Arsenic	mg/kg	3.89 J Z	3.86 J Z	10.8	4.61	5.42	4.02 J Z	5.01	5.26
6010C	7440-39-3	Barium	mg/kg	75.0	111	117	90.5	121	76.5	84.0	112
6010C	7440-41-7	Beryllium	mg/kg	0.447 J Z	0.756 J Z	1.38	0.455 J Z	0.780 J Z	0.449 J Z	0.453 J Z	0.743 J Z
6010C	7440-42-8	Boron	mg/kg	7.52 J Z	11.6	11.9	6.99 J Z	28.6	22.7	22.1	8.04 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.318 J Z	0.521 J Z	0.476 J Z	0.268 J Z	0.624 J Z	0.456 J Z	0.427 J Z	0.547 J Z
6010C	7440-47-3	Chromium	mg/kg	17.2 J Q	34.8 J Q	34.8 J Q	24.2 J Q	28.1	17.1	17.0	24.1
6010C	7440-48-4	Cobalt	mg/kg	4.76 J A	9.25 J A	9.62 J A	6.03 J A	6.99	3.69	3.99	7.12
6010C	7440-50-8	Copper	mg/kg	6.28	17.8	26.5	8.80	16.7	10.1	10.5	12.7
6010C	7440-62-2	Vanadium	mg/kg	33.9 J Q	57.8 J Q	63.2 J Q	42.3 J Q	50.7	35.6	36.4	43.3
6010C	7440-66-6	Zinc	mg/kg	57.9	63.6	115	54.9	60.6	47.3	51.8	53.3
6010C	7440-67-7	Zirconium	mg/kg	5.28 U	5.96	5.38 U	1.49 J Z	5.68	4.01 J Z	4.05 J Z	2.73 J Z
6010C	7440-70-2	Calcium	mg/kg	7220	4430	16000	3340	4190	3180	3230	3070
6010C	7723-14-0	Phosphorus	mg/kg	417	340	692	420	247	305	351	300
6020A	7440-22-4	Silver	mg/kg	0.211 U	0.0324 J Z	0.157 J Z	0.207 U	0.0922 J Z	0.0657 J Z	0.0687 J Z	0.0277 J Z
6020A	7440-24-6	Strontium	mg/kg	19.6 J A	28.6 J A	35.9 J A	14.8 J A	41.0	25.3	32.2	25.6
6020A	7440-28-0	Thallium	mg/kg	0.244	0.321	0.401	0.241	0.419	0.233	0.328	0.305
6020A	7782-49-2	Selenium	mg/kg	0.423 U	0.204 J Z	0.219 J Z	0.415 U	0.132 J Z	0.428 U	0.422 U	0.189 J Z

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				Sample Name	SL-525-SA5D-SB-2.5-3.5	SL-526-SA5D-SB-0.0-0.5	SL-526-SA5D-SB-3.0-4.0	SL-527-SA5D-SB-0.0-0.5	SL-527-SA5D-SB-4.0-5.0	SL-528-SA5D-SB-0.0-0.5	SL-528-SA5D-SB-2.5-3.5	SL-529-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/03/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013	09/03/2013	09/11/2013
				SDG	PH100	PH098	PH098	PH100	PH100	PH100	PH100	PH106
				Start Depth	2.5	0	3	0	4	0	2.5	0
				End Depth	3.5	0.5	4	0.5	5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	11400	12700	15800	14000	24400	18300	14900	18500
6010C	7439-89-6	Iron	mg/kg	18300	22700	29500	19400	43100	22600	28000	22800
6010C	7439-92-1	Lead	mg/kg	3.21	4.78	10.1	10.9	16.3	14.3	6.60	7.14
6010C	7439-93-2	Lithium	mg/kg	21.3	30.8	36.3	19.5	53.5	20.0	35.0	17.3
6010C	7439-95-4	Magnesium	mg/kg	4440	6750	8360	4040	11600	4320	6930	4370
6010C	7439-96-5	Manganese	mg/kg	265	279	385	321	500	317	380	365
6010C	7439-98-7	Molybdenum	mg/kg	2.10 U F	2.04 U	2.10 U	2.03 U F	2.18 U	1.99 U F	2.15 U	2.09 U F
6010C	7440-02-0	Nickel	mg/kg	13.7	21.6	27.5	14.0	46.9	15.2	24.3	14.9
6010C	7440-09-7	Potassium	mg/kg	2130 J Q	2020	2780	4130 J Q	3040 J Q	3900 J Q	2280 J Q	3670
6010C	7440-23-5	Sodium	mg/kg	141	85.6 J Z	149	63.4 J Z	221	91.0 J Z	229	104 J Z
6010C	7440-31-5	Tin	mg/kg	10.5 U B	10.2 U B	10.5 U B	10.1 U B	10.9 U B	9.93 U B	10.7 U B	10.5 U B
6010C	7440-32-6	Titanium	mg/kg	1140	1280	1430	948	1870	1100	1350	1150
6010C	7440-36-0	Antimony	mg/kg	1.34 J Q, Z	1.64 J Z	1.79 J Z	1.23 J Q, Z	2.74 J Q, Z	1.49 J Q, Z	1.98 J Q, Z	0.825 J Q, Z
6010C	7440-38-2	Arsenic	mg/kg	6.29	7.61	12.5	7.24	40.6	4.71	8.66	4.66
6010C	7440-39-3	Barium	mg/kg	69.2	82.3	84.2	94.7	156	110	92.7	106
6010C	7440-41-7	Beryllium	mg/kg	0.380 J Z	0.417 J Z	0.778 J Z	0.580 J Z	1.57	0.707 J Z	0.659 J Z	0.713 J Z
6010C	7440-42-8	Boron	mg/kg	4.74 J Z	4.42 J Z	6.08 J Z	7.47 J Z	9.66 J Z	8.15 J Z	6.50 J Z	9.15 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.344 J Z	0.370 J Z	0.457 J Z	0.583 J Z	0.640 J Z	0.549 J Z	0.473 J Z	0.398 J Z
6010C	7440-47-3	Chromium	mg/kg	18.5	28.4	34.3	21.2	52.1	24.6	30.6	25.1 J Q
6010C	7440-48-4	Cobalt	mg/kg	4.99	6.39	10.4	6.00	13.4	6.14	7.87	7.18 J A
6010C	7440-50-8	Copper	mg/kg	6.20	10.7	18.4	11.1	31.2	12.5	16.7	12.7
6010C	7440-62-2	Vanadium	mg/kg	33.5	46.2	56.5	35.2	75.0	42.5	46.9	46.8 J Q
6010C	7440-66-6	Zinc	mg/kg	50.5	58.5	79.3	58.3	114	62.1	67.9	51.1
6010C	7440-67-7	Zirconium	mg/kg	2.08 J Z	2.35 J Z	3.01 J Z	2.19 J Z	3.26 J Z	2.95 J Z	2.03 J Z	2.32 J Z
6010C	7440-70-2	Calcium	mg/kg	2920	3560	4660	2800	6970	3160	4280	2850
6010C	7723-14-0	Phosphorus	mg/kg	374	495	555	532	701	436	511	255
6020A	7440-22-4	Silver	mg/kg	0.210 U	0.204 U	0.0375 J Z	0.0461 J Z	0.199 J Z	0.0473 J Z	0.215 U	0.0281 J Z
6020A	7440-24-6	Strontium	mg/kg	18.2	20.5	24.2	21.7	47.5	22.9	24.3	24.3 J A
6020A	7440-28-0	Thallium	mg/kg	0.249	0.248	0.319	0.265	0.459	0.281	0.316	0.318
6020A	7782-49-2	Selenium	mg/kg	0.420 U	0.408 U	0.126 J Z	0.405 U	0.258 J Z	0.130 J Z	0.429 U	0.152 J Z

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J-Result is an estimated value
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			Sample Name	SL-529-SA5D-SB-3.0-4.0	SL-530-SA5D-SB-0.0-0.5	SL-530-SA5D-SB-2.5-3.5	SL-531-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-2.5-3.5	SL-533-SA5D-SB-0.0-0.5	SL-533-SA5D-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/11/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013
			SDG	PH106	PH099	PH099	PH099	PH099	PH099	PH099	PH099
			Start Depth	3	0	2.5	0	0	2.5	0	2.5
			End Depth	4	0.5	3.5	0.5	0.5	3.5	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	16500	14600	13100	15400	15700	10500	16300	25800
6010C	7439-89-6	Iron	mg/kg	29100	21500	21800	22600	20200	19600	21800	51800
6010C	7439-92-1	Lead	mg/kg	7.38	6.96	4.30	4.94	15.1	4.02	16.4	14.9
6010C	7439-93-2	Lithium	mg/kg	33.2	23.2	28.6	27.0	18.7	24.5	19.6	57.7
6010C	7439-95-4	Magnesium	mg/kg	7560	4640	4600	4970	3960	4410	4200	10500
6010C	7439-96-5	Manganese	mg/kg	351	336	231	321	357	308	315	558
6010C	7439-98-7	Molybdenum	mg/kg	2.09 U F	2.01 U F	2.04 U F	2.04 U F	2.01 U F	2.05 U F	2.01 U F	2.12 U F
6010C	7440-02-0	Nickel	mg/kg	22.0	12.5	10.2	11.2	13.8	9.80	14.7	28.4
6010C	7440-09-7	Potassium	mg/kg	2400	3680 J Q	2360 J Q	2940 J Q	3630 J Q	2350 J Q	4110 J Q	4450 J Q
6010C	7440-23-5	Sodium	mg/kg	339	111	311	184	92.5 J Z	198	104	504
6010C	7440-31-5	Tin	mg/kg	10.4 U B	10.1 U B	10.2 U B	10.2 U B	10.1 U B	10.3 U B	10.1 U B	10.6 U B
6010C	7440-32-6	Titanium	mg/kg	1560	1420	1470	1440	1160	1360	1160	2650
6010C	7440-36-0	Antimony	mg/kg	1.21 J Q, Z	1.68 J Q, Z	1.61 J Q, Z	1.36 J Q, Z	1.22 J Q, Z	1.26 J Q, Z	1.51 J Q, Z	3.50 J Q, Z
6010C	7440-38-2	Arsenic	mg/kg	6.91	4.90	6.20	5.92	4.64	5.42	4.62	14.3
6010C	7440-39-3	Barium	mg/kg	106	104	88.9	98.8	102	105	105	194
6010C	7440-41-7	Beryllium	mg/kg	0.693 J Z	0.542 J Z	0.571 J Z	0.568 J Z	0.606 J Z	0.376 J Z	0.652 J Z	1.38
6010C	7440-42-8	Boron	mg/kg	8.48 J Z	10.1 U B	10.2 U B	10.2 U B	6.52 J Z	10.3 U B	6.78 J Z	6.60 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.286 J Z	0.430 J Z	0.305 J Z	0.339 J Z	0.653 J Z	0.327 J Z	0.754 J Z	0.702 J Z
6010C	7440-47-3	Chromium	mg/kg	29.3 J Q	19.1	16.9	17.5	22.6	14.5	24.8	39.3
6010C	7440-48-4	Cobalt	mg/kg	7.56 J A	5.80	5.11	5.35	5.99	4.76	6.12	11.9
6010C	7440-50-8	Copper	mg/kg	14.1	10.4	7.25	6.56	12.8	5.25	13.5	25.4
6010C	7440-62-2	Vanadium	mg/kg	54.6 J Q	37.6	37.2	38.3	39.1	33.2	40.3	71.3
6010C	7440-66-6	Zinc	mg/kg	72.5	61.0	56.1	57.1	67.6	52.8	78.5	129
6010C	7440-67-7	Zirconium	mg/kg	1.56 J Z	1.27 J Z	1.35 J Z	1.27 J Z	1.96 J Z	5.13 U	1.80 J Z	1.15 J Z
6010C	7440-70-2	Calcium	mg/kg	4250	2610	2920	2640	2580	2570	2750	16900
6010C	7723-14-0	Phosphorus	mg/kg	489	432	407	483	350	424	441	792
6020A	7440-22-4	Silver	mg/kg	0.209 U	0.0272 J Z	0.0620 J Z	0.0269 J Z	0.0406 J Z	0.205 U	0.0525 J Z	0.160 J Z
6020A	7440-24-6	Strontium	mg/kg	25.4 J A	18.3	17.9	17.3	25.8	13.7	25.6	51.4
6020A	7440-28-0	Thallium	mg/kg	0.347	0.262	0.220	0.216	0.247	0.209	0.272	0.413
6020A	7782-49-2	Selenium	mg/kg	0.142 J Z	0.109 J Z	0.408 U	0.408 U	0.190 J Z	0.411 U	0.165 J Z	0.227 J Z

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				Sample Name	SL-534-SA5D-SB-0.0-0.5	SL-534-SA5D-SB-6.5-7.5	SL-535-SA5D-SB-0.0-0.5	SL-835-SA5D-SB-0.0-0.5	SL-535-SA5D-SB-2.0-3.0	SL-536-SA5D-SB-0.0-0.5	SL-536-SA5D-SB-3.5-4.5	SL-537-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/28/2013	08/28/2013	08/28/2013
				SDG	PH099	PH099	PH099	PH099	PH099	PH095	PH095	PH095
				Start Depth	0	6.5	0	0	2	0	3.5	0
				End Depth	0.5	7.5	0.5	0.5	3	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	16300	10000	16900	19000	16400	13200	28600	15400
6010C	7439-89-6	Iron	mg/kg	22500	19200	31600	25000	33400	23400	48800	21900
6010C	7439-92-1	Lead	mg/kg	7.09	4.35	9.60	7.49	8.82	5.78	20.4	10.3
6010C	7439-93-2	Lithium	mg/kg	21.5	25.3	39.6	24.3	46.2	28.9	74.6	21.5
6010C	7439-95-4	Magnesium	mg/kg	4320	4790	5960	4690	6450	4870	11900	4100
6010C	7439-96-5	Manganese	mg/kg	354	228	418	381	375	242	522	327
6010C	7439-98-7	Molybdenum	mg/kg	2.03 U F	2.11 U F	2.04 U F	2.01 U F	2.05 U F	2.08 U F	2.18 U F	2.10 U F
6010C	7440-02-0	Nickel	mg/kg	15.5	15.0	16.2	15.4	21.5	16.0	36.2	15.4
6010C	7440-09-7	Potassium	mg/kg	3560 J Q	2150 J Q	2860 J Q	3970 J Q	3100 J Q	1810	4310	3500
6010C	7440-23-5	Sodium	mg/kg	135	138	160 J FD	90.8 J FD, Z	327	102 J Z	322	259
6010C	7440-31-5	Tin	mg/kg	10.2 U B	10.5 U B	10.2 U B	10.0 U B	10.2 U B	10.4 U B	10.9 U B	10.5 U B
6010C	7440-32-6	Titanium	mg/kg	1250	1290	1620	1370	1760	910	1870	975
6010C	7440-36-0	Antimony	mg/kg	1.73 J Q, Z	1.69 J Q, Z	2.02 J Q, Z	1.78 J Q, Z	1.32 J Q, Z	1.40 J Z	2.84 J Z	0.981 J Z
6010C	7440-38-2	Arsenic	mg/kg	6.04	6.61	8.27	5.91	5.51	7.11	15.3	6.43
6010C	7440-39-3	Barium	mg/kg	103	63.7	124	116	108	72.9	141	108
6010C	7440-41-7	Beryllium	mg/kg	0.658 J Z	0.354 J Z	0.804 J Z	0.711 J Z	0.706 J Z	0.524 J Z	1.63	0.689 J Z
6010C	7440-42-8	Boron	mg/kg	6.26 J Z	10.5 U B	7.59 J Z	7.00 J Z	10.2 U B	4.70 J Z	8.78 J Z	6.45 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.473 J Z	0.313 J Z	0.485 J Z	0.513 J Z	1.50	0.319 J Z	0.601 J Z	0.481 J Z
6010C	7440-47-3	Chromium	mg/kg	25.1	20.8	25.5	25.3	24.3	23.1	49.6	24.1
6010C	7440-48-4	Cobalt	mg/kg	6.53	5.35	8.97	7.13	6.67	5.17	13.5	6.50
6010C	7440-50-8	Copper	mg/kg	12.1	7.56	14.3	13.4	14.8	7.58	36.8	13.4
6010C	7440-62-2	Vanadium	mg/kg	41.3	39.7	49.7	46.0	51.0	38.0	80.2	40.7
6010C	7440-66-6	Zinc	mg/kg	55.8	53.2	77.4	61.6	85.6	56.2	137	56.6
6010C	7440-67-7	Zirconium	mg/kg	2.28 J Z	1.86 J Z	2.11 J FD, Z	5.02 UJ FD	1.62 J Z	5.21 U	3.47 J Z	1.84 J Z
6010C	7440-70-2	Calcium	mg/kg	2520	3080	3560	2860	5210	3750	7340	2680
6010C	7723-14-0	Phosphorus	mg/kg	440	419	534	415	699	321	860	305
6020A	7440-22-4	Silver	mg/kg	0.0598 J Z	0.211 U	0.204 U	0.201 U	0.0508 J Z	0.0836 J Z	0.144 J Z	0.0501 J Z
6020A	7440-24-6	Strontium	mg/kg	20.7	14.6	21.7	22.2	27.9	24.1	47.9	24.0
6020A	7440-28-0	Thallium	mg/kg	0.268	0.179 J Z	0.318	0.282	0.274	0.189 J Z	0.376	0.271
6020A	7782-49-2	Selenium	mg/kg	0.174 J Z	0.120 J Z	0.193 J Z	0.219 J Z	0.164 J Z	0.417 U	0.252 J Z	0.182 J Z

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			Sample Name	SL-537-SA5D-SB-2.5-3.5	SL-538-SA5D-SB-0.0-0.5	SL-538-SA5D-SB-3.0-4.0	SL-539-SA5D-SB-0.0-0.5	SL-539-SA5D-SB-3.0-4.0	SL-540-SA5D-SB-0.0-0.5	SL-540-SA5D-SB-5.0-6.0	SL-541-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/28/2013	08/28/2013	08/28/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013
			SDG	PH095	PH095	PH095	PH098	PH098	PH100	PH100	PH100
			Start Depth	2.5	0	3	0	3	0	5	0
			End Depth	3.5	0.5	4	0.5	4	0.5	6	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	13300	15600	10000	14300	10200	27900	17500	18300
6010C	7439-89-6	Iron	mg/kg	22400	21400	18400	19000	19500	31800	32400	24300
6010C	7439-92-1	Lead	mg/kg	5.31	7.58	5.37	6.37	6.70	9.05	5.72	6.94
6010C	7439-93-2	Lithium	mg/kg	27.6	19.3	29.6	17.0	22.0	24.1	31.6	18.7
6010C	7439-95-4	Magnesium	mg/kg	5290	4030	5860	3430	4530	6820	7050	4660
6010C	7439-96-5	Manganese	mg/kg	262	325	271	318	292	472	465	445
6010C	7439-98-7	Molybdenum	mg/kg	2.09 U F	2.03 U F	2.07 U F	1.98 U F	2.04 U	2.14 U F	2.15 U	2.10 U F
6010C	7440-02-0	Nickel	mg/kg	12.8	15.0	18.8	12.8	16.5	21.1	17.1	17.3
6010C	7440-09-7	Potassium	mg/kg	2050	2200	2540	3130	1830	5650 J Q	3250 J Q	4210 J Q
6010C	7440-23-5	Sodium	mg/kg	254	86.6 J Z	130	85.9 J Z	110	93.1 J Z	240	78.1 J Z
6010C	7440-31-5	Tin	mg/kg	10.4 U B	10.1 U B	10.4 U B	9.90 U B	10.2 U B	10.7 U B	10.7 U B	10.5 U B
6010C	7440-32-6	Titanium	mg/kg	1250	934	1250	965	915	1240	1720	1060
6010C	7440-36-0	Antimony	mg/kg	1.22 J Z	1.01 J Z	1.21 J Z	0.851 J Z	1.03 J Z	1.76 J Q, Z	2.15 J Q, Z	1.79 J Q, Z
6010C	7440-38-2	Arsenic	mg/kg	12.4	7.69	24.8	5.49	70.2	6.11	9.31	5.14
6010C	7440-39-3	Barium	mg/kg	83.0	98.3	85.2	94.2	62.4	127	130	121
6010C	7440-41-7	Beryllium	mg/kg	0.532 J Z	0.647 J Z	0.432 J Z	0.608 J Z	0.531 J Z	0.929 J Z	0.733 J Z	0.750 J Z
6010C	7440-42-8	Boron	mg/kg	4.76 J Z	5.78 J Z	4.28 J Z	5.11 J Z	3.79 J Z	12.9	7.45 J Z	7.68 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.292 J Z	0.329 J Z	0.307 J Z	0.370 J Z	0.347 J Z	0.759 J Z	0.592 J Z	0.607 J Z
6010C	7440-47-3	Chromium	mg/kg	20.8	24.0	22.7	20.3	18.7	36.0	26.8	26.0
6010C	7440-48-4	Cobalt	mg/kg	5.25	8.48	6.04	6.19	5.25	9.54	8.86	8.13
6010C	7440-50-8	Copper	mg/kg	7.11	12.5	9.29	10.9	7.32	18.2	13.6	14.1
6010C	7440-62-2	Vanadium	mg/kg	40.9	40.2	37.4	36.8	28.4	64.1	58.0	45.4
6010C	7440-66-6	Zinc	mg/kg	54.3	44.1	56.9	44.0	48.7	72.3	84.1	56.5
6010C	7440-67-7	Zirconium	mg/kg	2.41 J Z	1.74 J Z	1.79 J Z	4.95 U	0.908 J Z	3.88 J Z	5.36 U	2.83 J Z
6010C	7440-70-2	Calcium	mg/kg	2940	2800	2670	2060	2700	5740	16300	3050
6010C	7723-14-0	Phosphorus	mg/kg	343	234	407	271	330	390	661	284
6020A	7440-22-4	Silver	mg/kg	0.0504 J Z	0.0630 J Z	0.207 U	0.0291 J Z	0.204 U	0.0478 J Z	0.0363 J Z	0.0278 J Z
6020A	7440-24-6	Strontium	mg/kg	19.5	23.4	14.4	21.0	15.0	29.1	36.8	25.3
6020A	7440-28-0	Thallium	mg/kg	0.255	0.233	0.232	0.282	0.208	0.350	0.310	0.293
6020A	7782-49-2	Selenium	mg/kg	0.181 J Z	0.145 J Z	0.415 U	0.163 J Z	0.409 U	0.241 J Z	0.429 U	0.150 J Z

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				Sample Name	SL-541-SA5D-SB-2.5-3.5	SL-542-SA5D-SB-0.0-0.5	SL-542-SA5D-SB-4.0-5.0	SL-543-SA5D-SB-0.0-0.5	SL-543-SA5D-SB-4.0-5.0	SL-544-SA5D-SB-0.0-0.5	SL-544-SA5D-SB-6.5-7.5	SL-545-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/03/2013	08/29/2013	08/29/2013	08/29/2013	08/29/2013	09/04/2013	09/04/2013	09/03/2013
				SDG	PH100	PH098	PH098	PH098	PH098	PH101	PH101	PH100
				Start Depth	2.5	0	4	0	4	0	6.5	0
				End Depth	3.5	0.5	5	0.5	5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	14500	22900	11600	18900	25000	19600	11700	25700
6010C	7439-89-6	Iron	mg/kg	22900	28800	17700	26000	34000	27100	18900	31600
6010C	7439-92-1	Lead	mg/kg	4.61	11.4	4.18	9.51	10.2	7.92	4.27	8.01
6010C	7439-93-2	Lithium	mg/kg	32.8	22.5	27.4	20.8	31.8	19.8	27.6	24.1
6010C	7439-95-4	Magnesium	mg/kg	6780	5680	3990	5470	6570	5530	4350	6940
6010C	7439-96-5	Manganese	mg/kg	329	449	248	436	433	410 J Q	252 J Q	477
6010C	7439-98-7	Molybdenum	mg/kg	2.07 U F	2.15 U F	2.08 U	2.10 U F	2.20 U F	2.09 U F	2.06 U	2.12 U F
6010C	7440-02-0	Nickel	mg/kg	24.9	19.8	9.77	17.4	21.1	15.8	8.95	21.4
6010C	7440-09-7	Potassium	mg/kg	2160 J Q	5040	2490	5560	4360	5620	3040	6300 J Q
6010C	7440-23-5	Sodium	mg/kg	110	83.9 J Z	83.0 J Z	79.0 J Z	143	85.8 J Z	105	83.2 J Z
6010C	7440-31-5	Tin	mg/kg	10.4 U B	10.8 U B	10.4 U B	10.5 U B	11.0 U B	10.5 U B	10.3 U B	10.6 U B
6010C	7440-32-6	Titanium	mg/kg	1390	1150	1060	1180	1000	1280	1410	1100
6010C	7440-36-0	Antimony	mg/kg	1.93 J Q, Z	1.86 J Z	0.908 J Z	1.42 J Z	1.70 J Z	4.19 UJ Q	4.12 UJ Q	2.43 J Q, Z
6010C	7440-38-2	Arsenic	mg/kg	5.87	6.18	19.6	5.19	7.97	5.67	18.9	6.47
6010C	7440-39-3	Barium	mg/kg	91.5	133	78.4	114	150	107	78.8	122
6010C	7440-41-7	Beryllium	mg/kg	0.523 J Z	0.859 J Z	0.424 J Z	0.707 J Z	0.986 J Z	0.706 J Z	0.450 J Z	0.889 J Z
6010C	7440-42-8	Boron	mg/kg	6.34 J Z	8.67 J Z	3.83 J Z	8.66 J Z	8.30 J Z	29.3	20.3	12.4
6010C	7440-43-9	Cadmium	mg/kg	0.423 J Z	0.694 J Z	0.320 J Z	0.643 J Z	0.538 J Z	0.619 J Z	0.425 J Z	0.787 J Z
6010C	7440-47-3	Chromium	mg/kg	27.8	32.3	16.2	28.9	36.0	27.5	15.8	34.8
6010C	7440-48-4	Cobalt	mg/kg	6.72	9.19	4.95	8.72	9.48	7.92	4.80	9.60
6010C	7440-50-8	Copper	mg/kg	10.5	16.1	6.03	15.0	15.8	18.7	10.3	17.7
6010C	7440-62-2	Vanadium	mg/kg	47.9	55.7	32.3	51.4	57.1	52.8	33.2	60.5
6010C	7440-66-6	Zinc	mg/kg	59.5	70.1	50.8	66.2	74.8	65.0	60.5	74.4
6010C	7440-67-7	Zirconium	mg/kg	3.10 J Z	3.58 J Z	2.65 J Z	3.21 J Z	2.56 J Z	5.06 J Z	4.93 J Z	3.36 J Z
6010C	7440-70-2	Calcium	mg/kg	3600	4250	2560	3520	4360	3450	2650	5710
6010C	7723-14-0	Phosphorus	mg/kg	523	320	374	422	392	383	409	486
6020A	7440-22-4	Silver	mg/kg	0.207 U	0.0506 J Z	0.208 U	0.0309 J Z	0.0701 J Z	0.0299 J Z	0.206 U	0.0409 J Z
6020A	7440-24-6	Strontium	mg/kg	19.8	29.9	13.9	26.9	33.5	28.3	17.1	28.2
6020A	7440-28-0	Thallium	mg/kg	0.253	0.345	0.255	0.313	0.355	0.354	0.360	0.364
6020A	7782-49-2	Selenium	mg/kg	0.414 U	0.200 J Z	0.416 U	0.236 J Z	0.111 J Z	0.240 J Z	0.412 U	0.222 J Z

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			Sample Name	SL-545-SA5D-SB-6.0-7.0	SL-546-SA5D-SB-0.0-0.5	SL-546-SA5D-SB-4.0-5.0	SL-547-SA5D-SB-0.0-0.5	SL-547-SA5D-SB-4.0-5.0	SL-548-SA5D-SB-0.0-0.5	SL-548-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	09/04/2013	09/04/2013	09/04/2013	09/04/2013	08/26/2013	08/26/2013	11/12/2013
			SDG	PH100	PH101	PH101	PH101	PH101	PH093	PH093	PH127
			Start Depth	6	0	4	0	4	0	4	0
			End Depth	7	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	11300	17000	26600	19600	28600	24600	25400	19000 J E
6010C	7439-89-6	Iron	mg/kg	18900	24600	32300	28700	35600	29900	32300	25500 J E
6010C	7439-92-1	Lead	mg/kg	3.78	9.06	8.87	8.56	8.04	12.1	8.22	8.15 J Q, E
6010C	7439-93-2	Lithium	mg/kg	27.3	17.9	27.0	22.1	30.4	25.1	27.6	20.9
6010C	7439-95-4	Magnesium	mg/kg	4550	4960	6860	6200	7620	6490	7110	5190 J E
6010C	7439-96-5	Manganese	mg/kg	265	369 J Q	428 J Q	376 J Q	405 J Q	496 J E	329 J E	311 J Q
6010C	7439-98-7	Molybdenum	mg/kg	2.06 U	2.09 U F	2.27 U F	2.07 U F	2.19 U F	2.04 U F	2.17 U F	2.10 U F
6010C	7440-02-0	Nickel	mg/kg	9.93	14.3	18.8	15.8	18.1	18.6	17.7	15.8
6010C	7440-09-7	Potassium	mg/kg	2050 J Q	5400	5130	5840	4570	5720	4400	4140 J Q
6010C	7440-23-5	Sodium	mg/kg	103	79.8 J Z	124	91.9 J Z	179	87.1 J Z	91.3 J Z	88.5 J Z
6010C	7440-31-5	Tin	mg/kg	10.3 U B	10.4 U B	11.3 U B	10.4 U B	11.0 U B	10.2 U B	10.8 U B	10.5 U B
6010C	7440-32-6	Titanium	mg/kg	995	1230	1280	1190	1500	1330	1090	1210
6010C	7440-36-0	Antimony	mg/kg	1.26 J Q, Z	4.17 UJ Q	4.53 UJ Q	4.15 UJ Q	4.38 UJ Q	4.07 UJ Q	4.33 UJ Q	4.21 UJ Q, E
6010C	7440-38-2	Arsenic	mg/kg	8.49	6.69	8.31	4.51	5.80	7.99	6.08	11.8 J Q, E
6010C	7440-39-3	Barium	mg/kg	71.9	98.9	128	103	129	128	120	111
6010C	7440-41-7	Beryllium	mg/kg	0.445 J Z	0.631 J Z	0.912 J Z	0.707 J Z	0.920 J Z	0.877 J Z	0.865 J Z	0.839 J Z
6010C	7440-42-8	Boron	mg/kg	5.37 J Z	27.1	34.6	30.9	36.9	7.14 J Z	6.76 J Z	3.76 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.485 J Z	0.677 J Z	0.600 J Z	0.587 J Z	0.494 J Z	0.325 J Z	0.168 J Z	1.05 U
6010C	7440-47-3	Chromium	mg/kg	15.0	25.4	34.9	30.6	36.0	33.6	34.9	27.5 J Q, E
6010C	7440-48-4	Cobalt	mg/kg	4.51	7.02	8.45	8.39	8.35	9.27 J E	8.57 J E	6.60
6010C	7440-50-8	Copper	mg/kg	6.41	17.6	19.1	17.7	17.9	18.7 J A	16.1 J A	12.5 J Q, E
6010C	7440-62-2	Vanadium	mg/kg	31.6	47.7	63.2	58.4	71.7	65.8	67.6	47.4 J Q
6010C	7440-66-6	Zinc	mg/kg	49.2	63.5	71.1	68.5	75.4	73.9 J Q	72.2 J Q	61.4 J Q
6010C	7440-67-7	Zirconium	mg/kg	2.58 J Z	4.28 J Z	6.22	5.63	7.69	5.22	6.49	5.26
6010C	7440-70-2	Calcium	mg/kg	43600	3100	4620	3670	4640	5580	4870	2800 J E
6010C	7723-14-0	Phosphorus	mg/kg	368	422	337	490	392	559	319	318 J Q, E
6020A	7440-22-4	Silver	mg/kg	0.206 U	0.0307 J Z	0.0801 J Z	0.0292 J Z	0.0627 J Z	0.0521 J Z	0.0483 J Z	0.0281 J Z
6020A	7440-24-6	Strontium	mg/kg	34.9	28.0	48.9	34.2	48.4	30.4 J Q	43.6 J Q	28.4 J Q, E
6020A	7440-28-0	Thallium	mg/kg	0.228	0.403	0.541	0.382	0.454	0.367 J Q	0.465 J Q	0.372 J Q
6020A	7782-49-2	Selenium	mg/kg	0.412 U	0.254 J Z	0.282 J Z	0.283 J Z	0.153 J Z	0.214 J Z	0.265 J Z	0.234 J Z

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				Sample Name	SL-549-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-11.0-12.0	SL-550-SA5D-SB-0.0-0.5	SL-550-SA5D-SB-4.0-5.0	SL-850-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-0.0-0.5	SL-551-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-9.0-10.0
				Sample Type	N	N	N	N	FD	N	N	N
				Sample Date	11/12/2013	11/12/2013	09/06/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013
				SDG	PH127	PH127	PH103	PH103	PH103	PH107	PH107	PH107
				Start Depth	4	11	0	4	4	0	4	9
				End Depth	5	12	0.5	5	5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	22000 J E	14200 J E	19100	22600	24600	19700	20700	21600
6010C	7439-89-6	Iron	mg/kg	26800 J E	23300 J E	27000	29400	28200	30300	31400	29300
6010C	7439-92-1	Lead	mg/kg	7.86 J Q, E	7.15 J Q, E	7.90	7.37	8.02	6.76	6.93	7.02
6010C	7439-93-2	Lithium	mg/kg	23.4	15.3	23.8	28.8	30.2	29.0	33.1	31.2
6010C	7439-95-4	Magnesium	mg/kg	5390 J E	3810 J E	5830	6460	6830	7050	7830	7760
6010C	7439-96-5	Manganese	mg/kg	336 J Q	127 J Q	375	359	387	341	342	369
6010C	7439-98-7	Molybdenum	mg/kg	2.19 U F	2.14 U F	2.02 U F	2.17 U F	2.17 U F	2.05 U F	2.16 U F	2.11 U F
6010C	7440-02-0	Nickel	mg/kg	17.7	9.87	14.7	18.1	18.8	19.3	28.0	33.0
6010C	7440-09-7	Potassium	mg/kg	3450 J Q	1490 J Q	4970 J Q	3430 J Q	3660 J Q	3740	3170	3210
6010C	7440-23-5	Sodium	mg/kg	114	125	100 J Z	99.0 J Z	108 J Z	92.2 J Z	108	125
6010C	7440-31-5	Tin	mg/kg	10.9 U B	10.7 U B	10.1 U B	10.8 U B	10.9 U B	10.2 U B	10.8 U B	10.5 U B
6010C	7440-32-6	Titanium	mg/kg	1220	865	1010	1010	1240	1130	1210	1200
6010C	7440-36-0	Antimony	mg/kg	4.37 UJ Q, E	4.28 UJ Q, E	4.03 UJ Q	4.33 UJ Q	4.34 UJ Q	4.10 UJ Q	4.31 UJ Q	4.22 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	13.3 J Q, E	13.2 J Q, E	5.28	5.72	6.06	3.90 J Z	4.40	4.68
6010C	7440-39-3	Barium	mg/kg	116	70.3	99.8	113	115	79.8	85.7	95.0
6010C	7440-41-7	Beryllium	mg/kg	0.972 J Z	0.793 J Z	0.712 J Z	0.865 J Z	0.925 J Z	0.767 J Z	0.789 J Z	0.826 J Z
6010C	7440-42-8	Boron	mg/kg	3.24 J Z	2.24 J Z	5.31 J Z	4.63 J Z	5.46 J Z	1.03 J Z	1.15 J Z	10.5 U
6010C	7440-43-9	Cadmium	mg/kg	1.09 U	1.07 U	0.190 J Z	0.119 J Z	0.0934 J Z	0.216 J Z	0.183 J Z	0.135 J Z
6010C	7440-47-3	Chromium	mg/kg	27.9 J Q, E	20.6 J Q, E	28.5 J Q	31.4 J Q	35.2 J Q	36.6	40.9	43.9
6010C	7440-48-4	Cobalt	mg/kg	6.54	3.27	7.96 J A	8.28 J A	8.55 J A	7.95 J A	8.35 J A	9.83 J A
6010C	7440-50-8	Copper	mg/kg	11.0 J Q, E	6.19 J Q, E	13.8	13.8	14.1	11.9	12.7	12.9
6010C	7440-62-2	Vanadium	mg/kg	50.1 J Q	42.6 J Q	52.9	56.8	63.8	61.2	62.9	61.6
6010C	7440-66-6	Zinc	mg/kg	58.8 J Q	38.4 J Q	61.3	62.3	62.1	65.2	65.8	64.1
6010C	7440-67-7	Zirconium	mg/kg	5.84	4.10 J Z	6.74	7.16	8.09	6.81	7.08	7.33
6010C	7440-70-2	Calcium	mg/kg	2520 J E	2100 J E	3670	3350	3570	3850	3960	3430
6010C	7723-14-0	Phosphorus	mg/kg	229 J Q, E	101 J Q, E	441 J Q	344 J Q	390 J Q	519	469	417
6020A	7440-22-4	Silver	mg/kg	0.0498 J Z	0.0425 J Z	0.0269 J Z	0.0367 J Z	0.0360 J Z	0.205 U	0.216 U	0.0290 J Q, Z
6020A	7440-24-6	Strontium	mg/kg	27.3 J Q, E	19.9 J Q, E	25.8	28.2	28.3	28.3 J Q, A	31.1 J Q, A	28.6 J Q, A
6020A	7440-28-0	Thallium	mg/kg	0.368 J Q	0.251 J Q	0.321	0.295	0.290	0.359 J Q	0.383 J Q	0.390 J Q
6020A	7782-49-2	Selenium	mg/kg	0.123 J Z	0.428 U	0.224 J Z	0.142 J Z	0.135 J Z	0.206 J Z	0.142 J Z	0.112 J Z

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			Sample Name	SL-551-SA5D-SB-14.0-15.0	SL-551-SA5D-SB-17.5-18.5	SL-552-SA5D-SB-0.0-0.5	SL-552-SA5D-SB-4.0-5.0	SL-553-SA5D-SB-0.0-0.5	SL-853-SA5D-SB-0.0-0.5	SL-553-SA5D-SB-4.5-5.5	SL-554-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/12/2013	09/12/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013	09/05/2013
			SDG	PH107	PH107	PH103	PH103	PH107	PH107	PH107	PH102
			Start Depth	14	17.5	0	4	0	0	4.5	0
			End Depth	15	18.5	0.5	5	0.5	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	26900	21600	18400	21800	15900	16800	19200	21100
6010C	7439-89-6	Iron	mg/kg	44300	38000	28000	32000	24500	27000	26600	31500
6010C	7439-92-1	Lead	mg/kg	15.1	14.7	7.94	7.72	10.1	11.8	7.23	9.11
6010C	7439-93-2	Lithium	mg/kg	42.7	58.1	25.6	33.2	21.6	24.3	23.3	30.5
6010C	7439-95-4	Magnesium	mg/kg	9940	9400	6330	7840	5370	5840	5370	6590
6010C	7439-96-5	Manganese	mg/kg	316	462	383	365	358	386	342	336
6010C	7439-98-7	Molybdenum	mg/kg	2.26 U F	2.12 U F	2.10 U F	2.24 U F	2.01 U F	1.97 U F	2.07 U F	2.08 U F
6010C	7440-02-0	Nickel	mg/kg	31.2	35.7	20.2	28.6	11.6	12.7	11.5	18.3
6010C	7440-09-7	Potassium	mg/kg	4360	4210	5400 J Q	3710 J Q	4690	4940	3180	4450 J Q
6010C	7440-23-5	Sodium	mg/kg	241	255	87.4 J Z	100 J Z	78.9 J Z	83.4 J Z	118	119
6010C	7440-31-5	Tin	mg/kg	11.3 U B	10.6 U B	10.5 U B	11.2 U B	10.0 U B	9.85 U B	10.4 U B	10.4 U B
6010C	7440-32-6	Titanium	mg/kg	1550	1590	1030	1010	1040	1090	1200	1090
6010C	7440-36-0	Antimony	mg/kg	4.52 UJ Q	4.25 UJ Q	4.19 UJ Q	4.48 UJ Q	4.02 UJ Q	3.94 UJ Q	4.15 UJ Q	4.16 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	7.35	7.91	5.08	6.51	3.46 J Z	3.83 J Z	3.85 J Z	6.26
6010C	7440-39-3	Barium	mg/kg	125	125	89.6	95.1	82.1	87.3	81.2	105
6010C	7440-41-7	Beryllium	mg/kg	1.22	1.00 J Z	0.686 J Z	0.820 J Z	0.634 J Z	0.662 J Z	0.757 J Z	0.822 J Z
6010C	7440-42-8	Boron	mg/kg	11.3 U	10.6 U	4.88 J Z	3.94 J Z	3.72 J Z	3.06 J Z	1.35 J Z	8.80 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.117 J Z	0.171 J Z	0.189 J Z	0.0885 J Z	0.320 J Z	0.363 J Z	0.241 J Z	0.281 J Z
6010C	7440-47-3	Chromium	mg/kg	48.1	43.5	32.1 J Q	38.9 J Q	29.1	30.3	29.7	34.2
6010C	7440-48-4	Cobalt	mg/kg	7.84 J A	11.6 J A	8.63 J A	9.45 J A	6.45 J A	7.28 J A	7.05 J A	8.47
6010C	7440-50-8	Copper	mg/kg	33.7	30.7	13.7	15.1	10.7	12.5	8.53	14.6
6010C	7440-62-2	Vanadium	mg/kg	82.6	62.0	55.6	62.1	51.4	53.6	56.4	58.1
6010C	7440-66-6	Zinc	mg/kg	118	122	64.4	68.8	60.3	67.0	52.3	76.2
6010C	7440-67-7	Zirconium	mg/kg	9.59	7.54	6.61	7.67	6.10	6.53	6.78	4.23 J Z
6010C	7440-70-2	Calcium	mg/kg	5210	5090	3400	3740	4450	4570	3490	4080
6010C	7723-14-0	Phosphorus	mg/kg	610	855	595 J Q	489 J Q	586	579	343	554
6020A	7440-22-4	Silver	mg/kg	0.0421 J Q, Z	0.0336 J Q, Z	0.210 U	0.224 U	0.0272 J Q, Z	0.0309 J Q, Z	0.207 U	0.208 U
6020A	7440-24-6	Strontium	mg/kg	57.9 J Q, A	28.1 J Q, A	23.0	26.3	26.7 J Q, A	34.9 J Q, A	26.4 J Q, A	26.0
6020A	7440-28-0	Thallium	mg/kg	0.588 J Q	0.556 J Q	0.299	0.320	0.277 J Q	0.391 J Q	0.325 J Q	0.342
6020A	7782-49-2	Selenium	mg/kg	0.227 J Z	0.125 J Z	0.183 J Z	0.162 J Z	0.232 J Z	0.284 J Z	0.189 J Z	0.206 J Z

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				Sample Name	SL-554-SA5D-SB-4.0-5.0	SL-554-SA5D-SB-7.0-8.0	SL-555-SA5D-SB-0.0-0.5	SL-555-SA5D-SB-4.0-5.0	SL-555-SA5D-SB-10.5-11.5	SL-556-SA5D-SB-0.0-0.5	SL-556-SA5D-SB-4.0-5.0	SL-556-SA5D-SB-11.0-12.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013
				SDG	PH102	PH102	PH102	PH102	PH102	PH102	PH102	PH102
				Start Depth	4	7	0	4	10.5	0	4	11
				End Depth	5	8	0.5	5	11.5	0.5	5	12
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	23400	25500	23900	24800	21400	18800	20400	18600
6010C	7439-89-6	Iron	mg/kg	32700	44300	30800	32700	33800	29300	31500	30000
6010C	7439-92-1	Lead	mg/kg	10.6	16.8	8.40	8.56	8.43	12.0	8.56	5.32
6010C	7439-93-2	Lithium	mg/kg	32.7	66.5	28.3	28.3	32.1	28.8	31.1	40.4
6010C	7439-95-4	Magnesium	mg/kg	6860	10600	7070	7290	6840	7050	7670	26100
6010C	7439-96-5	Manganese	mg/kg	340	409	409	296	251	347	369	396
6010C	7439-98-7	Molybdenum	mg/kg	2.12 U F	2.13 U	2.06 U F	2.17 U F	2.15 U F	2.00 U	2.12 U F	2.07 U
6010C	7440-02-0	Nickel	mg/kg	19.9	30.0	15.9	14.4	15.2	13.8	19.2	217
6010C	7440-09-7	Potassium	mg/kg	3070 J Q	3810 J Q	4330 J Q	2580 J Q	2680 J Q	4050 J Q	3190 J Q	2180 J Q
6010C	7440-23-5	Sodium	mg/kg	110	148	101 J Z	119	199	106	148	142
6010C	7440-31-5	Tin	mg/kg	10.6 U B	10.6 U B	10.3 U B	10.9 U B	10.7 U B	9.98 U B	10.6 U B	10.4 U B
6010C	7440-32-6	Titanium	mg/kg	1120	1280	1040	1160	1140	947	1020	1230
6010C	7440-36-0	Antimony	mg/kg	4.24 UJ Q	4.26 UJ Q	4.11 UJ Q	4.34 UJ Q	4.29 UJ Q	3.99 UJ Q	4.23 UJ Q	4.14 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	7.24	10.4	4.99	8.28	7.84	4.87	5.96	5.62
6010C	7440-39-3	Barium	mg/kg	112	113	110	89.7	81.9	77.8	83.5	72.5
6010C	7440-41-7	Beryllium	mg/kg	0.936 J Z	1.22	0.819 J Z	0.847 J Z	0.875 J Z	0.669 J Z	0.709 J Z	0.543 J Z
6010C	7440-42-8	Boron	mg/kg	8.83 J Z	8.74 J Z	10.6	10.5 J Z	8.84 J Z	10.2	9.88 J Z	5.87 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.268 J Z	0.185 J Z	0.177 J Z	0.140 J Z	0.0891 J Z	0.230 J Z	0.246 J Z	0.232 J Z
6010C	7440-47-3	Chromium	mg/kg	35.1	40.7	35.2	36.4	34.1	35.7	36.8	131
6010C	7440-48-4	Cobalt	mg/kg	9.19	11.7	10.7	8.48	7.51	7.29	9.13	20.9
6010C	7440-50-8	Copper	mg/kg	15.7	32.0	11.6	10.9	12.3	8.49	9.47	17.7
6010C	7440-62-2	Vanadium	mg/kg	59.7	68.3	64.0	67.0	60.6	62.7	64.8	48.6
6010C	7440-66-6	Zinc	mg/kg	77.2	131	66.3	61.4	61.2	65.8	67.8	80.1
6010C	7440-67-7	Zirconium	mg/kg	4.78 J Z	5.14 J Z	4.90 J Z	5.26 J Z	4.18 J Z	5.16	5.14 J Z	2.96 J Z
6010C	7440-70-2	Calcium	mg/kg	4080	6220	4050	3390	3900	4900	4360	5700
6010C	7723-14-0	Phosphorus	mg/kg	401	723	378	207	384	617	493	481
6020A	7440-22-4	Silver	mg/kg	0.0473 J Z	0.0431 J Z	0.206 U	0.0502 J Z	0.0505 J Z	0.0404 J Z	0.212 U	0.207 U
6020A	7440-24-6	Strontium	mg/kg	27.3	30.4	34.6	30.0	28.6	24.5	24.6	18.2
6020A	7440-28-0	Thallium	mg/kg	0.329	0.450	0.330	0.285	0.314	0.302	0.272	0.322
6020A	7782-49-2	Selenium	mg/kg	0.168 J Z	0.273 J Z	0.251 J Z	0.128 J Z	0.429 U	0.235 J Z	0.221 J Z	0.414 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-557-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-4.0-5.0	SL-559-SA5D-SB-0.0-0.5	SL-559-SA5D-SB-6.0-7.0	SL-560-SA5D-SB-0.0-0.5	SL-560-SA5D-SB-4.0-5.0	SL-860-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	FD
			Sample Date	09/24/2013	09/24/2013	09/24/2013	09/05/2013	09/05/2013	11/12/2013	11/12/2013	11/12/2013
			SDG	PH113	PH113	PH113	PH102	PH102	PH127	PH127	PH127
			Start Depth	0	0	4	0	6	0	4	4
			End Depth	0.5	0.5	5	0.5	7	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	27500	21600	15000	25000	22300	35900 J E	14400 J E	13300 J E
6010C	7439-89-6	Iron	mg/kg	39200	29300	24400	30200	38500	39300 J E	21200 J E	21400 J E
6010C	7439-92-1	Lead	mg/kg	15.2	10.4	5.72	11.9	7.37	12.2 J Q, E	6.33 J Q, E	6.82 J Q, E
6010C	7439-93-2	Lithium	mg/kg	34.8	20.9	18.8	26.7	26.6	31.5	12.7	12.5
6010C	7439-95-4	Magnesium	mg/kg	9110	7280	5310	6950	6340	8150 J E	3520 J E	3760 J E
6010C	7439-96-5	Manganese	mg/kg	331	411	287	406	221	487 J Q	148 J Q	160 J Q
6010C	7439-98-7	Molybdenum	mg/kg	2.08 U	2.09 U F	2.13 U	2.12 U F	2.15 U F	2.17 U F	2.00 UJ F, FD	2.00 UJ FD
6010C	7440-02-0	Nickel	mg/kg	19.3	17.7	10.7	20.2	16.3	24.4	8.12	9.08
6010C	7440-09-7	Potassium	mg/kg	4870 J Q	6280 J Q	2740 J Q	5110 J Q	3200 J Q	4120 J Q	2100 J Q	2510 J Q
6010C	7440-23-5	Sodium	mg/kg	124	92.0 J Z	102 J Z	85.6 J Z	99.6 J Z	128	132	136
6010C	7440-31-5	Tin	mg/kg	10.4 U B	10.4 U B	10.7 U B	10.6 U B	10.7 U B	10.8 U B	10.0 U B	10.0 U B
6010C	7440-32-6	Titanium	mg/kg	1490	1050	787	1160	1730	1430	989	1070
6010C	7440-36-0	Antimony	mg/kg	4.17 UJ Q	4.17 UJ Q	4.27 UJ Q	4.23 UJ Q	4.29 UJ Q	4.34 UJ Q, E	4.01 UJ Q, E	4.01 UJ Q, E
6010C	7440-38-2	Arsenic	mg/kg	2.79 J Z	3.27 J Z	1.72 J Z	8.05	14.1	9.70 J Q, E	5.64 J Q, E	5.98 J Q, E
6010C	7440-39-3	Barium	mg/kg	106	88.7	64.5	121	114	156	61.7	61.3
6010C	7440-41-7	Beryllium	mg/kg	0.843 J Z	0.686 J Z	0.476 J Z	0.841 J Z	0.942 J Z	1.36	0.668 J Z	0.618 J Z
6010C	7440-42-8	Boron	mg/kg	17.2	22.1	17.6	13.8	6.72 J Z	8.20 J Z	1.90 J Z	1.94 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.965 J Z	1.09	0.847 J Z	0.469 J Z	0.323 J Z	1.08 U	1.00 U	1.00 U
6010C	7440-47-3	Chromium	mg/kg	39.0	32.3	25.1	31.4	27.2	42.4 J Q, E	16.4 J Q, E	18.2 J Q, E
6010C	7440-48-4	Cobalt	mg/kg	10.3 J E	8.29 J E	4.95 J E	8.57	5.78	10.4	3.18	3.53
6010C	7440-50-8	Copper	mg/kg	20.7	18.1	10.6	16.9	14.2	14.9 J Q, E	5.94 J Q, E	6.97 J Q, E
6010C	7440-62-2	Vanadium	mg/kg	79.7	57.9	46.3	57.3	59.6	80.0 J Q	33.1 J Q	32.7 J Q
6010C	7440-66-6	Zinc	mg/kg	90.5	75.2	49.6	78.3	91.6	81.7 J Q	45.6 J Q	49.9 J Q
6010C	7440-67-7	Zirconium	mg/kg	7.51	5.19 J Z	4.44 J Z	2.71 J Z	5.36 U	8.71	4.11 J Z	3.96 J Z
6010C	7440-70-2	Calcium	mg/kg	6060	38500	106000	8720	72900	6910 J E	2270 J E	2770 J E
6010C	7723-14-0	Phosphorus	mg/kg	490	800	442	762	109	308 J Q, E	134 J Q, E	198 J Q, E
6020A	7440-22-4	Silver	mg/kg	0.0358 J Z	0.0392 J Z	0.213 U	0.0560 J Z	0.0312 J Z	0.0568 J Z	0.200 U	0.200 U
6020A	7440-24-6	Strontium	mg/kg	40.8 J E, A	75.9 J E, A	98.5 J E, A	24.5	57.2	36.4 J Q, E	13.2 J Q, E	14.4 J Q, E
6020A	7440-28-0	Thallium	mg/kg	0.431	0.313	0.183 J Z	0.320	0.431	0.421 J Q	0.224 J Q	0.291 J Q
6020A	7782-49-2	Selenium	mg/kg	0.261 J Z	0.354 J Z	0.251 J Z	0.213 J Z	0.216 J Z	0.231 J Z	0.401 U	0.401 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-560-SA5D-SB-7.0-8.0	SL-561-SA5D-SB-0.0-0.5	SL-561-SA5D-SB-4.0-5.0	SL-561-SA5D-SB-9.0-10.0	SL-562-SA5D-SB-0.0-0.5	SL-562-SA5D-SB-4.0-5.0	SL-563-SA5D-SB-0.0-0.5	SL-563-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	11/12/2013	10/08/2013	10/08/2013	10/08/2013	09/25/2013	09/25/2013	09/25/2013	09/25/2013
				SDG	PH127	PH124	PH124	PH124	PH114	PH114	PH114	PH114
				Start Depth	7	0	4	9	0	4	0	4
				End Depth	8	0.5	5	10	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	10700 J E	26900	27900	26200	25300 J E	28500 J E	24600 J E	19300 J E
6010C	7439-89-6	Iron	mg/kg	15700 J E	36400	37800	35300	32900 J E	34300 J E	29800 J E	26900 J E
6010C	7439-92-1	Lead	mg/kg	6.10 J Q, E	14.9	9.25	9.31	12.8	10.6	10.1	10.0
6010C	7439-93-2	Lithium	mg/kg	8.8	25.4	27.3	27.6	24.7	21.4	28.8	26.2
6010C	7439-95-4	Magnesium	mg/kg	2770 J E	7990	7760	7060	8040 J E	6590 J E	7730 J E	6980 J E
6010C	7439-96-5	Manganese	mg/kg	103 J Q	438	420	455	417 J E	435 J E	390 J E	303 J E
6010C	7439-98-7	Molybdenum	mg/kg	1.99 U F	2.06 U F, B	2.15 U F, B	2.13 U F, B	2.07 U F	2.23 U F	2.05 U	2.10 U
6010C	7440-02-0	Nickel	mg/kg	8.56	21.4 J Q, E	22.1 J Q, E	22.2 J Q, E	20.7	19.4	18.7	15.9
6010C	7440-09-7	Potassium	mg/kg	1400 J Q	6950	4590	3990	6840 J Q	3370 J Q	4470 J Q	3280 J Q
6010C	7440-23-5	Sodium	mg/kg	150	83.7 J Z	86.2 J Z	119	102 J Z	274	117	146
6010C	7440-31-5	Tin	mg/kg	9.94 U B	10.3 U B	10.7 U B	10.6 U B	10.4 U B	11.2 U B	10.3 U B	10.5 U B
6010C	7440-32-6	Titanium	mg/kg	655	1240	1190	1320	981	962	949	873
6010C	7440-36-0	Antimony	mg/kg	3.98 UJ Q, E	4.12 UJ Q	4.30 UJ Q	4.26 UJ Q	4.15 UJ Q	4.46 UJ Q	4.10 UJ Q	4.19 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	5.76 J Q, E	4.71	4.81	5.23	2.93 J Z	3.59 J Z	4.14	4.38
6010C	7440-39-3	Barium	mg/kg	44.7	116	129	123	113	104	92.9	75.0
6010C	7440-41-7	Beryllium	mg/kg	0.601 J Z	0.993 J Z	1.02 J Z	0.910 J Z	0.886 J Z	0.955 J Z	0.766 J Z	0.655 J Z
6010C	7440-42-8	Boron	mg/kg	1.76 J Z	5.60 J Z	10.7 U F	10.6 U F	11.7	7.21 J Z	12.1	10.5
6010C	7440-43-9	Cadmium	mg/kg	0.994 U	1.03 U	1.07 U	0.0979 J Z	0.315 J Z	0.105 J Z	0.372 J Z	0.439 J Z
6010C	7440-47-3	Chromium	mg/kg	19.4 J Q, E	39.0 J Q, E	38.1 J Q, E	38.9 J Q, E	33.6	35.9	31.2	24.7
6010C	7440-48-4	Cobalt	mg/kg	2.42	10.3	10.8	10.4	10.4	10.1	9.44	9.99
6010C	7440-50-8	Copper	mg/kg	8.67 J Q, E	28.3	26.4	24.8	19.2	13.6	16.6	14.7
6010C	7440-62-2	Vanadium	mg/kg	28.1 J Q	69.3 J Q	70.7 J Q	67.5 J Q	62.4 J Q	66.0 J Q	60.8 J Q	45.0 J Q
6010C	7440-66-6	Zinc	mg/kg	35.2 J Q	88.1	82.0	72.5	83.7 J Q	58.3 J Q	71.8 J Q	70.3 J Q
6010C	7440-67-7	Zirconium	mg/kg	3.30 J Z	3.09 J Z	2.58 J Z	3.30 J Z	7.42	7.65	6.34	7.13
6010C	7440-70-2	Calcium	mg/kg	2420 J E	8370	16600	21300	18600 J E	20500 J E	71700 J E	112000 J E
6010C	7723-14-0	Phosphorus	mg/kg	169 J Q, E	754	502	370	661 J E	160 J E	550 J E	521 J E
6020A	7440-22-4	Silver	mg/kg	0.199 U	0.0551 J Z	0.0563 J Z	0.0428 J Z	0.0479 J Q, E, Z	0.0655 J Q, E, Z	0.0487 J Q, E, Z	0.0378 J Q, E, Z
6020A	7440-24-6	Strontium	mg/kg	11.4 J Q, E	35.1 J A	45.7 J A	52.3 J A	69.6 J E	82.7 J E	128 J E	206 J E
6020A	7440-28-0	Thallium	mg/kg	0.245 J Q	0.419	0.376	0.375	0.417 J Q, E	0.466 J Q, E	0.378 J Q, E	0.289 J Q, E
6020A	7782-49-2	Selenium	mg/kg	0.398 U	0.401 J Z	0.297 J Z	0.257 J Z	0.296 J Z	0.222 J Z	0.327 J Z	0.239 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-863-SA5D-SB-4.0-5.0	SL-564-SA5D-SB-0.0-0.5	SL-564-SA5D-SB-4.0-5.0	SL-565-SA5D-SB-0.0-0.5	SL-865-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-4.0-5.0	SL-567-SA5D-SB-0.0-0.5
			Sample Type	FD	N	N	N	FD	N	N	N
			Sample Date	09/25/2013	10/01/2013	10/01/2013	09/24/2013	09/24/2013	09/24/2013	09/24/2013	10/07/2013
			SDG	PH114	PH119	PH119	PH113	PH113	PH113	PH113	PH123
			Start Depth	4	0	4	0	0	0	4	0
			End Depth	5	0.5	5	0.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	16800 J E	24600	24200	22700	20400	26100	19700	19200
6010C	7439-89-6	Iron	mg/kg	25000 J E	45200	30700	55000 J FD	32700 J FD	40100	31300	29300
6010C	7439-92-1	Lead	mg/kg	8.55	5.73	12.5	11.2	16.3	13.3	7.78	10.5
6010C	7439-93-2	Lithium	mg/kg	24.0	26.3	25.8	25.5	22.5	34.6	36.5	27.0
6010C	7439-95-4	Magnesium	mg/kg	6440 J E	7820	7960	8530	7520	8300	7880	7670
6010C	7439-96-5	Manganese	mg/kg	296 J E	260	369	275	263	353	484	361
6010C	7439-98-7	Molybdenum	mg/kg	2.12 U	2.13 U	2.21 U	2.10 U	2.09 U	2.04 U	2.11 U	2.07 U F
6010C	7440-02-0	Nickel	mg/kg	14.5	20.2	18.2	22.2	18.8	19.7	18.1	20.2
6010C	7440-09-7	Potassium	mg/kg	2860 J Q	3920 J Q	4150 J Q	4120 J Q	4490 J Q	4780 J Q	4610 J Q	4960
6010C	7440-23-5	Sodium	mg/kg	144	163	346	134	131	113	167	127
6010C	7440-31-5	Tin	mg/kg	10.6 U B	10.7 U B	11.1 U B	10.5 U B	10.4 U B	10.2 U B	10.5 U B	10.3 U B
6010C	7440-32-6	Titanium	mg/kg	734	1320	1010	924	914	1180	1130	914
6010C	7440-36-0	Antimony	mg/kg	4.24 UJ Q	4.27 UJ Q	4.42 UJ Q	4.21 UJ Q	4.18 UJ Q	4.08 UJ Q	4.21 UJ Q	4.13 U
6010C	7440-38-2	Arsenic	mg/kg	4.49	7.67	7.36	4.92	4.16 J Z	2.79 J Z	3.14 J Z	3.70 J Z
6010C	7440-39-3	Barium	mg/kg	67.1	96.1	96.5	149	151	125	90.5	128
6010C	7440-41-7	Beryllium	mg/kg	0.560 J Z	0.974 J Z	0.864 J Z	0.858 J Z	0.692 J Z	0.913 J Z	0.642 J Z	0.665 J Z
6010C	7440-42-8	Boron	mg/kg	8.83 J Z	7.13 J Z	9.38 J Z	3.09 J FD, Z	23.9 J FD	20.0	18.0	13.7
6010C	7440-43-9	Cadmium	mg/kg	0.402 J Z	1.07 U	1.11 U	0.840 J Z	1.19	1.20	0.947 J Z	0.701 J Z
6010C	7440-47-3	Chromium	mg/kg	23.0	29.7	27.0	30.9	29.6	39.1	39.4	30.5
6010C	7440-48-4	Cobalt	mg/kg	7.40	7.47	12.9	9.18 J E	7.91 J E	10.5 J E	8.80 J E	8.84
6010C	7440-50-8	Copper	mg/kg	12.6	19.1	7.17	30.5	25.7	21.8	15.9	22.0
6010C	7440-62-2	Vanadium	mg/kg	40.1 J Q	66.0	58.7	65.0	59.1	79.3	71.7	58.5
6010C	7440-66-6	Zinc	mg/kg	63.0 J Q	87.1	81.4	85.3	83.0	90.0	82.5	74.4
6010C	7440-67-7	Zirconium	mg/kg	6.31	8.48	10.9	6.59	6.15	7.46	7.99	8.22
6010C	7440-70-2	Calcium	mg/kg	127000 J E	98100	79000	52200	61000	6390	6890	19300
6010C	7723-14-0	Phosphorus	mg/kg	505 J E	533	584	427	533	424	718	561
6020A	7440-22-4	Silver	mg/kg	0.0392 J Q, E, Z	0.0504 J Z	0.221 U	0.210 U	0.209 U	0.0384 J Z	0.0311 J Z	0.0788 J Z
6020A	7440-24-6	Strontium	mg/kg	235 J E	196	215	114 J E, A	169 J E, A	38.9 J E, A	30.0 J E, A	60.1
6020A	7440-28-0	Thallium	mg/kg	0.332 J Q, E	0.331	0.285	0.341	0.319	0.437	0.386	0.376
6020A	7782-49-2	Selenium	mg/kg	0.207 J Z	0.227 J Z	0.195 J Z	0.166 J Z	0.266 J Z	0.386 J Z	0.116 J Z	0.401 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-567-SA5D-SB-3.5-4.5	SL-568-SA5D-SB-0.0-0.5	SL-568-SA5D-SB-2.5-3.5	SL-868-SA5D-SB-2.5-3.5	SL-569-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-4.0-5.0	SL-571-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	10/07/2013	09/23/2013	09/23/2013	09/23/2013	09/25/2013	10/01/2013	10/01/2013	09/23/2013
				SDG	PH123	PH112	PH112	PH112	PH114	PH119	PH119	PH112
				Start Depth	3.5	0	2.5	2.5	0	0	4	0
				End Depth	4.5	0.5	3.5	3.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	19000	14800 J E	21900 J E	18100 J E	18000 J E	23100	18500	18900 J E
6010C	7439-89-6	Iron	mg/kg	30700	22500 J E	27700 J E	23800 J E	25800 J E	30400	28900	35500 J E
6010C	7439-92-1	Lead	mg/kg	9.83	10.5	7.55	6.79	8.52	4.36	3.05 J Z	7.81
6010C	7439-93-2	Lithium	mg/kg	24.1	16.0 J E	35.1 J E	28.5 J E	33.4	40.5	31.7	38.6 J E
6010C	7439-95-4	Magnesium	mg/kg	7320	6990 J E	7660 J E	6710 J E	7310 J E	8350	7070	8190 J E
6010C	7439-96-5	Manganese	mg/kg	362	287 J E	283 J E	307 J E	241 J E	245	297	270 J E
6010C	7439-98-7	Molybdenum	mg/kg	2.12 U	2.02 U F	2.13 U	1.99 U	2.03 U	2.14 U	2.21 U	2.03 U
6010C	7440-02-0	Nickel	mg/kg	17.2	20.3	18.6	16.6	13.3	15.3	12.6	14.7
6010C	7440-09-7	Potassium	mg/kg	4820	3520 J E, Q	3590 J E, Q	3020 J E, Q	3830 J Q	4350 J Q	3520 J Q	4370 J E, Q
6010C	7440-23-5	Sodium	mg/kg	152	224	200	176	118	138	136	116
6010C	7440-31-5	Tin	mg/kg	10.6 U B	10.1 U B	10.7 U B	9.95 U B	10.2 U B	10.7 U B	11.1 U B, F	10.1 U B
6010C	7440-32-6	Titanium	mg/kg	803	790 J E	1170 J E	891 J E	895	1270	912	1090 J E
6010C	7440-36-0	Antimony	mg/kg	4.25 U	4.03 UJ Q	4.26 UJ Q	3.98 UJ Q	4.07 UJ Q	4.28 UJ Q	4.43 UJ Q	4.06 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	4.61	4.15	4.32	4.83	3.80 J Z	4.54	5.33	4.25
6010C	7440-39-3	Barium	mg/kg	89.9	140	102	91.9	61.0	127	99.4	83.0
6010C	7440-41-7	Beryllium	mg/kg	0.682 J Z	0.458 J Z	0.602 J Z	0.534 J Z	0.593 J Z	0.667 J Z	0.556 J Z	0.611 J Z
6010C	7440-42-8	Boron	mg/kg	14.8	7.90 J Z	10.1 J Z	8.73 J Z	10.7	6.97 J Z	6.60 J Z	6.99 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.507 J Z	0.868 J Z	0.342 J Z	0.390 J Z	0.114 J Z	1.07 U	0.218 J Z	0.251 J Z
6010C	7440-47-3	Chromium	mg/kg	28.3	24.0	33.3	32.7	35.3	31.9	26.9	33.0
6010C	7440-48-4	Cobalt	mg/kg	8.55	7.00 J E	8.49 J E	7.63 J E	6.99	7.99	6.54	7.78 J E
6010C	7440-50-8	Copper	mg/kg	19.4	22.3	17.1	15.8	9.56	13.2	10.1	13.7
6010C	7440-62-2	Vanadium	mg/kg	52.7	50.1 J E	60.1 J E	53.7 J E	63.7 J Q	61.0	51.9	58.0 J E
6010C	7440-66-6	Zinc	mg/kg	70.5	68.8 J E, Q, A	83.4 J E, Q, A	66.1 J E, Q, A	57.5 J Q	73.7	61.0	76.7 J E, Q, A
6010C	7440-67-7	Zirconium	mg/kg	6.27	11.0	4.53 J Z	3.82 J Z	8.02	6.75	6.05	2.62 J Z
6010C	7440-70-2	Calcium	mg/kg	78900	16500	39600	43500	5800 J E	25500	90600	11500
6010C	7723-14-0	Phosphorus	mg/kg	517	715	468	487	632 J E	583	538	515
6020A	7440-22-4	Silver	mg/kg	0.0421 J Z	0.110 J Z	0.0348 J Z	0.0294 J Z	0.203 UJ E	0.214 U	0.221 U	0.203 U
6020A	7440-24-6	Strontium	mg/kg	164	66.1	95.6	97.0	23.7 J E	62.9	110	27.0
6020A	7440-28-0	Thallium	mg/kg	0.370	0.277	0.302	0.269	0.223 J Q, E	0.338	0.274	0.393
6020A	7782-49-2	Selenium	mg/kg	0.638	0.324 J Z	0.195 J Z	0.168 J Z	0.257 J Z	0.177 J Z	0.177 J Z	0.178 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-577-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-4.0-5.0	SL-882-SA5D-SB-4.0-5.0	SL-582-SA5D-SB-10.0-11.0	SL-583-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	09/19/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/23/2013	10/02/2013	10/02/2013
			SDG	PH111	PH118	PH118	PH118	PH118	PH112	PH120	PH120
			Start Depth	0	0	4	4	10	0	0	4
			End Depth	0.5	0.5	5	5	11	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	14100	25100	23800	25200	23200	22600 J E	32700	26300
6010C	7439-89-6	Iron	mg/kg	25600	32900	30200	31200	30500	31200 J E	33100	35300
6010C	7439-92-1	Lead	mg/kg	5.52	5.71	5.23	5.50	5.33	15.0	9.78	9.05
6010C	7439-93-2	Lithium	mg/kg	26.8	32.2	29.5	30.8	28.7	25.4 J E	29.8	30.3
6010C	7439-95-4	Magnesium	mg/kg	7100	8360	7620	7760	7360	7570 J E	6770	7690
6010C	7439-96-5	Manganese	mg/kg	244	362	326	396	315	408 J E	333	356
6010C	7439-98-7	Molybdenum	mg/kg	1.96 U	2.07 U	2.24 U	2.20 U	2.21 U	2.08 U	2.13 U	2.21 U F
6010C	7440-02-0	Nickel	mg/kg	8.63	16.3	14.0	15.2	13.6	16.4	19.6	18.7
6010C	7440-09-7	Potassium	mg/kg	1980	5110 J Q	3880 J Q	4170 J Q	3380 J Q	7160 J E, Q	2940	4600
6010C	7440-23-5	Sodium	mg/kg	111	98.2 J Z	146	144	129	84.7 J Z	152	158
6010C	7440-31-5	Tin	mg/kg	9.82 U B	10.4 U B	11.2 U B	11.0 U B	11.1 U B	10.4 U B	10.7 U B	11.1 U B
6010C	7440-32-6	Titanium	mg/kg	997	1420	1360	1460	1380	1010 J E	1010	996
6010C	7440-36-0	Antimony	mg/kg	3.93 U	4.15 UJ Q	4.49 UJ Q	4.39 UJ Q	4.43 UJ Q	4.16 UJ Q	4.26 U	4.43 U
6010C	7440-38-2	Arsenic	mg/kg	1.81 J Z	6.76	6.58	6.42	6.54	4.37	10.1	4.61
6010C	7440-39-3	Barium	mg/kg	40.2	100	95.3	108	79.0	105	170	122
6010C	7440-41-7	Beryllium	mg/kg	0.544 J Z	0.816 J Z	0.771 J Z	0.789 J Z	0.765 J Z	0.758 J Z	1.13	0.932 J Z
6010C	7440-42-8	Boron	mg/kg	14.5	6.31 J Z	5.70 J Z	6.43 J Z	5.51 J Z	10.8	11.6	14.8
6010C	7440-43-9	Cadmium	mg/kg	0.799 J Z	1.04 U	1.12 U	1.10 U	1.11 U	0.341 J Z	0.268 J Z	0.372 J Z
6010C	7440-47-3	Chromium	mg/kg	34.9	36.7	34.1	34.8	33.5	34.8	36.2	35.1
6010C	7440-48-4	Cobalt	mg/kg	5.54	9.03	8.11	8.59	8.06	8.40 J E	9.63	10.0
6010C	7440-50-8	Copper	mg/kg	8.01	10.4 U	11.2 U	11.0 U	12.5	18.3	16.7	20.0
6010C	7440-62-2	Vanadium	mg/kg	62.7	72.0	67.8	69.2	66.6	61.0 J E	65.9	65.4
6010C	7440-66-6	Zinc	mg/kg	50.6	78.4	69.4	69.5	63.9	80.0 J E, Q, A	58.1	73.2
6010C	7440-67-7	Zirconium	mg/kg	6.01	6.41	8.23	7.78	7.74	5.17 J Z	6.90	6.68
6010C	7440-70-2	Calcium	mg/kg	4390	15800	26200	30200	11200	8160	4440	4800
6010C	7723-14-0	Phosphorus	mg/kg	615	604	433	462	464	712	141	289
6020A	7440-22-4	Silver	mg/kg	0.196 U	0.0311 J Z	0.224 U	0.220 U	0.221 U	0.0487 J Z	0.0665 J Z	0.0485 J Z
6020A	7440-24-6	Strontium	mg/kg	21.5	32.9	61.4	62.7	48.0	37.0	35.4	38.3
6020A	7440-28-0	Thallium	mg/kg	0.187 J Z	0.352	0.297	0.318	0.304	0.408	0.374	0.487
6020A	7782-49-2	Selenium	mg/kg	0.253 J Z	0.277 J Z	0.220 J Z	0.184 J Z	0.150 J Z	0.332 J Z	0.249 J Z	0.289 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-607-SA5D-SB-0.0-0.5	SL-607-SA5D-SB-4.0-5.0	SL-608-SA5D-SB-0.0-0.5	SL-608-SA5D-SB-4.0-5.0	SL-609-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N
				Sample Date	10/01/2013	10/01/2013	10/03/2013	10/03/2013	11/15/2013
				SDG	PH119	PH119	PH122	PH122	PH130
				Start Depth	0	4	0	4	0
				End Depth	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit						
6010C	7429-90-5	Aluminum	mg/kg	34000	28000	27500	25900	14700 J E
6010C	7439-89-6	Iron	mg/kg	37500	31200	32700	36500	23300
6010C	7439-92-1	Lead	mg/kg	7.99	7.44	9.59	10.7	6.55
6010C	7439-93-2	Lithium	mg/kg	27.4	26.0	23.3	24.6	31.3
6010C	7439-95-4	Magnesium	mg/kg	7860	6450	6710	6460	5880
6010C	7439-96-5	Manganese	mg/kg	439	377	527	460	333 J E
6010C	7439-98-7	Molybdenum	mg/kg	0.190 J Z	2.30 U	2.10 U F	2.17 U	2.08 U
6010C	7440-02-0	Nickel	mg/kg	20.8	17.4	20.0	18.2	23.9
6010C	7440-09-7	Potassium	mg/kg	4870 J Q	3590 J Q	4890	3540	2220
6010C	7440-23-5	Sodium	mg/kg	134	153	117	143	117
6010C	7440-31-5	Tin	mg/kg	10.6 U B	11.5 U B	10.5 U B	10.9 U B	10.4 U B
6010C	7440-32-6	Titanium	mg/kg	1570	1450	1020	1170	1230
6010C	7440-36-0	Antimony	mg/kg	4.25 UJ Q	4.61 UJ Q	4.21 U	4.34 U	4.17 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	7.85	7.63	3.44 J Z	4.10 J Z	8.61
6010C	7440-39-3	Barium	mg/kg	150	108	142	118	96.8 J Q
6010C	7440-41-7	Beryllium	mg/kg	1.11	0.937 J Z	1.01 J Z	0.938 J Z	0.600 J Z
6010C	7440-42-8	Boron	mg/kg	4.64 J Z	4.47 J Z	11.1	13.4	1.27 J E, Z
6010C	7440-43-9	Cadmium	mg/kg	1.06 U	0.0979 J Z	0.450 J Z	0.466 J Z	1.04 U
6010C	7440-47-3	Chromium	mg/kg	40.2	33.3	32.8	31.7	30.0
6010C	7440-48-4	Cobalt	mg/kg	10.5	9.29	10.5	10.5	7.32
6010C	7440-50-8	Copper	mg/kg	18.9	15.8	21.2	18.7	13.3
6010C	7440-62-2	Vanadium	mg/kg	76.7	65.9	60.7	62.2	43.0
6010C	7440-66-6	Zinc	mg/kg	80.3	66.0	70.3	64.3	55.6
6010C	7440-67-7	Zirconium	mg/kg	8.10	7.16	6.17	7.06	4.77 J Z
6010C	7440-70-2	Calcium	mg/kg	6900	5400	5840	5620	3700 J E
6010C	7723-14-0	Phosphorus	mg/kg	308	314	314	343	461
6020A	7440-22-4	Silver	mg/kg	0.0545 J Z	0.0456 J Z	0.0572 J Z	0.0465 J Z	0.208 U B
6020A	7440-24-6	Strontium	mg/kg	41.9	32.4	32.0	33.0	20.2 J Q, E
6020A	7440-28-0	Thallium	mg/kg	0.389	0.325	0.469	0.410	0.208 U B
6020A	7782-49-2	Selenium	mg/kg	0.177 J Z	0.461 U	0.240 J Z	0.148 J Z	0.417 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-501-SA5D-SB-0.0-0.5	SL-501-SA5D-SB-4.0-5.0	SL-501-SA5D-SB-9.0-10.0	SL-501-SA5D-SB-14.0-15.0	SL-501-SA5D-SB-19.0-20.0	SL-501-SA5D-SB-24.0-25.0	SL-501-SA5D-SB-28.0-29.0	SL-502-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	10/03/2013
			SDG	PH109	PH109	PH109	PH109	PH109	PH109	PH109	PH122
			Start Depth	0	4	9	14	19	24	28	0
			End Depth	0.5	5	10	15	20	25	29	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	8.3	13.2	9.6	9.7	9.9	7.5	7.2	3.8

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-502-SA5D-SB-6.5-7.5	SL-503-SA5D-SB-0.0-0.5	SL-503-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-0.0-0.5	SL-504-SA5D-SB-4.0-5.0	SL-804-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-9.0-10.0	SL-504-SA5D-SB-16.0-17.0
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	10/03/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013
			SDG	PH122	PH109	PH109	PH109	PH109	PH109	PH109	PH109
			Start Depth	6.5	0	4	0	4	4	9	16
			End Depth	7.5	0.5	5	0.5	5	5	10	17
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	10.3	8.8	13.5	9.9	12.7	12.0	9.5	7.9

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-505-SA5D-SB-0.0-0.5	SL-505-SA5D-SB-4.0-5.0	SL-505-SA5D-SB-9.0-10.0	SL-505-SA5D-SB-14.0-15.0	SL-505-SA5D-SB-19.0-20.0	SL-506-SA5D-SB-0.0-0.5	SL-506-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/11/2013	09/11/2013	10/03/2013
			SDG	PH108	PH108	PH108	PH108	PH108	PH106	PH106	PH122
			Start Depth	0	4	9	14	19	0	4	0
			End Depth	0.5	5	10	15	20	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	4.1	8.9	11.4	9.8	10.1	9.7	13.7	5.4

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-507-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-10.5-11.5	SL-508-SA5D-SB-0.0-0.5	SL-508-SA5D-SB-4.0-5.0	SL-508-SA5D-SB-9.0-10.0	SL-508-SA5D-SB-14.0-15.0	SL-508-SA5D-SB-19.0-20.0	SL-508-SA5D-SB-23.0-24.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013
			SDG	PH122	PH122	PH122	PH122	PH122	PH122	PH122	PH122
			Start Depth	4	10.5	0	4	9	14	19	23
			End Depth	5	11.5	0.5	5	10	15	20	24
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	12.1	6.2	6.8	13.5	12.1	10.6	10	6.9

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-509-SA5D-SB-0.0-0.5	SL-509-SA5D-SB-4.0-5.0	SL-510-SA5D-SB-0.0-0.5	SL-510-SA5D-SB-4.0-5.0	SL-512-SA5D-SB-0.0-0.5	SL-512-SA5D-SB-4.0-5.0	SL-513-SA5D-SB-0.0-0.5	SL-513-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/26/2013	09/26/2013	09/18/2013	09/18/2013
			SDG	PH110	PH110	PH110	PH110	PH116	PH116	PH110	PH110
			Start Depth	0	4	0	4	0	4	0	4
			End Depth	0.5	5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	9.6	13.9	9.3	14.6	5.6	12.4	11.7	14.8

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-513-SA5D-SB-9.0-10.0	SL-513-SA5D-SB-16.0-17.0	SL-514-SA5D-SB-0.0-0.5	SL-514-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-0.0-0.5	SL-815-SA5D-SB-0.0-0.5	SL-515-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013
			SDG	PH110	PH110	PH110	PH110	PH104	PH104	PH104	PH104
			Start Depth	9	16	0	4	0	0	4	9
			End Depth	10	17	0.5	5	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	12.0	7.5	12.4	14.2	9.2	7.7	14.8	15.6

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-515-SA5D-SB-22.0-23.0	SL-516-SA5D-SB-0.0-0.5	SL-516-SA5D-SB-4.0-5.0	SL-816-SA5D-SB-4.0-5.0	SL-516-SA5D-SB-9.0-10.0	SL-516-SA5D-SB-13.0-14.0	SL-518-SA5D-SB-0.0-0.5	SL-518-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	09/09/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	09/10/2013	09/10/2013
			SDG	PH104	PH130	PH130	PH130	PH130	PH130	PH105	PH105
			Start Depth	22	0	4	4	9	13	0	4
			End Depth	23	0.5	5	5	10	14	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	14.4	7.4	9.5	10.2	9.1	2.8	8.4	14.6

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-518-SA5D-SB-9.0-10.0	SL-518-SA5D-SB-15.0-16.0	SL-519-SA5D-SB-0.0-0.5	SL-519-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-0.0-0.5	SL-520-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-8.0-9.0	SL-521-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/10/2013	09/10/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013
			SDG	PH105	PH105	PH106	PH106	PH106	PH106	PH106	PH106
			Start Depth	9	15	0	4	0	4	8	0
			End Depth	10	16	0.5	5	0.5	5	9	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	14.4	9.3	8.3	13.2	10.6	15.8	11.1	7.8

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-521-SA5D-SB-5.5-6.5	SL-522-SA5D-SB-0.0-0.5	SL-522-SA5D-SB-6.0-7.0	SL-523-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-5.5-6.5	SL-824-SA5D-SB-5.5-6.5	SL-525-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/04/2013	09/04/2013	09/04/2013	09/03/2013
			SDG	PH106	PH106	PH106	PH106	PH101	PH101	PH101	PH100
			Start Depth	5.5	0	6	0	0	5.5	5.5	0
			End Depth	6.5	0.5	7	0.5	0.5	6.5	6.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	7.2	7.4	8.9	3.5	4.6	6.6	7.1	4.2

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-525-SA5D-SB-2.5-3.5	SL-526-SA5D-SB-0.0-0.5	SL-526-SA5D-SB-3.0-4.0	SL-527-SA5D-SB-0.0-0.5	SL-527-SA5D-SB-4.0-5.0	SL-528-SA5D-SB-0.0-0.5	SL-528-SA5D-SB-2.5-3.5	SL-529-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013	09/03/2013	09/11/2013
			SDG	PH100	PH098	PH098	PH100	PH100	PH100	PH100	PH106
			Start Depth	2.5	0	3	0	4	0	2.5	0
			End Depth	3.5	0.5	4	0.5	5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	5.6	3.0	5.5	1.3	9.1	2.2	7.7	5.4

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-529-SA5D-SB-3.0-4.0	SL-530-SA5D-SB-0.0-0.5	SL-530-SA5D-SB-2.5-3.5	SL-531-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-2.5-3.5	SL-533-SA5D-SB-0.0-0.5	SL-533-SA5D-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/11/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013
			SDG	PH106	PH099	PH099	PH099	PH099	PH099	PH099	PH099
			Start Depth	3	0	2.5	0	0	2.5	0	2.5
			End Depth	4	0.5	3.5	0.5	0.5	3.5	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	6.0	1.7	3.9	3.9	1.5	4.5	2.6	8.5

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-534-SA5D-SB-0.0-0.5	SL-534-SA5D-SB-6.5-7.5	SL-535-SA5D-SB-0.0-0.5	SL-835-SA5D-SB-0.0-0.5	SL-535-SA5D-SB-2.0-3.0	SL-536-SA5D-SB-0.0-0.5	SL-536-SA5D-SB-3.5-4.5	SL-537-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/28/2013	08/28/2013	08/28/2013
			SDG	PH099	PH099	PH099	PH099	PH099	PH095	PH095	PH095
			Start Depth	0	6.5	0	0	2	0	3.5	0
			End Depth	0.5	7.5	0.5	0.5	3	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	3.6	6.0	3.7	2.3	4.3	5.9	8.1	4.6

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-537-SA5D-SB-2.5-3.5	SL-538-SA5D-SB-0.0-0.5	SL-538-SA5D-SB-3.0-4.0	SL-539-SA5D-SB-0.0-0.5	SL-539-SA5D-SB-3.0-4.0	SL-540-SA5D-SB-0.0-0.5	SL-540-SA5D-SB-5.0-6.0	SL-541-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/28/2013	08/28/2013	08/28/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013
			SDG	PH095	PH095	PH095	PH098	PH098	PH100	PH100	PH100
			Start Depth	2.5	0	3	0	3	0	5	0
			End Depth	3.5	0.5	4	0.5	4	0.5	6	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	4.3	5.1	3.5	2.9	4.1	7.6	6.8	5.7

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-541-SA5D-SB-2.5-3.5	SL-542-SA5D-SB-0.0-0.5	SL-542-SA5D-SB-4.0-5.0	SL-543-SA5D-SB-0.0-0.5	SL-543-SA5D-SB-4.0-5.0	SL-544-SA5D-SB-0.0-0.5	SL-544-SA5D-SB-6.5-7.5	SL-545-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	08/29/2013	08/29/2013	08/29/2013	08/29/2013	09/04/2013	09/04/2013	09/03/2013
			SDG	PH100	PH098	PH098	PH098	PH098	PH101	PH101	PH100
			Start Depth	2.5	0	4	0	4	0	6.5	0
			End Depth	3.5	0.5	5	0.5	5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	3.4	7.1	4.8	4.8	9.9	4.5	5.7	6.7

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-545-SA5D-SB-6.0-7.0	SL-546-SA5D-SB-0.0-0.5	SL-546-SA5D-SB-4.0-5.0	SL-547-SA5D-SB-0.0-0.5	SL-547-SA5D-SB-4.0-5.0	SL-548-SA5D-SB-0.0-0.5	SL-548-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	09/04/2013	09/04/2013	09/04/2013	09/04/2013	08/26/2013	08/26/2013	11/12/2013
			SDG	PH100	PH101	PH101	PH101	PH101	PH093	PH093	PH127
			Start Depth	6	0	4	0	4	0	4	0
			End Depth	7	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	4.9	4.1	11.7	5.4	12.2	2.7	10.4	6.8

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-549-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-11.0-12.0	SL-550-SA5D-SB-0.0-0.5	SL-550-SA5D-SB-4.0-5.0	SL-850-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-0.0-0.5	SL-551-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	11/12/2013	11/12/2013	09/06/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013
			SDG	PH127	PH127	PH103	PH103	PH103	PH107	PH107	PH107
			Start Depth	4	11	0	4	4	0	4	9
			End Depth	5	12	0.5	5	5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	11.2	10.2	3.7	10.4	10.6	4.3	7.2	8.8

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-551-SA5D-SB-14.0-15.0	SL-551-SA5D-SB-17.5-18.5	SL-552-SA5D-SB-0.0-0.5	SL-552-SA5D-SB-4.0-5.0	SL-553-SA5D-SB-0.0-0.5	SL-853-SA5D-SB-0.0-0.5	SL-553-SA5D-SB-4.5-5.5	SL-554-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/12/2013	09/12/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013	09/05/2013
			SDG	PH107	PH107	PH103	PH103	PH107	PH107	PH107	PH102
			Start Depth	14	17.5	0	4	0	0	4.5	0
			End Depth	15	18.5	0.5	5	0.5	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	12.3	8.6	4.6	11.6	1.4	1.4	5.5	4.9

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-554-SA5D-SB-4.0-5.0	SL-554-SA5D-SB-7.0-8.0	SL-555-SA5D-SB-0.0-0.5	SL-555-SA5D-SB-4.0-5.0	SL-555-SA5D-SB-10.5-11.5	SL-556-SA5D-SB-0.0-0.5	SL-556-SA5D-SB-4.0-5.0	SL-556-SA5D-SB-11.0-12.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013
			SDG	PH102	PH102	PH102	PH102	PH102	PH102	PH102	PH102
			Start Depth	4	7	0	4	10.5	0	4	11
			End Depth	5	8	0.5	5	11.5	0.5	5	12
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	6.6	7.9	4.7	8.8	10.4	2.7	5.5	6.3

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-557-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-4.0-5.0	SL-559-SA5D-SB-0.0-0.5	SL-559-SA5D-SB-6.0-7.0	SL-560-SA5D-SB-0.0-0.5	SL-560-SA5D-SB-4.0-5.0	SL-860-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	FD
			Sample Date	09/24/2013	09/24/2013	09/24/2013	09/05/2013	09/05/2013	11/12/2013	11/12/2013	11/12/2013
			SDG	PH113	PH113	PH113	PH102	PH102	PH127	PH127	PH127
			Start Depth	0	0	4	0	6	0	4	4
			End Depth	0.5	0.5	5	0.5	7	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	4.0	5.1	6.3	6.4	7.7	10.5	3.1	4.0

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-560-SA5D-SB-7.0-8.0	SL-561-SA5D-SB-0.0-0.5	SL-561-SA5D-SB-4.0-5.0	SL-561-SA5D-SB-9.0-10.0	SL-562-SA5D-SB-0.0-0.5	SL-562-SA5D-SB-4.0-5.0	SL-563-SA5D-SB-0.0-0.5	SL-563-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/12/2013	10/08/2013	10/08/2013	10/08/2013	09/25/2013	09/25/2013	09/25/2013	09/25/2013
			SDG	PH127	PH124	PH124	PH124	PH114	PH114	PH114	PH114
			Start Depth	7	0	4	9	0	4	0	4
			End Depth	8	0.5	5	10	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	3.3	4.9	8.8	7.0	5.4	10.4	6.2	7.4

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-863-SA5D-SB-4.0-5.0	SL-564-SA5D-SB-0.0-0.5	SL-564-SA5D-SB-4.0-5.0	SL-565-SA5D-SB-0.0-0.5	SL-865-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-4.0-5.0	SL-567-SA5D-SB-0.0-0.5
			Sample Type	FD	N	N	N	FD	N	N	N
			Sample Date	09/25/2013	10/01/2013	10/01/2013	09/24/2013	09/24/2013	09/24/2013	09/24/2013	10/07/2013
			SDG	PH114	PH119	PH119	PH113	PH113	PH113	PH113	PH123
			Start Depth	4	0	4	0	0	0	4	0
			End Depth	5	0.5	5	0.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	6.5	7.2	10.4	5.9	5.2	2.9	6.9	4.2

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-567-SA5D-SB-3.5-4.5	SL-568-SA5D-SB-0.0-0.5	SL-568-SA5D-SB-2.5-3.5	SL-868-SA5D-SB-2.5-3.5	SL-569-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-4.0-5.0	SL-571-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	10/07/2013	09/23/2013	09/23/2013	09/23/2013	09/25/2013	10/01/2013	10/01/2013	09/23/2013
			SDG	PH123	PH112	PH112	PH112	PH114	PH119	PH119	PH112
			Start Depth	3.5	0	2.5	2.5	0	0	4	0
			End Depth	4.5	0.5	3.5	3.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	7.7	2.8	6.2	1.5	2.6	8.3	10.5	3.3

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-572-SA5D-SB-0.0-0.5	SL-573-SA5D-SB-0.0-0.5	SL-573-SA5D-SB-4.0-5.0	SL-574-SA5D-SB-0.0-0.5	SL-575-SA5D-SB-0.0-0.5	SL-575-SA5D-SB-3.0-4.0	SL-576-SA5D-SB-0.0-0.5	SL-576-SA5D-SB-3.5-4.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/23/2013	09/25/2013	09/25/2013	09/23/2013	10/07/2013	10/07/2013	09/19/2013	09/19/2013
			SDG	PH112	PH114	PH114	PH112	PH123	PH123	PH111	PH111
			Start Depth	0	0	4	0	0	3	0	3.5
			End Depth	0.5	0.5	5	0.5	0.5	4	0.5	4.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	1.4	1.3	5.7	1.0	1.4	4.6	1.4	5.7

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-577-SA5D-SB-0.0-0.5	SL-578-SA5D-SB-0.0-0.5	SL-579-SA5D-SB-0.0-0.5	SL-879-SA5D-SB-0.0-0.5	SL-580-SA5D-SB-0.0-0.5	SL-581-SA5D-SB-0.0-0.5	SL-581-SA5D-SB-2.5-3.5	SL-582-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	09/19/2013	09/19/2013	09/19/2013	09/19/2013	09/19/2013	09/19/2013	09/19/2013	09/30/2013
			SDG	PH111	PH111	PH111	PH111	PH111	PH111	PH111	PH118
			Start Depth	0	0	0	0	0	0	2.5	0
			End Depth	0.5	0.5	0.5	0.5	0.5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	1.1	6.2	1.7	1.7	1.1	1.2	5.1	5.4

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-582-SA5D-SB-4.0-5.0	SL-882-SA5D-SB-4.0-5.0	SL-582-SA5D-SB-10.0-11.0	SL-583-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-4.0-5.0	SL-590-SA5D-SB-0.0-0.5	SL-590-SA5D-SB-4.0-5.0
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	09/30/2013	09/30/2013	09/30/2013	09/23/2013	10/02/2013	10/02/2013	09/06/2013	09/06/2013
			SDG	PH118	PH118	PH118	PH112	PH120	PH120	PH103	PH103
			Start Depth	4	4	10	0	0	4	0	4
			End Depth	5	5	11	0.5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	11.7	11.6	10.6	3.9	6.2	9.7	3.3	8.3

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-890-SA5D-SB-4.0-5.0	SL-590-SA5D-SB-11.0-12.0	SL-591-SA5D-SB-0.0-0.5	SL-591-SA5D-SB-6.5-7.5	SL-592-SA5D-SB-0.0-0.5	SL-592-SA5D-SB-4.0-5.0	SL-592-SA5D-SB-10.5-11.5	SL-593-SA5D-SB-0.0-0.5
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	10/07/2013
			SDG	PH103	PH103	PH107	PH107	PH107	PH107	PH107	PH123
			Start Depth	4	11	0	6.5	0	4	10.5	0
			End Depth	5	12	0.5	7.5	0.5	5	11.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	8.1	6.5	4.3	9.0	4.9	10.1	8.6	2.0

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-593-SA5D-SB-3.5-4.5	SL-594-SA5D-SB-0.0-0.5	SL-594-SA5D-SB-4.0-5.0	SL-594-SA5D-SB-7.0-8.0	SL-595-SA5D-SB-0.0-0.5	SL-595-SA5D-SB-4.0-5.0	SL-595-SA5D-SB-9.0-10.0	SL-595-SA5D-SB-14.0-15.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/07/2013	10/02/2013	10/02/2013	10/02/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013
			SDG	PH123	PH120	PH120	PH120	PH118	PH118	PH118	PH118
			Start Depth	3.5	0	4	7	0	4	9	14
			End Depth	4.5	0.5	5	8	0.5	5	10	15
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	8.3	3.4	9.7	8.0	9.0	10.5	13.8	14.2

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-595-SA5D-SB-17.0-18.0	SL-596-SA5D-SB-0.0-0.5	SL-596-SA5D-SB-4.0-5.0	SL-596-SA5D-SB-11.5-12.5	SL-597-SA5D-SB-0.0-0.5	SL-597-SA5D-SB-4.0-5.0	SL-597-SA5D-SB-9.0-10.0	SL-597-SA5D-SB-14.0-15.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013
			SDG	PH118	PH118	PH118	PH118	PH118	PH118	PH118	PH118
			Start Depth	17	0	4	11.5	0	4	9	14
			End Depth	18	0.5	5	12.5	0.5	5	10	15
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	13.9	8.4	11.1	11.1	9.5	10	11.2	10.1

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-597-SA5D-SB-17.0-18.0	SL-598-SA5D-SB-0.0-0.5	SL-598-SA5D-SB-4.0-5.0	SL-598-SA5D-SB-9.0-10.0	SL-598-SA5D-SB-14.0-15.0	SL-598-SA5D-SB-18.0-19.0	SL-599-SA5D-SB-0.0-0.5	SL-599-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/30/2013	10/01/2013	10/01/2013	10/01/2013	10/01/2013	10/01/2013	09/09/2013	09/09/2013
			SDG	PH118	PH119	PH119	PH119	PH119	PH119	PH104	PH104
			Start Depth	17	0	4	9	14	18	0	4
			End Depth	18	0.5	5	10	15	19	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	9.6	6.6	11.0	12.8	15.5	14.8	8.6	14.3

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-599-SA5D-SB-9.0-10.0	SL-599-SA5D-SB-14.0-15.0	SL-599-SA5D-SB-19.0-20.0	SL-599-SA5D-SB-22.0-23.0	SL-600-SA5D-SB-0.0-0.5	SL-900-SA5D-SB-0.0-0.5	SL-600-SA5D-SB-4.0-5.0	SL-600-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/09/2013	09/09/2013	09/09/2013	09/09/2013	10/02/2013	10/02/2013	10/02/2013	10/02/2013
			SDG	PH104	PH104	PH104	PH104	PH120	PH120	PH120	PH120
			Start Depth	9	14	19	22	0	0	4	9
			End Depth	10	15	20	23	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	14.2	14.6	14.2	10.4	5.0	8.6	6.7	14.3

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-600-SA5D-SB-14.0-15.0	SL-600-SA5D-SB-18.5-19.5	SL-601-SA5D-SB-0.0-0.5	SL-601-SA5D-SB-4.0-5.0	SL-601-SA5D-SB-9.0-10.0	SL-601-SA5D-SB-14.0-15.0	SL-601-SA5D-SB-20.5-21.5	SL-602-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/02/2013	10/02/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013	10/08/2013
			SDG	PH120	PH120	PH104	PH104	PH104	PH104	PH104	PH124
			Start Depth	14	18.5	0	4	9	14	20.5	0
			End Depth	15	19.5	0.5	5	10	15	21.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	13.6	12.2	8.7	11.7	11.3	11.4	3.4	3.3

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-602-SA5D-SB-4.0-5.0	SL-602-SA5D-SB-9.0-10.0	SL-603-SA5D-SB-0.0-0.5	SL-603-SA5D-SB-4.0-5.0	SL-603-SA5D-SB-9.0-10.0	SL-603-SA5D-SB-13.0-14.0	SL-604-SA5D-SB-0.0-0.5	SL-604-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/08/2013	10/08/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013
			SDG	PH124	PH124	PH105	PH105	PH105	PH105	PH105	PH105
			Start Depth	4	9	0	4	9	12	0	4
			End Depth	5	10	0.5	5	10	14	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	9.4	9.0	4.8	11.5	12.4	9.1	10.8	12.4

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-604-SA5D-SB-9.0-10.0	SL-604-SA5D-SB-16.5-17.5	SL-605-SA5D-SB-0.0-0.5	SL-605-SA5D-SB-4.0-5.0	SL-905-SA5D-SB-4.0-5.0	SL-605-SA5D-SB-9.0-10.0	SL-605-SA5D-SB-14.5-15.5	SL-606-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013
			SDG	PH105	PH105	PH105	PH105	PH105	PH105	PH105	PH105
			Start Depth	9	16.5	0	4	4	9	14.5	0
			End Depth	10	17.5	0.5	5	5	10	15.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	11.6	10.3	11.4	13.9	14.5	10.9	7.4	8.5

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-606-SA5D-SB-4.0-5.0	SL-606-SA5D-SB-9.0-10.0	SL-606-SA5D-SB-13.0-14.0	SL-607-SA5D-SB-0.0-0.5	SL-607-SA5D-SB-4.0-5.0	SL-608-SA5D-SB-0.0-0.5	SL-608-SA5D-SB-4.0-5.0	SL-609-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/10/2013	09/10/2013	09/10/2013	10/01/2013	10/01/2013	10/03/2013	10/03/2013	11/15/2013
			SDG	PH105	PH105	PH105	PH119	PH119	PH122	PH122	PH130
			Start Depth	4	9	13	0	4	0	4	0
			End Depth	5	10	14	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	12.6	11.1	8.4	6.9	14.0	5.9	10.6	4.0

U-Compound not detected above reporting limit
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R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-501-SA5D-SB-0.0-0.5	SL-501-SA5D-SB-4.0-5.0	SL-501-SA5D-SB-9.0-10.0	SL-501-SA5D-SB-14.0-15.0	SL-501-SA5D-SB-19.0-20.0	SL-501-SA5D-SB-24.0-25.0	SL-501-SA5D-SB-28.0-29.0
				Sample Type	N	N	N	N	N	N	N
				Sample Date	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013
				SDG	PH109	PH109	PH109	PH109	PH109	PH109	PH109
				Start Depth	0	4	9	14	19	24	28
				End Depth	0.5	5	10	15	20	25	29
Analytic Method	CAS Number	Chemical Name	Unit								
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	21 U	20 U	20 U	20 U	19 U	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	21 U	20 U	20 U	20 U	19 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	21 U	20 U	20 U	20 U	19 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	20 U	19 U	19 U	19 U	18 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	0.97 J Z	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	21 U	20 U	20 U	20 U	19 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	21 U	20 U	20 U	20 U	19 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	21 U	20 U	20 U	20 U	19 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.0 J Z	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U

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				Sample Name	SL-502-SA5D-SB-0.0-0.5	SL-502-SA5D-SB-6.5-7.5	SL-503-SA5D-SB-0.0-0.5	SL-503-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-0.0-0.5	SL-504-SA5D-SB-4.0-5.0	SL-804-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-9.0-10.0
				Sample Type	N	N	N	N	N	N	FD	N
				Sample Date	10/03/2013	10/03/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013
				SDG	PH122	PH122	PH109	PH109	PH109	PH109	PH109	PH109
				Start Depth	0	6.5	0	4	0	4	4	9
				End Depth	0.5	7.5	0.5	5	0.5	5	5	10
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	190 U	200 U	20 U	21 U	20 U	20 U	20 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	190 U	200 U	20 U	21 U	20 U	20 U	20 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	17 U	19 U	1.8 U	1.9 U	0.92 J Z	1.9 U	1.9 U	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	190 U	200 U	20 U	21 U	20 U	20 U	20 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	17	9.0 J Z	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	46 J Z	190 U	19 U	20 U	19 U	19 UJ Q	19 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	20	8.8 J Z	1.8 U	1.9 U	0.76 J Z	1.9 U	1.9 U	1.8 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	17 U	19 U	1.8 U	1.9 U	0.76 J Z	1.9 U	1.9 U	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	19	12 J Z	0.62 J Z	1.9 U	0.91 J Z	1.9 U	1.9 U	1.8 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	190 U	200 U	20 U	21 U	20 U	20 U	20 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	190 U	200 U	20 U	21 U	20 U	20 U	20 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	190 U	200 U	20 U	21 U	20 U	20 U	20 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	17 U	19 U	1.0 J Z	0.78 J Z	0.81 J Z	1.9 U	1.9 U	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	17 U	19 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U

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				Sample Name	SL-504-SA5D-SB-16.0-17.0	SL-505-SA5D-SB-0.0-0.5	SL-505-SA5D-SB-4.0-5.0	SL-505-SA5D-SB-9.0-10.0	SL-505-SA5D-SB-14.0-15.0	SL-505-SA5D-SB-19.0-20.0	SL-506-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N
				Sample Date	09/17/2013	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/11/2013
				SDG	PH109	PH108	PH108	PH108	PH108	PH108	PH106
				Start Depth	16	0	4	9	14	19	0
				End Depth	17	0.5	5	10	15	20	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	12 J Z	16 J Z	20 U	18 J Z	20 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	4.5	1.6 J Z	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.8	0.81 J Z	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	3.5 J Z	18 U	19 U	19 U	19 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.3 J Z	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	4.7	1.9	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	5.1	1.8	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.7	0.96 J Z	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	16	8.7	1.7 J Z	1.8 U	1.8 U	0.46 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	2.0	0.84 J Z	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.7	0.75 J Z	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	2.9	1.2 J Z	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.7 U B	1.8 U B	1.9 U B	1.8 U B	1.8 U B	1.8 U F
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	0.77 J Z	0.73 J Z	1.9 U	1.8 U	1.8 U	1.8 U

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				Sample Name	SL-506-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-0.0-0.5	SL-507-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-10.5-11.5	SL-508-SA5D-SB-0.0-0.5	SL-508-SA5D-SB-4.0-5.0	SL-508-SA5D-SB-9.0-10.0	SL-508-SA5D-SB-14.0-15.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/11/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013
				SDG	PH106	PH122	PH122	PH122	PH122	PH122	PH122	PH122
				Start Depth	4	0	4	10.5	0	4	9	14
				End Depth	5	0.5	5	11.5	0.5	5	10	15
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	21 U	68 J Z	20 U	19 U	19 U	21 U	20 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	21 U	190 U	20 U	19 U	19 U	21 U	20 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	19	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	0.81 J Z
8270D SIM	129-00-0	Pyrene	µg/kg	1.9 U	120	1.9 U	1.8 U	1.1 J Z	1.9 U	1.9 U	8.3
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	21 U	190 U	20 U	19 U	19 U	21 U	20 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	280	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	7.5
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	20 U	320	19 U	18 U	18 U	20 U	19 U	6.9 J Z
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	280	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	6.9
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.9 U	590	1.9 U	1.8 U	1.3 J Z	1.9 U	1.9 U	13
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9 U	79	1.9 U	1.8 U	1.7 J Z	1.9 U	1.9 U	9.1
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.9 U	260	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	7.2
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	17 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.9 U	320	1.9 U	1.8 U	2.0	1.9 U	1.9 U	8.4
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.9 U	480	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	12
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	92	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	2.0
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9 U	210	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	8.4
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	17 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	17 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	21 U	190 U	20 U	19 U	19 U	21 U	20 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	21 U	190 U	20 U	19 U	19 U	21 U	20 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	29	1.9 U	1.8 U	1.2 J Z	1.9 U	1.9 U	2.5
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	21 U	190 U	20 U	19 U	19 U	21 U	20 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	17 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.9 U	17 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	0.99 J Z	17 U	1.9 U	1.8 U	1.3 J Z	1.9 U	1.9 U	1.9 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.9 U	17 U	1.9 U	1.8 U	0.81 J Z	1.9 U	1.9 U	1.9 U

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				Sample Name	SL-508-SA5D-SB-19.0-20.0	SL-508-SA5D-SB-23.0-24.0	SL-509-SA5D-SB-0.0-0.5	SL-509-SA5D-SB-4.0-5.0	SL-510-SA5D-SB-0.0-0.5	SL-510-SA5D-SB-4.0-5.0	SL-512-SA5D-SB-0.0-0.5	SL-512-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	10/03/2013	10/03/2013	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/26/2013	09/26/2013
				SDG	PH122	PH122	PH110	PH110	PH110	PH110	PH116	PH116
				Start Depth	19	23	0	4	0	4	0	4
				End Depth	20	24	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	19 U	20 U	21 U	20 U	21 U	19 U	21 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	19 U	20 U	21 U	20 U	21 U	19 U	21 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	0.80 J Z	1.9 U	1.8 U	1.9 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	1.8 U	0.90 J Z	1.9 U	1.9	1.9 U	1.2 J Z	1.9 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	19 U	20 U	21 U	20 U	21 U	19 U	21 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	18 U	19 U	20 U	19 U	20 U	18 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	1.8 U	1.6 J Z	1.9 U	1.4 J Z	1.9 U	1.2 J Z	1.9 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.8 U	1.3 J Z	1.9 U	1.1 J Z	1.9 U	1.2 J Z	1.9 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	1.8 U	2.3	1.9 U	1.9	1.9 U	0.99 J Z	1.9 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	0.76 J Z	1.9 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	19 U	20 U	21 U	20 U	21 U	19 U	21 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	19 U	20 U	21 U	20 U	21 U	19 U	21 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.8 U	1.1 J Z	1.0 J Z	5.2	1.9 U	1.8 U	1.9 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	19 U	20 U	21 U	20 U	21 U	19 U	21 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	0.85 J Z	1.9 U	1.8 U	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	2.0	1.9 U	1.8 U	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.8 U	1.6 J Z	1.0 J Z	1.3 J Z	1.4 J Z	0.84 J Z	1.0 J Z
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	1.8 U	0.89 J Z	1.9 U	2.3	0.92 J Z	0.76 J Z	1.9 U

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				Sample Name	SL-513-SA5D-SB-0.0-0.5	SL-513-SA5D-SB-4.0-5.0	SL-513-SA5D-SB-9.0-10.0	SL-513-SA5D-SB-16.0-17.0	SL-514-SA5D-SB-0.0-0.5	SL-514-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-0.0-0.5	SL-815-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	FD
				Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/09/2013	09/09/2013
				SDG	PH110	PH110	PH110	PH110	PH110	PH110	PH104	PH104
				Start Depth	0	4	9	16	0	4	0	0
				End Depth	0.5	5	10	17	0.5	5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg		20 U	21 U	20 U	19 U	21 U	21 U	20 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg		20 U	21 U	20 U	19 U	21 U	21 U	20 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg		0.45 J Z	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg		20 U	21 U	20 U	19 U	21 U	21 U	20 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg		19 U	20 U	19 U	18 U	19 U	20 U	19 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.5 J Z	1.4 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 UJ FD	0.89 J FD, Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.2 J Z	1.5 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg		20 U	21 U	20 U	19 U	21 U	21 U	20 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg		20 U	21 U	20 U	19 U	21 U	21 U	20 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg		2.2	1.9 U	1.9 U	1.8 U	1.9 U	1.0 J Z	1.8 UJ FD	0.81 J FD, Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg		20 U	21 U	20 U	19 U	21 U	21 U	20 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg		1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg		2.7	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg		0.86 J Z	1.1 J Z	1.9 U	1.8 U	1.9 U	1.9 U	1.8 UJ FD	1.8 UJ F, FD
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg		2.2	1.9 U	1.9 U	1.8 U	1.9 U	0.85 J Z	1.8 U	1.8 U

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				Sample Name	SL-515-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-9.0-10.0	SL-515-SA5D-SB-22.0-23.0	SL-516-SA5D-SB-0.0-0.5	SL-516-SA5D-SB-4.0-5.0	SL-816-SA5D-SB-4.0-5.0	SL-516-SA5D-SB-9.0-10.0
				Sample Type	N	N	N	N	N	FD	N
				Sample Date	09/09/2013	09/09/2013	09/09/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013
				SDG	PH104	PH104	PH104	PH130	PH130	PH130	PH130
				Start Depth	4	9	22	0	4	4	9
				End Depth	5	10	23	0.5	5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	10 J Z	21 U	7.6 J Z	19 U	20 U	20 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	21 U	21 U	21 U	19 U	20 U	20 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	21 U	21 U	21 U	19 U	20 U	20 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	20 U	20 U	20 U	18 U	19 U	19 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	21 U	21 U	21 U	19 U	20 U	20 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	21 U	21 U	21 U	19 U	20 U	20 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	21 U	21 U	21 U	19 U	20 U	20 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	2.0 U	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U

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				Sample Name	SL-516-SA5D-SB-13.0-14.0	SL-518-SA5D-SB-0.0-0.5	SL-518-SA5D-SB-4.0-5.0	SL-518-SA5D-SB-9.0-10.0	SL-518-SA5D-SB-15.0-16.0	SL-519-SA5D-SB-0.0-0.5	SL-519-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	11/15/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013	09/11/2013	09/11/2013	09/11/2013
				SDG	PH130	PH105	PH105	PH105	PH105	PH106	PH106	PH106
				Start Depth	13	0	4	9	15	0	4	0
				End Depth	14	0.5	5	10	16	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	20 U	21 U	21 U	20 U	20 U	21 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	20 U	21 U	21 U	20 U	20 U	21 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.8 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	129-00-0	Pyrene	µg/kg	0.87 J Z	1.4 J Z	2.0 U	1.9 U	1.8 U	0.98 J Q, Z	1.9 U	1.9 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	20 U	21 U	21 U	20 U	20 U	21 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.8 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	19 U	20 U	20 U	19 U	18 UJ Q	20 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.8 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	0.71 J Z	1.7 J Z	2.0 U	1.9 U	1.8 U	1.4 J Q, Z	1.9 U	1.9 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.1 J Z	1.8	2.0 U	1.9 U	1.8 U	1.2 J Q, Z	1.9 U	1.9 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.3 J Z	1.8 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.8 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	0.96 J Z	1.9	2.0 U	1.9 U	1.8 U	1.7 J Q, Z	1.9 U	1.9 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.8 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.8 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	0.84 J Z	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.8 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	20 U	21 U	21 U	20 U	20 U	21 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	20 U	21 U	21 U	20 U	20 U	21 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.1 J Z	1.4 J Z	2.0 U	1.9 U	1.8 U	0.94 J Q, Z	1.9 U	1.9 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	20 U	21 U	21 U	20 U	20 U	21 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.8 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.8 U	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.4 J Z	0.99 J Z	2.0 U	1.9 U	1.8 U	1.4 J Q, Z	1.9 U	1.0 J Z
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	0.91 J Z	0.76 J Z	2.0 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U

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				Sample Name	SL-520-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-8.0-9.0	SL-521-SA5D-SB-0.0-0.5	SL-521-SA5D-SB-5.5-6.5	SL-522-SA5D-SB-0.0-0.5	SL-522-SA5D-SB-6.0-7.0	SL-523-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/04/2013
				SDG	PH106	PH106	PH106	PH106	PH106	PH106	PH106	PH101
				Start Depth	4	8	0	5.5	0	6	0	0
				End Depth	5	9	0.5	6.5	0.5	7	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	21 U	20 U	20 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	21 U	20 U	20 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	2.0 U	0.38 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	2.0 U	3.5	1.8 U	1.8 U	0.83 J Z	1.8 U	1.7 U	2.9
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	21 U	20 U	20 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	2.0 U	1.1 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	0.71 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	20 U	19 U	18 U	18 U	18 U	19 U	18 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	2.0 U	0.85 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	2.0 U	3.0	1.2 J Z	1.8 U	1.2 J Z	1.8 U	1.7 U	1.6 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	2.0 U	3.8	0.73 J Z	1.8 U	0.82 J Z	1.8 U	1.7 U	3.0
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	2.0 U	1.4 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	2.0 U	3.2	6.5	1.8 U	1.5 J Z	1.8 U	1.7 U	4.7
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	2.0 U	1.6 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	2.0 U	1.9	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	0.86 J Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	21 U	20 U	20 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	21 U	20 U	20 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	2.0 U	2.3	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	2.6
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	21 U	20 U	20 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	7.4	1.7 U	0.74 J Z
8270D SIM	91-20-3	Naphthalene	µg/kg	1.0 J Z	1.1 J Z	1.5 J Z	1.8 U F	1.0 J Z	45	1.7 U F	1.5 J Z
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	2.0 U	1.9 U	1.8 U	1.8 U	1.8 U	11	1.7 U	1.4 J Z

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				Sample Name	SL-524-SA5D-SB-5.5-6.5	SL-824-SA5D-SB-5.5-6.5	SL-525-SA5D-SB-0.0-0.5	SL-525-SA5D-SB-2.5-3.5	SL-526-SA5D-SB-0.0-0.5	SL-526-SA5D-SB-3.0-4.0	SL-527-SA5D-SB-0.0-0.5	SL-527-SA5D-SB-4.0-5.0
				Sample Type	N	FD	N	N	N	N	N	N
				Sample Date	09/04/2013	09/04/2013	09/03/2013	09/03/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013
				SDG	PH101	PH101	PH100	PH100	PH098	PH098	PH100	PH100
				Start Depth	5.5	5.5	0	2.5	0	3	0	4
				End Depth	6.5	6.5	0.5	3.5	0.5	4	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	19 U	190 U	19 U	19 U	19 U	18 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	19 U	190 U	19 U	19 U	19 U	18 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	2.1	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	190 U	19 U	19 U	19 U	18 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	0.91 J Z	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	18 U	180 U	18 U	18 U	18 U	17 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	1.6 J Z	1.8 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	2.7	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	0.73 J Z	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	0.84 J FD, Z	1.8 UJ FD	15 J Z	1.8 U	1.7 U	1.8 U	4.0	1.8 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	0.71 J Z	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	0.80 J Z	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	190 U	19 U	19 U	19 U	18 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	190 U	19 U	19 U	19 U	18 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	1.8	1.8 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	190 U	19 U	19 U	19 U	18 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	1.2 J Z	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	1.8 U	17 U	1.8 U	1.7 U	1.8 U	0.85 J Z	1.8 U

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				Sample Name	SL-528-SA5D-SB-0.0-0.5	SL-528-SA5D-SB-2.5-3.5	SL-529-SA5D-SB-0.0-0.5	SL-529-SA5D-SB-3.0-4.0	SL-530-SA5D-SB-0.0-0.5	SL-530-SA5D-SB-2.5-3.5	SL-531-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/03/2013	09/03/2013	09/11/2013	09/11/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013
				SDG	PH100	PH100	PH106	PH106	PH099	PH099	PH099	PH099
				Start Depth	0	2.5	0	3	0	2.5	0	0
				End Depth	0.5	3.5	0.5	4	0.5	3.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	18 U F	19 U	19 U	19 U	18 U	19 U	19 U	8.7 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	18 U	19 U	19 U	19 U	18 U	19 U	19 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.8 U	1.8 U	1.8 U	0.54 J Z	1.7 U	1.7 U	0.46 J Z
8270D SIM	129-00-0	Pyrene	µg/kg	3.0	1.8 U	1.8 U	1.8 U	13	1.7 U	1.7 U	6.5
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	19 U	19 U	19 U	18 U	19 U	19 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	0.95 J Z	1.8 U	1.8 U	1.8 U	4.2	1.7 U	1.7 U	2.0
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	18 U	18 U	18 U	7.3 J Z	18 U	18 U	3.7 J Z
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	0.71 J Z	1.8 U	1.8 U	1.8 U	4.4	1.7 U	1.7 U	1.6 J Z
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	2.7	0.91 J Z	1.8 U	1.8 U	17	1.7 U	1.7 U	6.2
8270D SIM	206-44-0	Fluoranthene	µg/kg	4.3	1.8 U	1.8 U	1.8 U	15	1.7 U	1.7 U	7.7
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.2 J Z	1.8 U	1.8 U	1.8 U	5.9	1.7 U	1.7 U	2.4
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	4.3	0.69 J Z	0.61 J Z	0.57 J Z	11	1.7 U	1.7 U	15
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.2 J Z	1.8 U	1.8 U	1.8 U	8.9	1.7 U	1.7 U	3.2
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.8 U	1.8 U	1.8 U	1.4 J Z	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.2 J Z	1.8 U	1.8 U	1.8 U	8.8	1.7 U	1.7 U	2.3
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 U	19 U	19 U	19 U	18 U	19 U	19 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	19 U	19 U	19 U	18 U	19 U	19 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	2.5	1.8 U	1.8 U	1.8 U	3.3	1.7 U	1.7 U	4.7
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 U	19 U	19 U	19 U	18 U	19 U	19 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7	1.8 U	1.8 U F	1.0 J Z	1.7 U	1.7 U	1.7 U	1.3 J Z
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.2 J Z	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	0.93 J Z

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				Sample Name	SL-532-SA5D-SB-2.5-3.5	SL-533-SA5D-SB-0.0-0.5	SL-533-SA5D-SB-2.5-3.5	SL-534-SA5D-SB-0.0-0.5	SL-534-SA5D-SB-6.5-7.5	SL-535-SA5D-SB-0.0-0.5	SL-835-SA5D-SB-0.0-0.5	SL-535-SA5D-SB-2.0-3.0
				Sample Type	N	N	N	N	N	N	FD	N
				Sample Date	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013
				SDG	PH099	PH099	PH099	PH099	PH099	PH099	PH099	PH099
				Start Depth	2.5	0	2.5	0	6.5	0	0	2
				End Depth	3.5	0.5	3.5	0.5	7.5	0.5	0.5	3
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	8.7 J Z	19 U	19 U	19 U	18 U	18 U	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	2.9	1.8 U	1.7 U	1.8 U	1.7 UJ FD	0.81 J FD, Z	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	0.99 J Z	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	17 U	18 U	18 U	18 U	17 U	17 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	0.85 J Z	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 U	3.2	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	3.8	1.8 U	1.7 U	1.8 U	1.7 UJ FD	0.85 J FD, Z	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.2 J Z	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7 U	6.3	1.8 U	0.59 J Z	1.8 U	1.7 UJ FD	0.63 J FD, Z	1.7 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.5 J Z	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.1 J Z	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	2.5	1.8 U	1.7 U	1.8 U	1.7 UJ FD	0.74 J FD, Z	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 UJ FD	1.1 J FD, Z	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.6 J Z	1.8 U	1.3 J Z	1.8 U	1.7 UJ FD	1.3 J FD, Z	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.1 J Z	1.8 U	0.80 J Z	1.8 U	1.7 UJ FD	1.9 J FD	1.7 U

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J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-536-SA5D-SB-0.0-0.5	SL-536-SA5D-SB-3.5-4.5	SL-537-SA5D-SB-0.0-0.5	SL-537-SA5D-SB-2.5-3.5	SL-538-SA5D-SB-0.0-0.5	SL-538-SA5D-SB-3.0-4.0	SL-539-SA5D-SB-0.0-0.5	SL-539-SA5D-SB-3.0-4.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	08/28/2013	08/28/2013	08/28/2013	08/28/2013	08/28/2013	08/28/2013	08/29/2013	08/29/2013
				SDG	PH095	PH095	PH095	PH095	PH095	PH095	PH098	PH098
				Start Depth	0	3.5	0	2.5	0	3	0	3
				End Depth	0.5	4.5	0.5	3.5	0.5	4	0.5	4
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	11 J Z	19 U	19 U	19 U	19 U	19 U	19 U	18 U	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	19 U	18 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.8 U	0.49 J Z	1.7 U	0.43 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	0.77 J Z	6.9	1.7 U	13	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	19 U	18 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	3.0	1.8	1.7 U	4.5	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	6.3 J Z	4.0 J Z	18 U	9.1 J Z	18 U	17 U	17 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.1 J Z	1.9	1.7 U	4.9	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	6.0	9.2	1.7 U	22	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	0.74 J Z	7.6	1.7 U	12	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	3.0	3.1	1.7 U	6.6	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	4.0	8.1	1.7 U	10	1.7 U	1.7 U	0.36 J Z	1.7 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	3.4	4.1	1.7 U	11	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.2 J Z	1.7 U	1.7 U	1.4 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.8 U	3.8	1.7 U	10	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	18 U	19 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	18 U	19 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.8 U	2.4	1.7 U	1.5 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	18 U	19 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U

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				Sample Name	SL-540-SA5D-SB-0.0-0.5	SL-540-SA5D-SB-5.0-6.0	SL-541-SA5D-SB-0.0-0.5	SL-541-SA5D-SB-2.5-3.5	SL-542-SA5D-SB-0.0-0.5	SL-542-SA5D-SB-4.0-5.0	SL-543-SA5D-SB-0.0-0.5	SL-543-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/03/2013	09/03/2013	09/03/2013	09/03/2013	08/29/2013	08/29/2013	08/29/2013	08/29/2013
				SDG	PH100	PH100	PH100	PH100	PH098	PH098	PH098	PH098
				Start Depth	0	5	0	2.5	0	4	0	4
				End Depth	0.5	6	0.5	3.5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	6.3 J Z	17 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	19 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	0.37 J Z	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	2.1	1.8 U	1.8 U	1.7 U	1.2 J Z	1.7 U	1.5 J Z	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	19 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	18 U	18 U	17 U	18 U	18 U	18 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	2.5	1.8 U	0.95 J Z	1.7 U	1.0 J Z	1.7 U	1.6 J Z	1.8 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	2.8	1.8 U	1.8 U	1.7 U	1.4 J Z	1.7 U	1.9	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	0.88 J Z	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	19	1.8 U	0.81 J Z	1.7 U	1.2 J Z	1.7 U	2.6	1.8 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	0.78 J Z	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.1 J Z	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	19 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	19 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	2.0	1.8 U	1.8 U	1.7 U	1.5 J Z	1.7 U	1.5 J Z	1.8 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	19 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.5 J Z	1.8 U	1.8 U	1.7 U	0.98 J Z	1.7 U	1.1 J Z	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	0.99 J Z	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U

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				Sample Name	SL-544-SA5D-SB-0.0-0.5	SL-544-SA5D-SB-6.5-7.5	SL-545-SA5D-SB-0.0-0.5	SL-545-SA5D-SB-6.0-7.0	SL-546-SA5D-SB-0.0-0.5	SL-546-SA5D-SB-4.0-5.0	SL-547-SA5D-SB-0.0-0.5	SL-547-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/04/2013	09/04/2013	09/03/2013	09/03/2013	09/04/2013	09/04/2013	09/04/2013	09/04/2013
				SDG	PH101	PH101	PH100	PH100	PH101	PH101	PH101	PH101
				Start Depth	0	6.5	0	6	0	4	0	4
				End Depth	0.5	7.5	0.5	7	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	20 U	19 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	20 U	19 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.3 J Z	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	20 U	19 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	18 U	18 U	18 U	18 U	19 U	18 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.6 J Z	1.7 U	1.7 J Z	1.7 U	1.0 J Z	1.9 U	1.1 J Z	1.9 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.4 J Z	1.7 U	1.1 J Z	1.7 U	0.80 J Z	1.9 U	0.72 J Z	1.9 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7	1.7 U	3.0	0.85 J Z	1.3 J Z	1.9 U	1.4 J Z	1.9 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	20 U	19 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	20 U	19 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.4 J Z	1.7 U	0.88 J Z	1.7 U	0.70 J Z	1.9 U	0.71 J Z	1.9 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	20 U	19 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.9 U	1.8 U	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.7 U	1.0 J Z	1.7 U	0.88 J Z	1.9 U	1.8 U F	1.9 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	0.73 J Z	1.9 U	0.75 J Z	1.9 U

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R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-548-SA5D-SB-0.0-0.5	SL-548-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-0.0-0.5	SL-549-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-11.0-12.0	SL-550-SA5D-SB-0.0-0.5	SL-550-SA5D-SB-4.0-5.0	SL-850-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	FD
				Sample Date	08/26/2013	08/26/2013	11/12/2013	11/12/2013	11/12/2013	09/06/2013	09/06/2013	09/06/2013
				SDG	PH093	PH093	PH127	PH127	PH127	PH103	PH103	PH103
				Start Depth	0	4	0	4	11	0	4	4
				End Depth	0.5	5	0.5	5	12	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	26	26	19 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	20 U	19 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	129-00-0	Pyrene	µg/kg	3.3	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	20 U	19 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.1 J Z	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	19 U	18 U	19 U	19 U	18 U	19 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.0 J Z	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	3.5	1.1 J Z	1.3 J Z	1.9 U	1.9 U	0.74 J Z	1.9 U	1.9 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	3.4	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.1 J Z	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	3.5	0.48 J Z	1.1 J Z	1.9 U	1.9 U	0.88 J Z	1.9 U	1.9 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.6 J Z	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.6 J Z	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	20 U	19 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	20 U	19 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	2.8	1.1 J Z	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	20 U	19 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	2.0	0.87 J Z	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.4 J Z	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U

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				Sample Name	SL-551-SA5D-SB-0.0-0.5	SL-551-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-9.0-10.0	SL-551-SA5D-SB-14.0-15.0	SL-551-SA5D-SB-17.5-18.5	SL-552-SA5D-SB-0.0-0.5	SL-552-SA5D-SB-4.0-5.0	SL-553-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/06/2013	09/06/2013	09/12/2013
				SDG	PH107	PH107	PH107	PH107	PH107	PH103	PH103	PH107
				Start Depth	0	4	9	14	17.5	0	4	0
				End Depth	0.5	5	10	15	18.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	19 U	20 U	20 U	20 U	19 U	20 U	18 UJ FD
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	19 U	20 U	20 U	20 U	19 U	20 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.5 J Z	1.9 U	3.2
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	20 U	20 U	20 U	19 U	20 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.2 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	18 U	18 U	19 U	18 U	18 U	19 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	0.90 J Z
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.4 J Z	1.9 U	2.4
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8	1.9 U	3.2
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.2 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.6 J Z	1.9 U	2.7
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.6 J Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.6 J Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	20 U	20 U	20 U	19 U	20 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	20 U	20 U	20 U	19 U	20 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.4 J Z	1.9 U	2.0
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	20 U	20 U	20 U	19 U	20 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	2.1	1.7 U	1.9 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U B	1.8 U B	1.8 U B	1.9 U B	1.8 U B	1.9	1.9 U	1.7 U B
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.8 U	1.8 U	1.9 U	3.4	0.78 J Z	1.9 U	1.7 U

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				Sample Name	SL-853-SA5D-SB-0.0-0.5	SL-553-SA5D-SB-4.5-5.5	SL-554-SA5D-SB-0.0-0.5	SL-554-SA5D-SB-4.0-5.0	SL-554-SA5D-SB-7.0-8.0	SL-555-SA5D-SB-0.0-0.5	SL-555-SA5D-SB-4.0-5.0	SL-555-SA5D-SB-10.5-11.5
				Sample Type	FD	N	N	N	N	N	N	N
				Sample Date	09/12/2013	09/12/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013
				SDG	PH107	PH107	PH102	PH102	PH102	PH102	PH102	PH102
				Start Depth	0	4.5	0	4	7	0	4	10.5
				End Depth	0.5	5.5	0.5	5	8	0.5	5	11.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	17 J FD, Z	19 U	19 U	19 U	19 U	19 U	20 U F	20 U	
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	20 U	
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	129-00-0	Pyrene	µg/kg	2.2	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	20 U	
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.0 J Z	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	18 U	18 U	18 U	18 U	18 U	18 U	19 U	
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	0.72 J Z	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	2.3	1.7 U	0.92 J Z	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	206-44-0	Fluoranthene	µg/kg	2.3	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	0.77 J Z	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	218-01-9	Chrysene	µg/kg	2.2	1.7 U	1.1 J Z	1.8 U	1.8 U	0.76 J Z	1.8 U	1.8 U	
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.1 J Z	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.1 J Z	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	20 U	
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	20 U	
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.4 J Z	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	20 U	
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U B	1.7 U B	0.86 J Z	1.8 U F	1.8 U F	1.7 U	1.8 U	1.8 U	
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.7 U	0.73 J Z	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	

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				Sample Name	SL-556-SA5D-SB-0.0-0.5	SL-556-SA5D-SB-4.0-5.0	SL-556-SA5D-SB-11.0-12.0	SL-557-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-4.0-5.0	SL-559-SA5D-SB-0.0-0.5	SL-559-SA5D-SB-6.0-7.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/05/2013	09/05/2013	09/05/2013	09/24/2013	09/24/2013	09/24/2013	09/05/2013	09/05/2013
				SDG	PH102	PH102	PH102	PH113	PH113	PH113	PH102	PH102
				Start Depth	0	4	11	0	0	4	0	6
				End Depth	0.5	5	12	0.5	0.5	5	0.5	7
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	18 U	19 U	19 U	19 U	7.1 J Z	19 U	19 U	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.0 J Z	1.7 U	1.8 U	1.3 J Z	1.3 J Z	1.8 U	1.8 U	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	0.86 J Z	1.8 U	1.8 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	0.99 J Z	0.83 J Z	1.8 U	1.8	1.7 J Z	1.8 U	0.85 J Z	1.8 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.2 J Z	1.7 U	1.8 U	1.3 J Z	1.4 J Z	1.8 U	1.8 U	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	0.79 J Z	1.8 U	1.8 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.3 J Z	0.92 J Z	1.8 U	1.5 J Z	1.7 J Z	1.8 U	1.0 J Z	1.8 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	0.74 J Z	1.7 U	1.8 U	1.1 J Z	1.2 J Z	1.8 U	1.8 U	1.8 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 U	19 U	19 U	22	10 J Z	19 U	19 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U F	1.3 J Z	1.8 U	1.1 J Z	1.6 J Z	1.8 U	1.0 J Z	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	0.69 J Z	1.0 J Z	1.8 U	0.73 J Z	1.2 J Z	1.8 U	0.85 J Z	1.8 U

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				Sample Name	SL-560-SA5D-SB-0.0-0.5	SL-560-SA5D-SB-4.0-5.0	SL-860-SA5D-SB-4.0-5.0	SL-560-SA5D-SB-7.0-8.0	SL-561-SA5D-SB-0.0-0.5	SL-561-SA5D-SB-4.0-5.0	SL-561-SA5D-SB-9.0-10.0	SL-562-SA5D-SB-0.0-0.5
				Sample Type	N	N	FD	N	N	N	N	N
				Sample Date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	10/08/2013	10/08/2013	10/08/2013	09/25/2013
				SDG	PH127	PH127	PH127	PH127	PH124	PH124	PH124	PH114
				Start Depth	0	4	4	7	0	4	9	0
				End Depth	0.5	5	5	8	0.5	5	10	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	19 U	19 U	19 U	9.4 J Z	20 U	11 J Z	8.1 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	2.6	1.8 U	1.8 U	1.7 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	1.4 J Z	1.8 U	1.8 U	0.95 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	1.2 J Z	1.8 U	1.8 U	0.71 J Z
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	3.5	1.8 U	1.8 U	2.1
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	3.4	1.8 U	1.8 U	1.5 J Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	0.42 J Z	1.8 U	1.8 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	3.3	0.54 J Z	0.45 J Z	2.2
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	1.4 J Z	1.8 U	1.8 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	1.4 J Z	1.8 U	1.8 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	2.9	1.8 U	1.8 U	1.9
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	19 U	19 U	19 U	27	20 U	19 U	33
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	1.2 J Z	1.8 U	1.8 U	0.92 J Z
8270D SIM	91-20-3	Naphthalene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	4.2	0.93 J Z	1.0 J Z	2.9
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.9 U	1.7 U	1.7 U	1.7 U	2.3	0.75 J Z	1.8 U	1.6 J Z

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				Sample Name	SL-562-SA5D-SB-4.0-5.0	SL-563-SA5D-SB-0.0-0.5	SL-563-SA5D-SB-4.0-5.0	SL-863-SA5D-SB-4.0-5.0	SL-564-SA5D-SB-0.0-0.5	SL-564-SA5D-SB-4.0-5.0	SL-565-SA5D-SB-0.0-0.5	SL-865-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	N	N	FD
				Sample Date	09/25/2013	09/25/2013	09/25/2013	09/25/2013	10/01/2013	10/01/2013	09/24/2013	09/24/2013
				SDG	PH114	PH114	PH114	PH114	PH119	PH119	PH113	PH113
				Start Depth	4	0	4	4	0	4	0	0
				End Depth	5	0.5	5	5	0.5	5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	19 UJ FD	11 J FD, Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	32	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	4.7	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	6.5	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.5 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.0 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	8.2	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	30	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	27	19 U	19 U	19 U	20 U	19 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	16	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	4.7	1.8 U	5.6 J FD	1.8 UJ FD	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	22	1.2 J Z	7.8 J FD	1.8 UJ FD	1.8 U	1.8 U	1.7 UJ FD	0.71 J FD, Z
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	9.5	1.8 U	12 J FD	1.8 UJ FD	1.8 U	1.8 U	1.7 U	1.7 U

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				Sample Name	SL-566-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-4.0-5.0	SL-567-SA5D-SB-0.0-0.5	SL-567-SA5D-SB-3.5-4.5	SL-568-SA5D-SB-0.0-0.5	SL-568-SA5D-SB-2.5-3.5	SL-868-SA5D-SB-2.5-3.5	SL-569-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	FD	N
				Sample Date	09/24/2013	09/24/2013	10/07/2013	10/07/2013	09/23/2013	09/23/2013	09/23/2013	09/25/2013
				SDG	PH113	PH113	PH123	PH123	PH112	PH112	PH112	PH114
				Start Depth	0	4	0	3.5	0	2.5	2.5	0
				End Depth	0.5	5	0.5	4.5	0.5	3.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	9.1 J Z	19 U	190 U	20 U	180 U	19 U	18 U	18 U	
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	18 U	19 U	190 U	20 U	180 U	19 U	18 U	18 U	
8270D SIM	120-12-7	Anthracene	µg/kg	0.70 J Z	1.8 U	17 U	1.8 U	17 U	1.8 U	1.7 U	1.7 U	
8270D SIM	129-00-0	Pyrene	µg/kg	1.1 J Z	1.8 U	58	1.8 U	35	1.9	1.4 J Z	1.7 U	
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	19 U	190 U	20 U	180 U	19 U	18 U	18 U	
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.8 U	20	1.8 U	18	0.87 J Z	1.2 J Z	1.7 U	
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	18 U	180 U	18 U	39 J Z	18 U	17 U	17 U	
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.8 U	19	1.8 U	11 J Z	1.8 UJ FD	0.76 J FD, Z	1.7 U	
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.3 J Z	1.8 U	46	0.88 J Z	41	2.1	1.4 J Z	1.7 U	
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.1 J Z	1.8 U	60	1.8 U	37	2.1	1.4 J Z	1.7 U	
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.8 U	22	1.8 U	17	1.2 J FD, Z	1.7 UJ FD	1.7 U	
8270D SIM	208-96-8	Acenaphthylene	µg/kg	0.45 J Z	1.8 U	17 U	1.8 U	17 U	1.8 U	1.7 U	1.7 U	
8270D SIM	218-01-9	Chrysene	µg/kg	1.1 J Z	1.8 U	49	1.0 J Z	32	1.5 J Z	1.1 J Z	0.99 J Z	
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.8 U	32	1.8 U	22	1.2 J Z	0.98 J Z	1.7 U	
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.8 U	17 U	1.8 U	17 U	1.8 U	1.7 U	1.7 U	
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.8 U	34	1.8 U	16 J Z	0.94 J Z	0.82 J Z	1.7 U	
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	17 U	1.8 U	17 U	1.8 U	1.7 U	1.7 U	
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.8 U	17 U	1.8 U	17 U	1.8 U	1.7 U	1.7 U	
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 U	19 U	190 U	20 U	180 U	19 UJ Q	18 U	18 U	
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	19 U	190 U	20 U	180 U	19 U	18 U	18 U	
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.2 J Z	1.8 U	30	1.8 U	17	0.93 J Z	0.86 J Z	1.7 U	
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	10 J Z	19 U	190 U	9.6 J Z	110 J Z	19 UJ FD	7.5 J FD, Z	29	
8270D SIM	86-73-7	Fluorene	µg/kg	0.70 J Z	1.8 U	17 U	1.8 U	17 U	1.8 U	1.7 U	1.7 U	
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.1 J Z	1.8 U	17 U	1.8 U	17 U	1.8 U	1.7 U	1.7 U	
8270D SIM	91-20-3	Naphthalene	µg/kg	3.0	0.91 J Z	17 U	1.0 J Z	17 U	1.8 U	1.7 U	0.79 J Z	
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.5 J Z	1.8 U	17 U	1.8 U	17 U	1.8 U	1.7 U	1.7 U	

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				Sample Name	SL-570-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-4.0-5.0	SL-571-SA5D-SB-0.0-0.5	SL-573-SA5D-SB-0.0-0.5	SL-574-SA5D-SB-0.0-0.5	SL-575-SA5D-SB-0.0-0.5	SL-575-SA5D-SB-3.0-4.0	SL-577-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	10/01/2013	10/01/2013	09/23/2013	09/25/2013	09/23/2013	10/07/2013	10/07/2013	09/19/2013
				SDG	PH119	PH119	PH112	PH114	PH112	PH123	PH123	PH111
				Start Depth	0	4	0	0	0	0	3	0
				End Depth	0.5	5	0.5	0.5	0.5	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	20 U	19 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	20 U	19 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	0.41 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	4.0	1.7 U	0.98 J Z	1.7 U	0.71 J Z	1.7 U	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	20 U	19 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.8 U	1.7 U	0.69 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	19 U	18 U	17 U	17 U	17 U	18 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	2.4	1.7 U	1.3 J Z	1.7 U	1.0 J Z	1.7 U	1.7 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	4.4	1.7 U	1.1 J Z	1.7 U	0.90 J Z	1.7 U	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.0 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	2.6	1.7 U	1.2 J Z	1.7 U	1.4 J Z	0.49 J Z	1.7 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.5 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.0 J Z	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	2.2	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	20 U	19 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	20 U	19 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.8	1.7 U	1.1 J Z	1.7 U	0.71 J Z	1.7 U	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	20 U	57	18 U	18 U	18 U	19 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.1 J Z	0.79 J Z	1.7	0.69 J Z	1.1 J Z	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	1.1 J Z	1.7 U	0.77 J Z	1.7 U	0.81 J Z	1.7 U	1.7 U

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				Sample Name	SL-578-SA5D-SB-0.0-0.5	SL-581-SA5D-SB-0.0-0.5	SL-581-SA5D-SB-2.5-3.5	SL-582-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-4.0-5.0	SL-882-SA5D-SB-4.0-5.0	SL-582-SA5D-SB-10.0-11.0	SL-583-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	FD	N	N
				Sample Date	09/19/2013	09/19/2013	09/19/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/23/2013
				SDG	PH111	PH111	PH111	PH118	PH118	PH118	PH118	PH112
				Start Depth	0	0	2.5	0	4	4	10	0
				End Depth	0.5	0.5	3.5	0.5	5	5	11	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	130	12 J Z	19 U	19 U	20 U	20 U	20 U	12 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	20 U	20 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	2.8	0.90 J Z	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	2.2
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	20 U	20 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.1 J Z	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	1.2 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	17 U	18 U	18 U	19 U	19 U	19 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	0.86 J Z	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	0.89 J Z
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	2.6	0.98 J Z	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	3.0
8270D SIM	206-44-0	Fluoranthene	µg/kg	3.7	1.1 J Z	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	2.1
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	0.89 J Z	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	0.84 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	3.0	1.1 J Z	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	2.6
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.2 J Z	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	1.0 J Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.2 J Z	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	0.95 J Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	20 U	20 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	20 U	20 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	2.6	0.87 J Z	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	2.0
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	20 U	20 U	26
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.9 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.4 J Z	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	0.82 J Z	0.92 J Z
8270D SIM	91-20-3	Naphthalene	µg/kg	1.9	1.7	0.74 J Z	0.91 J Z	1.9 U	1.9 U	0.99 J Z	3.7
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	2.9	1.6 J Z	1.8 U	1.7 U	1.9 U	1.9 U	1.0 J Z	1.5 J Z

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				Sample Name	SL-589-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-4.0-5.0	SL-607-SA5D-SB-0.0-0.5	SL-607-SA5D-SB-4.0-5.0	SL-608-SA5D-SB-0.0-0.5	SL-608-SA5D-SB-4.0-5.0	SL-609-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N
				Sample Date	10/02/2013	10/02/2013	10/01/2013	10/01/2013	10/03/2013	10/03/2013	11/15/2013
				SDG	PH120	PH120	PH119	PH119	PH122	PH122	PH130
				Start Depth	0	4	0	4	0	4	0
				End Depth	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	20 U	19 U	21 U	19 U	20 U	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	20 U	19 U	21 U	19 U	20 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	1.3 J Z	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	20 U	19 U	21 U	19 U	20 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	19 U	18 U	20 U	18 U	19 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	1.0 J Z	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.4 J Z	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	1.0 J Z	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	20 U	19 U	21 U	19 U	20 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	20 U	19 U	21 U	19 U	20 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.1 J Z	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	20 U	19 U	21 U	19 U	20 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.8 U	0.82 J Z	1.2 J Z	1.8 U	1.8 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U

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				Sample Name	SL-501-SA5D-SB-0.0-0.5	SL-501-SA5D-SB-4.0-5.0	SL-501-SA5D-SB-9.0-10.0	SL-501-SA5D-SB-14.0-15.0	SL-501-SA5D-SB-19.0-20.0	SL-501-SA5D-SB-24.0-25.0	SL-501-SA5D-SB-28.0-29.0	SL-502-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	10/03/2013
				SDG	PH109	PH109	PH109	PH109	PH109	PH109	PH109	PH122
				Start Depth	0	4	9	14	19	24	28	0
				End Depth	0.5	5	10	15	20	25	29	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	20 U	19 U	19 U	19 U	18 U	18 U	7.4 J Z
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	36 U	38 U	36 U	36 U	37 U	36 U	35 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	36 U	38 U	36 U	36 U	37 U	36 U	35 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	36 U	38 U	36 U	36 U	37 U	36 U	35 U	34 U

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				Sample Name	SL-502-SA5D-SB-6.5-7.5	SL-503-SA5D-SB-0.0-0.5	SL-503-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-0.0-0.5	SL-504-SA5D-SB-4.0-5.0	SL-804-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-9.0-10.0	SL-504-SA5D-SB-16.0-17.0
				Sample Type	N	N	N	N	N	FD	N	N
				Sample Date	10/03/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013
				SDG	PH122	PH109	PH109	PH109	PH109	PH109	PH109	PH109
				Start Depth	6.5	0	4	0	4	4	9	16
				End Depth	7.5	0.5	5	0.5	5	5	10	17
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	19 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	19 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	19 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	19 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	36 U	38 U	37 U	38 U	37 U	36 U	36 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	19 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	36 U	38 U	37 U	38 U	37 U	36 U	36 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	19 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	19 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	19 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	19 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	36 U	38 U	37 U	38 U	37 U	36 U	36 U

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				Sample Name	SL-505-SA5D-SB-0.0-0.5	SL-505-SA5D-SB-4.0-5.0	SL-505-SA5D-SB-9.0-10.0	SL-505-SA5D-SB-14.0-15.0	SL-505-SA5D-SB-19.0-20.0	SL-506-SA5D-SB-0.0-0.5	SL-506-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/11/2013	09/11/2013	10/03/2013
				SDG	PH108	PH108	PH108	PH108	PH108	PH106	PH106	PH122
				Start Depth	0	4	9	14	19	0	4	0
				End Depth	0.5	5	10	15	20	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	7.2 J Z
8082A	11097-69-1	Aroclor 1254	µg/kg	30	18 J Z	19 U	19 U	19 U	19 U	20 U	10 J Z
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	36 U	37 U	36 U	37 U	36 U	38 U	13 J Z
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	36 U	37 U	36 U	37 U	36 U	38 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	36 U	37 U	36 U	37 U	36 U	38 U	35 U

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				Sample Name	SL-507-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-10.5-11.5	SL-508-SA5D-SB-0.0-0.5	SL-508-SA5D-SB-4.0-5.0	SL-508-SA5D-SB-9.0-10.0	SL-508-SA5D-SB-14.0-15.0	SL-508-SA5D-SB-19.0-20.0	SL-508-SA5D-SB-23.0-24.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013
				SDG	PH122	PH122	PH122	PH122	PH122	PH122	PH122	PH122
				Start Depth	4	10.5	0	4	9	14	19	23
				End Depth	5	11.5	0.5	5	10	15	20	24
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	18 U	18 U	20 U	19 U	19 U	19 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	18 U	22	20 U	19 U	19 U	8.9 J Z	7.8 J Z
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	18 U	18 U	20 U	19 U	19 U	19 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	18 U	18 U	20 U	19 U	19 U	19 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	35 U	35 U	38 U	37 U	37 U	36 U	35 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	18 U	18 U	20 U	19 U	19 U	19 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	35 U	35 U	38 U	37 U	37 U	36 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	18 U	18 U	20 U	19 U	19 U	19 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	18 U	18 U	20 U	19 U	19 U	19 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	18 U	18 U	20 U	19 U	19 U	19 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	18 U	18 U	20 U	19 U	19 U	19 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	35 U	35 U	38 U	37 U	37 U	36 U	35 U

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				Sample Name	SL-509-SA5D-SB-0.0-0.5	SL-509-SA5D-SB-4.0-5.0	SL-510-SA5D-SB-0.0-0.5	SL-510-SA5D-SB-4.0-5.0	SL-512-SA5D-SB-0.0-0.5	SL-512-SA5D-SB-4.0-5.0	SL-513-SA5D-SB-0.0-0.5	SL-513-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/26/2013	09/26/2013	09/18/2013	09/18/2013
				SDG	PH110	PH110	PH110	PH110	PH116	PH116	PH110	PH110
				Start Depth	0	4	0	4	0	4	0	4
				End Depth	0.5	5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	20 U	14 U	20 U	18 U	19 U	19 U	20 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	20 U	14 U	20 U	18 U	19 U	19 U	20 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	20 U	14 U	20 U	18 U	19 U	19 U	20 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	20 U	14 U	20 U	18 U	19 U	19 U	20 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	38 U	27 U	38 U	35 U	38 U	37 U	38 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	20 U	14 U	20 U	18 U	19 U	19 U	20 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	38 U	27 U	38 U	35 U	38 U	37 U	38 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	20 U	14 U	20 U	18 U	19 U	19 U	20 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	20 U	14 U	20 U	18 U	19 U	19 U	20 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	20 U	14 U	20 U	18 U	19 U	19 U	20 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	20 U	14 U	20 U	18 U	19 U	19 U	20 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	38 U	27 U	38 U	35 U	38 U	37 U	38 U

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				Sample Name	SL-513-SA5D-SB-9.0-10.0	SL-513-SA5D-SB-16.0-17.0	SL-514-SA5D-SB-0.0-0.5	SL-514-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-0.0-0.5	SL-815-SA5D-SB-0.0-0.5	SL-515-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-9.0-10.0
				Sample Type	N	N	N	N	N	FD	N	N
				Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013
				SDG	PH110	PH110	PH110	PH110	PH104	PH104	PH104	PH104
				Start Depth	9	16	0	4	0	0	4	9
				End Depth	10	17	0.5	5	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	20 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	20 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	20 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	20 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	36 U	38 U	38 U	36 U	36 U	38 U	39 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	20 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	36 U	38 U	38 U	36 U	36 U	38 U	39 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	20 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	20 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	20 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	20 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	36 U	38 U	38 U	36 U	36 U	38 U	39 U

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J-Result is an estimated value
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				Sample Name	SL-515-SA5D-SB-22.0-23.0	SL-516-SA5D-SB-0.0-0.5	SL-516-SA5D-SB-4.0-5.0	SL-816-SA5D-SB-4.0-5.0	SL-516-SA5D-SB-9.0-10.0	SL-516-SA5D-SB-13.0-14.0	SL-518-SA5D-SB-0.0-0.5	SL-518-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	09/09/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	09/10/2013	09/10/2013
				SDG	PH104	PH130	PH130	PH130	PH130	PH130	PH105	PH105
				Start Depth	22	0	4	4	9	13	0	4
				End Depth	23	0.5	5	5	10	14	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	20 U	18 U	19 U	19 U	19 U	17 U	18 U	20 U
8082A	11097-69-1	Aroclor 1254	µg/kg	20 U	18 U	19 U	19 U	19 U	17 U	18 U	20 U
8082A	11100-14-4	Aroclor 1268	µg/kg	20 U	18 U	19 U	19 U	19 U	17 U	18 U	20 U
8082A	11104-28-2	Aroclor 1221	µg/kg	20 U	18 U	19 U	19 U	19 U	17 U	18 U	20 U
8082A	11126-42-4	Aroclor 5460	µg/kg	38 U	36 U	36 U	37 U	36 U	34 U	36 U	38 U
8082A	11141-16-5	Aroclor 1232	µg/kg	20 U	18 U	19 U	19 U	19 U	17 U	18 U	20 U
8082A	12642-23-8	Aroclor 5442	µg/kg	38 U	36 U	36 U	37 U	36 U	34 U	36 U	38 U
8082A	12672-29-6	Aroclor 1248	µg/kg	20 U	18 U	19 U	19 U	19 U	17 U	18 U	20 U
8082A	12674-11-2	Aroclor 1016	µg/kg	20 U	18 U	19 U	19 U	19 U	17 U	18 U	20 U
8082A	37324-23-5	Aroclor 1262	µg/kg	20 U	18 U	19 U	19 U	19 U	17 U	18 U	20 U
8082A	53469-21-9	Aroclor 1242	µg/kg	20 U	18 U	19 U	19 U	19 U	17 U	18 U	20 U
8082A	63496-31-1	Aroclor 5432	µg/kg	38 U	36 U	36 U	37 U	36 U	34 U	36 U	38 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-518-SA5D-SB-9.0-10.0	SL-518-SA5D-SB-15.0-16.0	SL-519-SA5D-SB-0.0-0.5	SL-519-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-0.0-0.5	SL-520-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-8.0-9.0	SL-521-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/10/2013	09/10/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013
				SDG	PH105	PH105	PH106	PH106	PH106	PH106	PH106	PH106
				Start Depth	9	15	0	4	0	4	8	0
				End Depth	10	16	0.5	5	0.5	5	9	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	20 U	19 U	18 U	19 U	19 U	20 U	19 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	20 U	19 U	18 U	19 U	19 U	20 U	19 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	20 U	19 U	18 U	19 U	19 U	20 U	19 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	20 U	19 U	18 U	19 U	19 U	20 U	19 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	38 U	36 U	36 U	37 U	36 U	39 U	37 U	36 U
8082A	11141-16-5	Aroclor 1232	µg/kg	20 U	19 U	18 U	19 U	19 U	20 U	19 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	38 U	36 U	36 U	37 U	36 U	39 U	37 U	36 U
8082A	12672-29-6	Aroclor 1248	µg/kg	20 U	19 U	18 U	19 U	19 U	20 U	19 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	20 U	19 U	18 U	19 U	19 U	20 U	19 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	20 U	19 U	18 U	19 U	19 U	20 U	19 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	20 U	19 U	18 U	19 U	19 U	20 U	19 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	38 U	36 U	36 U	37 U	36 U	39 U	37 U	36 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-521-SA5D-SB-5.5-6.5	SL-522-SA5D-SB-0.0-0.5	SL-522-SA5D-SB-6.0-7.0	SL-523-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-5.5-6.5	SL-824-SA5D-SB-5.5-6.5	SL-525-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	FD	N
				Sample Date	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/04/2013	09/04/2013	09/04/2013	09/03/2013
				SDG	PH106	PH106	PH106	PH106	PH101	PH101	PH101	PH100
				Start Depth	5.5	0	6	0	0	5.5	5.5	0
				End Depth	6.5	0.5	7	0.5	0.5	6.5	6.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	19 U	17 U	18 U	18 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	19 U	17 U	18 U	18 U	18 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	19 U	17 U	18 U	18 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	19 U	17 U	18 U	18 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	36 U	36 U	34 U	34 U	35 U	35 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	19 U	17 U	18 U	18 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	36 U	36 U	34 U	34 U	35 U	35 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	19 U	17 U	18 U	18 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	19 U	17 U	18 U	18 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	19 U	17 U	18 U	18 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	19 U	17 U	18 U	18 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	36 U	36 U	34 U	34 U	35 U	35 U	34 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-525-SA5D-SB-2.5-3.5	SL-526-SA5D-SB-0.0-0.5	SL-526-SA5D-SB-3.0-4.0	SL-527-SA5D-SB-0.0-0.5	SL-527-SA5D-SB-4.0-5.0	SL-528-SA5D-SB-0.0-0.5	SL-528-SA5D-SB-2.5-3.5	SL-529-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/03/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013	09/03/2013	09/11/2013
				SDG	PH100	PH098	PH098	PH100	PH100	PH100	PH100	PH106
				Start Depth	2.5	0	3	0	4	0	2.5	0
				End Depth	3.5	0.5	4	0.5	5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	18 U	17 U	18 U	17 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	18 U	17 U	18 U	6.3 J Z	18 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	18 U	17 U	18 U	17 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 UJ C	18 UJ C	17 U	18 U	17 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	34 U	35 U	33 U	36 U	34 U	35 U	35 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 UJ C	18 UJ C	17 U	18 U	17 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	34 UJ C	35 UJ C	33 U	36 U	34 U	35 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	18 U	17 U	18 U	17 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 UJ C	18 UJ C	17 U	18 U	17 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	18 U	17 U	18 U	17 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	18 U	17 U	18 U	17 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	34 U	35 U	33 U	36 U	34 U	35 U	35 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-529-SA5D-SB-3.0-4.0	SL-530-SA5D-SB-0.0-0.5	SL-530-SA5D-SB-2.5-3.5	SL-531-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-2.5-3.5	SL-533-SA5D-SB-0.0-0.5	SL-533-SA5D-SB-2.5-3.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/11/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013
				SDG	PH106	PH099	PH099	PH099	PH099	PH099	PH099	PH099
				Start Depth	3	0	2.5	0	0	2.5	0	2.5
				End Depth	4	0.5	3.5	0.5	0.5	3.5	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	17 U	18 U	18 U	17 U	18 U	17 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	17 U	18 U	18 U	17 U	18 U	6.6 J Z	19 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	17 U	18 U	18 U	17 U	18 U	17 U	19 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	17 U	18 U	18 U	17 U	18 U	17 U	19 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	34 U	34 U	34 U	34 U	35 U	34 U	36 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	17 U	18 U	18 U	17 U	18 U	17 U	19 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	34 U	34 U	34 U	34 U	35 U	34 U	36 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	17 U	18 U	18 U	17 U	18 U	17 U	19 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	17 U	18 U	18 U	17 U	18 U	17 U	19 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	17 U	18 U	18 U	17 U	18 U	17 U	19 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	17 U	18 U	18 U	17 U	18 U	17 U	19 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	34 U	34 U	34 U	34 U	35 U	34 U	36 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-534-SA5D-SB-0.0-0.5	SL-534-SA5D-SB-6.5-7.5	SL-535-SA5D-SB-0.0-0.5	SL-835-SA5D-SB-0.0-0.5	SL-535-SA5D-SB-2.0-3.0	SL-536-SA5D-SB-0.0-0.5	SL-536-SA5D-SB-3.5-4.5	SL-537-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/28/2013	08/28/2013	08/28/2013
				SDG	PH099	PH099	PH099	PH099	PH099	PH095	PH095	PH095
				Start Depth	0	6.5	0	0	2	0	3.5	0
				End Depth	0.5	7.5	0.5	0.5	3	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	18 U	17 U	18 U	18 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	18 U	17 U	18 U	18 U	18 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	18 U	17 U	18 U	18 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	18 U	17 U	18 U	18 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	35 U	34 U	34 U	34 U	35 U	36 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	18 U	17 U	18 U	18 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	35 U	34 U	34 U	34 U	35 U	36 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	18 U	17 U	18 U	18 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	18 U	17 U	18 U	18 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	18 U	17 U	18 U	18 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	18 U	17 U	18 U	18 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	35 U	34 U	34 U	34 U	35 U	36 U	34 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-537-SA5D-SB-2.5-3.5	SL-538-SA5D-SB-0.0-0.5	SL-538-SA5D-SB-3.0-4.0	SL-539-SA5D-SB-0.0-0.5	SL-539-SA5D-SB-3.0-4.0	SL-540-SA5D-SB-0.0-0.5	SL-540-SA5D-SB-5.0-6.0	SL-541-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	08/28/2013	08/28/2013	08/28/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013
				SDG	PH095	PH095	PH095	PH098	PH098	PH100	PH100	PH100
				Start Depth	2.5	0	3	0	3	0	5	0
				End Depth	3.5	0.5	4	0.5	4	0.5	6	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	17 U	18 U	18 U	18 U	18 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	17 U	18 U	18 U	18 U	18 U	18 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	17 U	18 U	18 U	18 U	18 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	17 U	18 UJ C	18 UJ C	18 U	18 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	35 U	34 U	34 U	34 U	36 U	35 U	35 U	35 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	17 U	18 UJ C	18 UJ C	18 U	18 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	35 U	34 U	34 UJ C	34 UJ C	36 U	35 U	35 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	17 U	18 U	18 U	18 U	18 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	17 U	18 UJ C	18 UJ C	18 U	18 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	17 U	18 U	18 U	18 U	18 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	17 U	18 U	18 U	18 U	18 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	35 U	34 U	34 U	34 U	36 U	35 U	35 U	35 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-541-SA5D-SB-2.5-3.5	SL-542-SA5D-SB-0.0-0.5	SL-542-SA5D-SB-4.0-5.0	SL-543-SA5D-SB-0.0-0.5	SL-543-SA5D-SB-4.0-5.0	SL-544-SA5D-SB-0.0-0.5	SL-544-SA5D-SB-6.5-7.5	SL-545-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/03/2013	08/29/2013	08/29/2013	08/29/2013	08/29/2013	09/04/2013	09/04/2013	09/03/2013
				SDG	PH100	PH098	PH098	PH098	PH098	PH101	PH101	PH100
				Start Depth	2.5	0	4	0	4	0	6.5	0
				End Depth	3.5	0.5	5	0.5	5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	18 U	18 U	19 U	18 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	18 U	18 U	19 U	18 U	18 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	18 U	18 U	19 U	18 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 UJ C	18 UJ C	18 UJ C	19 UJ C	18 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	36 U	35 U	35 U	37 U	34 U	35 U	35 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 UJ C	18 UJ C	18 UJ C	19 UJ C	18 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	36 UJ C	35 UJ C	35 UJ C	37 UJ C	34 U	35 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	18 U	18 U	19 U	18 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 UJ C	18 UJ C	18 UJ C	19 UJ C	18 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	18 U	18 U	19 U	18 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	18 U	18 U	19 U	18 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	36 U	35 U	35 U	37 U	34 U	35 U	35 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-545-SA5D-SB-6.0-7.0	SL-546-SA5D-SB-0.0-0.5	SL-546-SA5D-SB-4.0-5.0	SL-547-SA5D-SB-0.0-0.5	SL-547-SA5D-SB-4.0-5.0	SL-548-SA5D-SB-0.0-0.5	SL-548-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/03/2013	09/04/2013	09/04/2013	09/04/2013	09/04/2013	08/26/2013	08/26/2013	11/12/2013
				SDG	PH100	PH101	PH101	PH101	PH101	PH093	PH093	PH127
				Start Depth	6	0	4	0	4	0	4	0
				End Depth	7	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	19 U	18 U	19 U	17 U	19 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	19 U	18 U	19 U	17 U	19 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	19 U	18 U	19 U	17 U	19 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	19 U	18 U	19 U	17 U	19 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	34 U	37 U	35 U	37 U	33 U	37 U	35 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	19 U	18 U	19 U	17 U	19 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	34 U	37 U	35 U	37 U	33 U	37 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	19 U	18 U	19 U	17 U	19 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	19 U	18 U	19 U	17 U	19 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	19 U	18 U	19 U	17 U	19 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	19 U	18 U	19 U	17 U	19 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	34 U	37 U	35 U	37 U	33 U	37 U	35 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-549-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-11.0-12.0	SL-550-SA5D-SB-0.0-0.5	SL-550-SA5D-SB-4.0-5.0	SL-850-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-0.0-0.5	SL-551-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-9.0-10.0
				Sample Type	N	N	N	N	FD	N	N	N
				Sample Date	11/12/2013	11/12/2013	09/06/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013
				SDG	PH127	PH127	PH103	PH103	PH103	PH107	PH107	PH107
				Start Depth	4	11	0	4	4	0	4	9
				End Depth	5	12	0.5	5	5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	19 U	18 U	19 U	19 U	18 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	19 U	18 U	19 U	19 U	18 U	18 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	19 U	18 U	19 U	19 U	18 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	19 U	18 U	19 U	19 U	18 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	37 U	34 U	37 U	37 U	34 U	35 U	36 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	19 U	18 U	19 U	19 U	18 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	37 U	34 U	37 U	37 U	34 U	35 U	36 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	19 U	18 U	19 U	19 U	18 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	19 U	18 U	19 U	19 U	18 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	19 U	18 U	19 U	19 U	18 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	19 U	18 U	19 U	19 U	18 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	37 U	34 U	37 U	37 U	34 U	35 U	36 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-551-SA5D-SB-14.0-15.0	SL-551-SA5D-SB-17.5-18.5	SL-552-SA5D-SB-0.0-0.5	SL-552-SA5D-SB-4.0-5.0	SL-553-SA5D-SB-0.0-0.5	SL-853-SA5D-SB-0.0-0.5	SL-553-SA5D-SB-4.5-5.5	SL-554-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	FD	N	N
				Sample Date	09/12/2013	09/12/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013	09/05/2013
				SDG	PH107	PH107	PH103	PH103	PH107	PH107	PH107	PH102
				Start Depth	14	17.5	0	4	0	0	4.5	0
				End Depth	15	18.5	0.5	5	0.5	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	18 U	18 U	19 U	17 U	17 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	18 U	18 U	19 U	17 U	17 U	18 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	18 U	18 U	19 U	17 U	17 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	18 U	18 U	19 U	17 U	17 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	36 U	35 U	37 U	33 U	33 U	35 U	35 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	18 U	18 U	19 U	17 U	17 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	36 U	35 U	37 U	33 U	33 U	35 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	18 U	18 U	19 U	17 U	17 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	18 U	18 U	19 U	17 U	17 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	18 U	18 U	19 U	17 U	17 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	18 U	18 U	19 U	17 U	17 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	36 U	35 U	37 U	33 U	33 U	35 U	35 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-554-SA5D-SB-4.0-5.0	SL-554-SA5D-SB-7.0-8.0	SL-555-SA5D-SB-0.0-0.5	SL-555-SA5D-SB-4.0-5.0	SL-555-SA5D-SB-10.5-11.5	SL-556-SA5D-SB-0.0-0.5	SL-556-SA5D-SB-4.0-5.0	SL-556-SA5D-SB-11.0-12.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013
				SDG	PH102	PH102	PH102	PH102	PH102	PH102	PH102	PH102
				Start Depth	4	7	0	4	10.5	0	4	11
				End Depth	5	8	0.5	5	11.5	0.5	5	12
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	18 U	18 U	19 U	17 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	18 U	18 U	19 U	17 U	18 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	18 U	18 U	19 U	17 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	18 U	18 U	19 U	17 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	36 U	34 U	36 U	37 U	34 U	35 U	35 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	18 U	18 U	19 U	17 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	36 U	34 U	36 U	37 U	34 U	35 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	18 U	18 U	19 U	17 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	18 U	18 U	19 U	17 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	18 U	18 U	19 U	17 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	18 U	18 U	19 U	17 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	36 U	34 U	36 U	37 U	34 U	35 U	35 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-557-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-4.0-5.0	SL-559-SA5D-SB-0.0-0.5	SL-559-SA5D-SB-6.0-7.0	SL-560-SA5D-SB-0.0-0.5	SL-560-SA5D-SB-4.0-5.0	SL-860-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	FD
				Sample Date	09/24/2013	09/24/2013	09/24/2013	09/05/2013	09/05/2013	11/12/2013	11/12/2013	11/12/2013
				SDG	PH113	PH113	PH113	PH102	PH102	PH127	PH127	PH127
				Start Depth	0	0	4	0	6	0	4	4
				End Depth	0.5	0.5	5	0.5	7	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	35 U	35 U	35 U	35 U	36 U	34 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	35 U	35 U	35 U	35 U	36 U	34 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	35 U	35 U	35 U	35 U	36 U	34 U	34 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-560-SA5D-SB-7.0-8.0	SL-561-SA5D-SB-0.0-0.5	SL-561-SA5D-SB-4.0-5.0	SL-561-SA5D-SB-9.0-10.0	SL-562-SA5D-SB-0.0-0.5	SL-562-SA5D-SB-4.0-5.0	SL-563-SA5D-SB-0.0-0.5	SL-563-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	11/12/2013	10/08/2013	10/08/2013	10/08/2013	09/25/2013	09/25/2013	09/25/2013	09/25/2013
				SDG	PH127	PH124	PH124	PH124	PH114	PH114	PH114	PH114
				Start Depth	7	0	4	9	0	4	0	4
				End Depth	8	0.5	5	10	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	17 U	18 U	19 U	18 U	18 U	19 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	17 U	18 U	19 U	18 U	18 U	19 U	18 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	17 U	18 U	19 U	18 U	18 U	19 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	17 U	18 U	19 U	18 U	18 U	19 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	35 U	36 U	35 U	35 U	37 U	35 U	36 U
8082A	11141-16-5	Aroclor 1232	µg/kg	17 U	18 U	19 U	18 U	18 U	19 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	35 U	36 U	35 U	35 U	37 U	35 U	36 U
8082A	12672-29-6	Aroclor 1248	µg/kg	17 U	18 U	19 U	18 U	18 U	19 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	17 U	18 U	19 U	18 U	18 U	19 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	17 U	18 U	19 U	18 U	18 U	19 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	17 U	18 U	19 U	18 U	18 U	19 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	35 U	36 U	35 U	35 U	37 U	35 U	36 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-863-SA5D-SB-4.0-5.0	SL-564-SA5D-SB-0.0-0.5	SL-564-SA5D-SB-4.0-5.0	SL-565-SA5D-SB-0.0-0.5	SL-865-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-4.0-5.0	SL-567-SA5D-SB-0.0-0.5
				Sample Type	FD	N	N	N	FD	N	N	N
				Sample Date	09/25/2013	10/01/2013	10/01/2013	09/24/2013	09/24/2013	09/24/2013	09/24/2013	10/07/2013
				SDG	PH114	PH119	PH119	PH113	PH113	PH113	PH113	PH123
				Start Depth	4	0	4	0	0	0	4	0
				End Depth	5	0.5	5	0.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	19 U	18 U	18 U	18 U	18 U	18 U	
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	19 U	18 U	18 U	18 U	18 U	23	
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	19 U	18 U	18 U	18 U	18 U	18 U	
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	19 U	18 U	18 U	18 U	18 U	18 U	
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	35 U	36 U	35 U	35 U	34 U	35 U	34 U	
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	19 U	18 U	18 U	18 U	18 U	18 U	
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	35 U	36 U	35 U	35 U	34 U	35 U	34 U	
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	19 U	18 U	18 U	18 U	18 U	18 U	
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	19 U	18 U	18 U	18 U	18 U	18 U	
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	19 U	18 U	18 U	18 U	18 U	18 U	
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	19 U	18 U	18 U	18 U	18 U	18 U	
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	35 U	36 U	35 U	35 U	34 U	35 U	34 U	

U-Compound not detected above reporting limit
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				Sample Name	SL-567-SA5D-SB-3.5-4.5	SL-568-SA5D-SB-0.0-0.5	SL-568-SA5D-SB-2.5-3.5	SL-868-SA5D-SB-2.5-3.5	SL-569-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-4.0-5.0	SL-571-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	10/07/2013	09/23/2013	09/23/2013	09/23/2013	09/25/2013	10/01/2013	10/01/2013	09/23/2013
				SDG	PH123	PH112	PH112	PH112	PH114	PH119	PH119	PH112
				Start Depth	3.5	0	2.5	2.5	0	0	4	0
				End Depth	4.5	0.5	3.5	3.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	17 U	18 U	17 U	17 U	19 U	19 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	60	7.3 J FD, S, Z	17 UJ FD	17 U	19 U	19 U	12 J S, Z
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	17 U	18 U	17 U	17 U	19 U	19 U	17 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	17 U	18 U	17 U	17 U	19 U	19 U	17 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	15 J L, Z	35 U	34 U	34 U	36 U	37 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	17 U	18 U	17 U	17 U	19 U	19 U	17 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	34 U	35 U	34 U	34 U	36 U	37 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	17 U	18 U	17 U	17 U	19 U	19 U	17 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	17 U	18 U	17 U	17 U	19 U	19 U	17 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	17 U	18 U	17 U	17 U	19 U	19 U	17 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	17 U	18 U	17 U	17 U	19 U	19 U	17 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	34 U	35 U	34 U	34 U	36 U	37 U	34 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-577-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-4.0-5.0	SL-882-SA5D-SB-4.0-5.0	SL-582-SA5D-SB-10.0-11.0	SL-583-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	09/19/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/23/2013	10/02/2013	10/02/2013
				SDG	PH111	PH118	PH118	PH118	PH118	PH112	PH120	PH120
				Start Depth	0	0	4	4	10	0	0	4
				End Depth	0.5	0.5	5	5	11	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg		17 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg		17 U	18 U	19 U	19 U	19 U	37	18 U	19 U
8082A	11100-14-4	Aroclor 1268	µg/kg		17 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8082A	11104-28-2	Aroclor 1221	µg/kg		17 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8082A	11126-42-4	Aroclor 5460	µg/kg		33 U	35 U	37 U	37 U	37 U	34 U	35 U	36 U
8082A	11141-16-5	Aroclor 1232	µg/kg		17 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8082A	12642-23-8	Aroclor 5442	µg/kg		33 U	35 U	37 U	37 U	37 U	34 U	35 U	36 U
8082A	12672-29-6	Aroclor 1248	µg/kg		17 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8082A	12674-11-2	Aroclor 1016	µg/kg		17 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8082A	37324-23-5	Aroclor 1262	µg/kg		17 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8082A	53469-21-9	Aroclor 1242	µg/kg		17 U	18 U	19 U	19 U	19 U	18 U	18 U	19 U
8082A	63496-31-1	Aroclor 5432	µg/kg		33 U	35 U	37 U	37 U	37 U	34 U	35 U	36 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-607-SA5D-SB-0.0-0.5	SL-607-SA5D-SB-4.0-5.0	SL-608-SA5D-SB-0.0-0.5	SL-608-SA5D-SB-4.0-5.0	SL-609-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N
				Sample Date	10/01/2013	10/01/2013	10/03/2013	10/03/2013	11/15/2013
				SDG	PH119	PH119	PH122	PH122	PH130
				Start Depth	0	4	0	4	0
				End Depth	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit						
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	20 U	18 U	19 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	20 U	18 U	19 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	20 U	18 U	19 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	20 U	18 U	19 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	38 U	35 U	36 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	20 U	18 U	19 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	38 U	35 U	36 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	20 U	18 U	19 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	20 U	18 U	19 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	20 U	18 U	19 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	20 U	18 U	19 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	38 U	35 U	36 U	34 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-513-SA5D-SB-0.0-0.5	SL-513-SA5D-SB-4.0-5.0	SL-513-SA5D-SB-9.0-10.0	SL-513-SA5D-SB-16.0-17.0	SL-541-SA5D-SB-0.0-0.5	SL-541-SA5D-SB-2.5-3.5	SL-551-SA5D-SB-0.0-0.5	SL-551-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/03/2013	09/03/2013	09/12/2013	09/12/2013
			SDG	PH110	PH110	PH110	PH110	PH100	PH100	PH107	PH107
			Start Depth	0	4	9	16	0	2.5	0	4
			End Depth	0.5	5	10	17	0.5	3.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
6850	14797-73-0	Perchlorate	µg/kg	5.7 U	5.9 U	5.7 U	5.4 U	5.3 U	5.2 U	5.2 U	5.4 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-551-SA5D-SB-9.0-10.0	SL-551-SA5D-SB-14.0-15.0	SL-551-SA5D-SB-17.5-18.5	SL-553-SA5D-SB-0.0-0.5	SL-853-SA5D-SB-0.0-0.5	SL-553-SA5D-SB-4.5-5.5	SL-556-SA5D-SB-0.0-0.5	SL-556-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/05/2013	09/05/2013
			SDG	PH107	PH107	PH107	PH107	PH107	PH107	PH102	PH102
			Start Depth	9	14	17.5	0	0	4.5	0	4
			End Depth	10	15	18.5	0.5	0.5	5.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
6850	14797-73-0	Perchlorate	µg/kg	5.5 U	5.7 U	5.5 U	5.1 U	5.1 U	5.3 U	5.1 U	5.3 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-556-SA5D-SB-11.0-12.0	SL-571-SA5D-SB-0.0-0.5	SL-579-SA5D-SB-0.0-0.5	SL-879-SA5D-SB-0.0-0.5	SL-580-SA5D-SB-0.0-0.5	SL-590-SA5D-SB-0.0-0.5	SL-590-SA5D-SB-4.0-5.0	SL-890-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	FD	N	N	N	FD
			Sample Date	09/05/2013	09/23/2013	09/19/2013	09/19/2013	09/19/2013	09/06/2013	09/06/2013	09/06/2013
			SDG	PH102	PH112	PH111	PH111	PH111	PH103	PH103	PH103
			Start Depth	11	0	0	0	0	0	4	4
			End Depth	12	0.5	0.5	0.5	0.5	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
6850	14797-73-0	Perchlorate	µg/kg	5.3 U	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	8.2 J Q	7.5

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-590-SA5D-SB-11.0-12.0
			Sample Type	N
			Sample Date	09/06/2013
			SDG	PH103
			Start Depth	11
			End Depth	12
Analytic Method	CAS Number	Chemical Name	Unit	
6850	14797-73-0	Perchlorate	µg/kg	3.4 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-505-SA5D-SB-0.0-0.5	SL-505-SA5D-SB-4.0-5.0	SL-505-SA5D-SB-9.0-10.0	SL-505-SA5D-SB-14.0-15.0	SL-505-SA5D-SB-19.0-20.0	SL-510-SA5D-SB-0.0-0.5	SL-510-SA5D-SB-4.0-5.0	SL-512-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/18/2013	09/18/2013	09/26/2013
				SDG	PH108	PH108	PH108	PH108	PH108	PH110	PH110	PH116
				Start Depth	0	4	9	14	19	0	4	0
				End Depth	0.5	5	10	15	20	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.23 J Z	0.91 U	0.94 U	0.92 U	0.92 U	0.91 U	0.97 U	0.88 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	1.8 U
8081B	2385-85-5	Mirex	µg/kg	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	1.8 U
8081B	309-00-2	Aldrin	µg/kg	0.87 U	0.91 U	0.94 U	0.92 U	0.92 U	0.91 U	0.97 U	0.88 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.87 U	0.91 U	0.94 U	0.92 U	0.92 U	0.91 U	0.97 U	0.88 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.0 U	1.4 J Z	2.1 U	2.1 U	2.1 U	2.1 U	2.2 U	2.0 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.87 U	0.91 U	0.94 U	0.92 U	0.92 U	0.91 U	0.97 U	0.88 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	1.8 U
8081B	50-29-3	4,4'-DDT	µg/kg	5.3	1.8 J Z	1.9 U	1.9 U	1.9 U	0.47 J Z	2.0 U	1.8 U
8081B	53494-70-5	Endrin Ketone	µg/kg	1.9 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.1 U	1.9 U
8081B	57-74-9	Chlordane	µg/kg	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.87 U	0.91 U	0.94 U	0.92 U	0.92 U	0.91 U	0.97 U	0.88 U
8081B	60-57-1	Dieldrin	µg/kg	0.38 J Z	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	1.8 U
8081B	72-20-8	Endrin	µg/kg	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	1.8 U
8081B	72-43-5	Methoxychlor	µg/kg	7.0 U	7.4 U	7.6 U	7.4 U	7.5 U	7.3 U	7.8 U	7.1 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	1.8 U
8081B	72-55-9	4,4'-DDE	µg/kg	3.9	1.3 J Z	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	1.8 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	1.8 U
8081B	76-44-8	Heptachlor	µg/kg	0.87 U	0.91 U	0.94 U	0.92 U	0.92 U	0.91 U	0.97 U	0.88 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	34 U	36 U	37 U	37 U	37 U	36 U	39 U	35 U
8081B	959-98-8	Endosulfan I	µg/kg	0.87 U	0.91 U	0.94 U	0.92 U	0.92 U	0.91 U	0.97 U	0.88 U

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				Sample Name	SL-512-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-0.0-0.5	SL-815-SA5D-SB-0.0-0.5	SL-515-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-9.0-10.0	SL-515-SA5D-SB-22.0-23.0	SL-518-SA5D-SB-0.0-0.5	SL-518-SA5D-SB-4.0-5.0
				Sample Type	N	N	FD	N	N	N	N	N
				Sample Date	09/26/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013	09/10/2013	09/10/2013
				SDG	PH116	PH104	PH104	PH104	PH104	PH104	PH105	PH105
				Start Depth	4	0	0	4	9	22	0	4
				End Depth	5	0.5	0.5	5	10	23	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.95 U	0.91 U	0.90 U	0.97 U	0.98 U	0.97 U	0.91 U	0.97 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.9 U	1.9 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
8081B	2385-85-5	Mirex	µg/kg	1.9 U	1.9 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
8081B	309-00-2	Aldrin	µg/kg	0.95 U	0.91 U	0.90 U	0.97 U	0.98 U	0.97 U	0.91 U	0.97 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.95 U	0.91 U	0.90 U	0.97 U	0.98 U	0.97 U	0.91 U	0.97 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.2 U	2.1 U	2.1 U	2.2 U	2.3 U	2.2 U	2.1 U	2.2 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.95 U	0.91 U	0.90 U	0.97 U	0.98 U	0.97 U	0.91 U	0.97 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.9 U	1.9 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
8081B	50-29-3	4,4'-DDT	µg/kg	1.9 U	1.9 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
8081B	53494-70-5	Endrin Ketone	µg/kg	2.1 U	2.0 U	2.0 U	2.1 U	2.1 U	2.1 U	2.0 U	2.1 U
8081B	57-74-9	Chlordane	µg/kg	19 U	19 U	18 U	20 U	20 U	20 U	19 U	20 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.95 U	0.91 U	0.90 U	0.97 U	0.98 U	0.97 U	0.91 U	0.97 U
8081B	60-57-1	Dieldrin	µg/kg	1.9 U	1.9 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
8081B	72-20-8	Endrin	µg/kg	1.9 U	1.9 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
8081B	72-43-5	Methoxychlor	µg/kg	7.6 U	7.4 U	7.3 U	7.9 U	7.9 U	7.8 U	7.3 U	7.8 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.9 U	1.9 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
8081B	72-55-9	4,4'-DDE	µg/kg	1.9 U	0.65 J Z	0.58 J Z	2.0 U	2.0 U	2.0 U	1.2 J Z	2.0 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.9 U	1.9 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
8081B	76-44-8	Heptachlor	µg/kg	0.95 U	0.91 U	0.90 U	0.97 U	0.98 U	0.97 U	0.91 U	0.97 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	38 U	36 U	36 U	39 U	39 U	39 U	36 U	39 U
8081B	959-98-8	Endosulfan I	µg/kg	0.95 U	0.91 U	0.90 U	0.97 U	0.98 U	0.97 U	0.91 U	0.97 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-518-SA5D-SB-9.0-10.0	SL-518-SA5D-SB-15.0-16.0	SL-520-SA5D-SB-0.0-0.5	SL-520-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-8.0-9.0	SL-522-SA5D-SB-0.0-0.5	SL-522-SA5D-SB-6.0-7.0	SL-523-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/10/2013	09/10/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013
				SDG	PH105	PH105	PH106	PH106	PH106	PH106	PH106	PH106
				Start Depth	9	15	0	4	8	0	6	0
				End Depth	10	16	0.5	5	9	0.5	7	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.97 U	0.92 U	0.93 U	0.99 U	0.93 U	0.90 U	0.91 U	0.86 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	1.8 U	1.9 U	1.8 U
8081B	2385-85-5	Mirex	µg/kg	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	1.8 U	1.9 U	1.8 U
8081B	309-00-2	Aldrin	µg/kg	0.97 U	0.92 U	0.93 U	0.99 U	0.93 U	0.90 U	0.91 U	0.86 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.97 U	0.92 U	0.93 U	0.99 U	0.93 U	0.90 U	0.91 U	0.86 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.2 U	2.1 U	2.1 U	2.3 U	2.1 U	2.1 U	2.1 U	2.0 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.97 U	0.92 U	0.93 U	0.99 U	0.93 U	0.90 U	0.91 U	0.86 U
8081B	33213-65-9	Endosulfan II	µg/kg	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	1.8 U	1.9 U	1.8 U
8081B	50-29-3	4,4'-DDT	µg/kg	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	1.8 U	1.9 U	1.8 U
8081B	53494-70-5	Endrin Ketone	µg/kg	2.1 U	2.0 U	2.0 U	2.1 U	2.0 U	1.9 U	2.0 U	1.9 U
8081B	57-74-9	Chlordane	µg/kg	20 U	19 U	19 U	20 U	19 U	18 U	19 U	18 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.97 U	0.92 U	0.93 U	0.99 U	0.93 U	0.90 U	0.91 U	0.86 U
8081B	60-57-1	Dieldrin	µg/kg	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	1.8 U	1.9 U	1.8 U
8081B	72-20-8	Endrin	µg/kg	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	1.8 U	1.9 U	1.8 U
8081B	72-43-5	Methoxychlor	µg/kg	7.8 U	7.4 U	7.5 U	8.0 U	7.5 U	7.2 U	7.4 U	6.9 U
8081B	72-54-8	4,4'-DDD	µg/kg	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	1.8 U	1.9 U	1.8 U
8081B	72-55-9	4,4'-DDE	µg/kg	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	1.8 U	1.9 U	1.8 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	1.8 U	1.9 U	1.8 U
8081B	76-44-8	Heptachlor	µg/kg	0.97 U	0.92 U	0.93 U	0.99 U	0.93 U	0.90 U	0.91 U	0.86 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	39 U	36 U	37 U	39 U	37 U	36 U	36 U	34 U
8081B	959-98-8	Endosulfan I	µg/kg	0.97 U	0.92 U	0.93 U	0.99 U	0.93 U	0.90 U	0.91 U	0.86 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-524-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-5.5-6.5	SL-824-SA5D-SB-5.5-6.5	SL-525-SA5D-SB-0.0-0.5	SL-525-SA5D-SB-2.5-3.5	SL-529-SA5D-SB-0.0-0.5	SL-529-SA5D-SB-3.0-4.0	SL-530-SA5D-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	09/04/2013	09/04/2013	09/04/2013	09/03/2013	09/03/2013	09/11/2013	09/11/2013	08/30/2013
			SDG	PH101	PH101	PH101	PH100	PH100	PH106	PH106	PH099
			Start Depth	0	5.5	5.5	0	2.5	0	3	0
			End Depth	0.5	6.5	6.5	0.5	3.5	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.87 U	0.89 U	0.89 U	0.86 U	0.87 U	0.88 U	0.88 U	0.84 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
8081B	2385-85-5	Mirex	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
8081B	309-00-2	Aldrin	µg/kg	0.87 U	0.89 U	0.89 U	0.86 U	0.87 U	0.88 U	0.88 U	0.84 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.87 U	0.89 U	0.89 U	0.86 U	0.87 U	0.88 U	0.88 U	0.84 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.9 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.87 U	0.89 U	0.89 U	0.86 U	0.87 U	0.88 U	0.88 U	0.84 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
8081B	50-29-3	4,4'-DDT	µg/kg	1.9	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.43 J Z
8081B	53494-70-5	Endrin Ketone	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U
8081B	57-74-9	Chlordane	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	18 U	17 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.87 U	0.89 U	0.89 U	0.86 U	0.87 U	0.88 U	0.88 U	0.84 U
8081B	60-57-1	Dieldrin	µg/kg	0.52 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
8081B	72-20-8	Endrin	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
8081B	72-43-5	Methoxychlor	µg/kg	7.0 U	7.2 U	7.2 U	7.0 U	7.0 U	7.1 U	7.1 U	6.8 U
8081B	72-54-8	4,4'-DDD	µg/kg	0.50 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
8081B	72-55-9	4,4'-DDE	µg/kg	15	1.6 J FD, Z	1.8 UJ FD	1.8 U	1.8 U	1.8 U	1.8 U	2.4
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
8081B	76-44-8	Heptachlor	µg/kg	0.87 U	0.89 U	0.89 U	0.86 U	0.87 U	0.88 U	0.88 U	0.84 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	35 U	35 U	36 U	34 U	35 U	35 U	35 U	33 U
8081B	959-98-8	Endosulfan I	µg/kg	0.87 U	0.89 U	0.89 U	0.86 U	0.87 U	0.88 U	0.88 U	0.84 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-530-SA5D-SB-2.5-3.5	SL-531-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-2.5-3.5	SL-533-SA5D-SB-0.0-0.5	SL-533-SA5D-SB-2.5-3.5	SL-535-SA5D-SB-0.0-0.5	SL-835-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	FD
				Sample Date	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013
				SDG	PH099	PH099	PH099	PH099	PH099	PH099	PH099	PH099
				Start Depth	2.5	0	0	2.5	0	2.5	0	0
				End Depth	3.5	0.5	0.5	3.5	0.5	3.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.86 U	0.86 U	0.26 J Z	0.87 U	0.85 U	0.90 U	0.85 U	0.84 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U
8081B	2385-85-5	Mirex	µg/kg	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U
8081B	309-00-2	Aldrin	µg/kg	0.86 U	0.86 U	0.84 U	0.87 U	0.85 U	0.90 U	0.85 U	0.84 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.86 U	0.86 U	0.84 U	0.87 U	0.85 U	0.90 U	0.85 U	0.84 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.0 U	2.0 U	1.9 U	2.0 U	1.9 U	2.1 U	2.0 U	1.9 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.86 U	0.86 U	0.84 U	0.87 U	0.85 U	0.90 U	0.85 U	0.84 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U
8081B	50-29-3	4,4'-DDT	µg/kg	1.8 U	1.8 U	2.7	1.8 U	0.86 J Z	1.8 U	1.7 U	1.7 U
8081B	53494-70-5	Endrin Ketone	µg/kg	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	2.0 U	1.9 U	1.8 U
8081B	57-74-9	Chlordane	µg/kg	18 U	18 U	17 U	18 U	17 U	18 U	17 U	17 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.86 U	0.86 U	0.84 U	0.87 U	0.85 U	0.90 U	0.85 U	0.84 U
8081B	60-57-1	Dieldrin	µg/kg	1.8 U	1.8 U	0.69 J Z	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U
8081B	72-20-8	Endrin	µg/kg	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U
8081B	72-43-5	Methoxychlor	µg/kg	6.9 U	6.9 U	6.8 U	7.0 U	6.9 U	7.3 U	6.9 U	6.8 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.8 U	1.8 U	0.54 J Z	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U
8081B	72-55-9	4,4'-DDE	µg/kg	1.8 U	1.8 U	9.1	1.8 U	2.5	1.8 U	1.7 U	1.7 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.8 U	1.7 U	1.7 U
8081B	76-44-8	Heptachlor	µg/kg	0.86 U	0.86 U	0.84 U	0.87 U	0.85 U	0.90 U	0.85 U	0.84 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	34 U	34 U	33 U	34 U	34 U	36 U	34 U	33 U
8081B	959-98-8	Endosulfan I	µg/kg	0.86 U	0.86 U	0.84 U	0.87 U	0.85 U	0.90 U	0.85 U	0.84 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-535-SA5D-SB-2.0-3.0	SL-540-SA5D-SB-0.0-0.5	SL-540-SA5D-SB-5.0-6.0	SL-542-SA5D-SB-0.0-0.5	SL-542-SA5D-SB-4.0-5.0	SL-543-SA5D-SB-0.0-0.5	SL-543-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	08/30/2013	09/03/2013	09/03/2013	08/29/2013	08/29/2013	08/29/2013	08/29/2013	11/12/2013
				SDG	PH099	PH100	PH100	PH098	PH098	PH098	PH098	PH127
				Start Depth	2	0	5	0	4	0	4	0
				End Depth	3	0.5	6	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.87 U	0.89 U	0.88 U	0.89 U	0.86 U	0.87 U	0.92 U	0.89 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U
8081B	2385-85-5	Mirex	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U
8081B	309-00-2	Aldrin	µg/kg	0.87 U	0.89 U	0.88 U	0.89 U	0.86 U	0.87 U	0.92 U	0.89 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.87 U	0.89 U	0.88 U	0.89 U	0.86 U	0.87 U	0.92 U	0.89 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.1 U	2.0 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.87 U	0.89 U	0.88 U	0.89 U	0.86 U	0.87 U	0.92 U	0.89 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U
8081B	50-29-3	4,4'-DDT	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.3 J Z
8081B	53494-70-5	Endrin Ketone	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	1.9 U
8081B	57-74-9	Chlordane	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.87 U	0.89 U	0.88 U	0.89 U	0.86 U	0.87 U	0.92 U	0.89 U
8081B	60-57-1	Dieldrin	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U
8081B	72-20-8	Endrin	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U
8081B	72-43-5	Methoxychlor	µg/kg	7.0 U	7.2 U	7.1 U	7.2 U	6.9 U	7.0 U	7.4 U	7.2 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U
8081B	72-55-9	4,4'-DDE	µg/kg	1.8 U	0.55 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	0.49 J Z
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.8 U	1.8 U	1.8 U	1.8 UJ C	1.8 UJ C	1.8 UJ C	1.9 UJ C	1.8 U
8081B	76-44-8	Heptachlor	µg/kg	0.87 U	0.89 U	0.88 U	0.89 U	0.86 U	0.87 U	0.92 U	0.89 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	34 U	35 U	35 U	35 U	34 U	34 U	37 U	35 U
8081B	959-98-8	Endosulfan I	µg/kg	0.87 U	0.89 U	0.88 U	0.89 U	0.86 U	0.87 U	0.92 U	0.89 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-549-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-11.0-12.0	SL-551-SA5D-SB-0.0-0.5	SL-551-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-9.0-10.0	SL-551-SA5D-SB-14.0-15.0	SL-551-SA5D-SB-17.5-18.5	SL-552-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	11/12/2013	11/12/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/12/2013	09/06/2013
				SDG	PH127	PH127	PH107	PH107	PH107	PH107	PH107	PH103
				Start Depth	4	11	0	4	9	14	17.5	0
				End Depth	5	12	0.5	5	10	15	18.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.93 U	0.92 U	0.87 U	0.89 U	0.91 U	0.95 U	0.91 U	0.87 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	1.8 U
8081B	2385-85-5	Mirex	µg/kg	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	1.8 U
8081B	309-00-2	Aldrin	µg/kg	0.93 U	0.92 U	0.87 U	0.89 U	0.91 U	0.95 U	0.91 U	0.87 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.93 U	0.92 U	0.87 U	0.89 U	0.91 U	0.95 U	0.91 U	0.87 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.1 U	2.1 U	2.0 U	2.0 U	2.1 U	2.2 U	2.1 U	2.0 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.93 U	0.92 U	0.87 U	0.89 U	0.91 U	0.95 U	0.91 U	0.87 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	1.8 U
8081B	50-29-3	4,4'-DDT	µg/kg	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	1.8 U
8081B	53494-70-5	Endrin Ketone	µg/kg	2.0 U	2.0 U	1.9 U	1.9 U	2.0 U	2.1 U	2.0 U	1.9 U
8081B	57-74-9	Chlordane	µg/kg	19 U	19 U	18 U	18 U	19 U	19 U	19 U	18 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.93 U	0.92 U	0.87 U	0.89 U	0.91 U	0.95 U	0.91 U	0.87 U
8081B	60-57-1	Dieldrin	µg/kg	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	1.8 U
8081B	72-20-8	Endrin	µg/kg	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	1.8 U
8081B	72-43-5	Methoxychlor	µg/kg	7.5 U	7.5 U	7.0 U	7.2 U	7.3 U	7.6 U	7.3 U	7.0 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	1.8 U
8081B	72-55-9	4,4'-DDE	µg/kg	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	0.46 J Z
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	1.8 U
8081B	76-44-8	Heptachlor	µg/kg	0.93 U	0.92 U	0.87 U	0.89 U	0.91 U	0.95 U	0.91 U	0.87 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	37 U	37 U	34 U	36 U	36 U	38 U	36 U	35 U
8081B	959-98-8	Endosulfan I	µg/kg	0.93 U	0.92 U	0.87 U	0.89 U	0.91 U	0.95 U	0.91 U	0.87 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-552-SA5D-SB-4.0-5.0	SL-554-SA5D-SB-0.0-0.5	SL-554-SA5D-SB-4.0-5.0	SL-554-SA5D-SB-7.0-8.0	SL-555-SA5D-SB-0.0-0.5	SL-555-SA5D-SB-4.0-5.0	SL-555-SA5D-SB-10.5-11.5	SL-559-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/06/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013
				SDG	PH103	PH102	PH102	PH102	PH102	PH102	PH102	PH102
				Start Depth	4	0	4	7	0	4	10.5	0
				End Depth	5	0.5	5	8	0.5	5	11.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.94 U	0.87 U	0.89 U	0.90 U	0.87 U	0.91 U	0.93 U	0.89 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U
8081B	2385-85-5	Mirex	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U
8081B	309-00-2	Aldrin	µg/kg	0.94 U	0.87 U	0.89 U	0.90 U	0.87 U	0.91 U	0.93 U	0.89 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.94 U	0.87 U	0.89 U	0.90 U	0.87 U	0.91 U	0.93 U	0.89 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.1 U	2.0 U	2.0 U	2.1 U	2.0 U	2.1 U	2.1 U	2.0 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.94 U	0.87 U	0.89 U	0.90 U	0.87 U	0.91 U	0.93 U	0.89 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U
8081B	50-29-3	4,4'-DDT	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	0.56 J Z
8081B	53494-70-5	Endrin Ketone	µg/kg	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	1.9 U
8081B	57-74-9	Chlordane	µg/kg	19 U	18 U	18 U	18 U	18 U	19 U	19 U	18 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.94 U	0.87 U	0.89 U	0.90 U	0.87 U	0.91 U	0.93 U	0.89 U
8081B	60-57-1	Dieldrin	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U
8081B	72-20-8	Endrin	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U
8081B	72-43-5	Methoxychlor	µg/kg	7.6 U	7.0 U	7.2 U	7.3 U	7.0 U	7.3 U	7.5 U	7.2 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U
8081B	72-55-9	4,4'-DDE	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.2 J Z
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U
8081B	76-44-8	Heptachlor	µg/kg	0.94 U	0.87 U	0.89 U	0.90 U	0.87 U	0.91 U	0.93 U	0.89 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	37 U	35 U	35 U	36 U	35 U	36 U	37 U	35 U
8081B	959-98-8	Endosulfan I	µg/kg	0.94 U	0.87 U	0.89 U	0.90 U	0.87 U	0.91 U	0.93 U	0.89 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-559-SA5D-SB-6.0-7.0	SL-567-SA5D-SB-0.0-0.5	SL-567-SA5D-SB-3.5-4.5	SL-568-SA5D-SB-0.0-0.5	SL-568-SA5D-SB-2.5-3.5	SL-868-SA5D-SB-2.5-3.5	SL-570-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-4.0-5.0
				Sample Type	N	N	N	N	N	FD	N	N
				Sample Date	09/05/2013	10/07/2013	10/07/2013	09/23/2013	09/23/2013	09/23/2013	10/01/2013	10/01/2013
				SDG	PH102	PH123	PH123	PH112	PH112	PH112	PH119	PH119
				Start Depth	6	0	3.5	0	2.5	2.5	0	4
				End Depth	7	0.5	4.5	0.5	3.5	3.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.90 U	0.86 U	0.89 U	1.2 U	0.88 U	0.84 U	0.91 U	0.93 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U
8081B	2385-85-5	Mirex	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U
8081B	309-00-2	Aldrin	µg/kg	0.90 U	0.86 U	0.89 U	0.85 U	0.88 U	0.84 U	0.91 U	0.93 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.90 U	0.86 U	0.89 U	0.85 U	0.88 U	0.84 U	0.91 U	0.93 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.1 U	2.0 U	2.0 U	1.9 U	2.0 U	1.9 U	2.1 U	2.1 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.90 U	1.4 U	0.89 U	0.51 J Z	0.88 U	0.84 U	0.91 U	0.93 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U
8081B	50-29-3	4,4'-DDT	µg/kg	1.8 U	1.1 J Z	1.8 U	4.5 U	1.8 U	1.7 U	1.9 U	1.9 U
8081B	53494-70-5	Endrin Ketone	µg/kg	2.0 U	1.9 U	1.9 U	1.8	1.9 U	1.8 U	2.0 U	2.0 U
8081B	57-74-9	Chlordane	µg/kg	18 U	18 U	18 U	17 U	18 U	17 U	19 U	19 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.90 U	0.86 U	0.89 U	0.85 U	0.88 U	0.84 U	0.91 U	0.93 U
8081B	60-57-1	Dieldrin	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U
8081B	72-20-8	Endrin	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U
8081B	72-43-5	Methoxychlor	µg/kg	7.3 U	6.9 U	7.2 U	4.1 J Z	7.1 U	6.8 U	7.3 U	7.5 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U
8081B	72-55-9	4,4'-DDE	µg/kg	1.8 U	0.86 J Z	0.83 J Z	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U
8081B	76-44-8	Heptachlor	µg/kg	0.90 U	0.86 U	0.89 U	0.85 U	0.88 U	0.84 U	0.91 U	0.93 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	36 U	34 U	35 U	76 U	35 U	33 U	36 U	37 U
8081B	959-98-8	Endosulfan I	µg/kg	0.90 U	0.86 U	0.89 U	0.85 U	0.88 U	0.84 U	0.91 U	0.93 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-571-SA5D-SB-0.0-0.5	SL-572-SA5D-SB-0.0-0.5	SL-573-SA5D-SB-0.0-0.5	SL-573-SA5D-SB-4.0-5.0	SL-574-SA5D-SB-0.0-0.5	SL-576-SA5D-SB-0.0-0.5	SL-576-SA5D-SB-3.5-4.5	SL-579-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/23/2013	09/23/2013	09/25/2013	09/25/2013	09/23/2013	09/19/2013	09/19/2013	09/19/2013
				SDG	PH112	PH112	PH114	PH114	PH112	PH111	PH111	PH111
				Start Depth	0	0	0	4	0	0	3.5	0
				End Depth	0.5	0.5	0.5	5	0.5	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.85 U	0.83 U	0.22 J Z	0.87 U	0.84 U	0.84 U	0.87 U	0.84 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U	1.7 U
8081B	2385-85-5	Mirex	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U	1.7 U
8081B	309-00-2	Aldrin	µg/kg	0.85 U	0.83 U	0.84 U	0.87 U	0.84 U	0.84 U	0.87 U	0.84 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.85 U	0.83 U	0.28 J Z	0.87 U	0.84 U	0.84 U	0.87 U	0.84 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.85 U	0.83 U	0.84 U	0.87 U	0.84 U	0.84 U	0.87 U	0.84 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U	1.7 U
8081B	50-29-3	4,4'-DDT	µg/kg	1.7 U	1.4 J Z	1.7 U	1.8 U	1.7 U	0.40 J Z	1.8 U	0.98 J Z
8081B	53494-70-5	Endrin Ketone	µg/kg	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.9 U	1.8 U
8081B	57-74-9	Chlordane	µg/kg	17 U	17 U	17 U	18 U	17 U	17 U	18 U	17 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.85 U	0.24 J Z	0.84 U	0.87 U	0.84 U	0.84 U	0.87 U	0.84 U
8081B	60-57-1	Dieldrin	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U	1.7 U
8081B	72-20-8	Endrin	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U	1.7 U
8081B	72-43-5	Methoxychlor	µg/kg	6.9 U	6.7 U	6.8 U	7.0 U	6.7 U	6.8 U	7.1 U	6.8 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U	1.7 U
8081B	72-55-9	4,4'-DDE	µg/kg	1.7 U	0.60 J Z	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U	0.86 J Z
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U	1.7 U
8081B	76-44-8	Heptachlor	µg/kg	0.85 U	0.83 U	0.19 J Z	0.87 U	0.84 U	0.84 U	0.87 U	0.84 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	34 U	33 U	33 U	35 U	33 U	33 U	35 U	34 U
8081B	959-98-8	Endosulfan I	µg/kg	0.85 U	0.83 U	0.84 U	0.87 U	0.84 U	0.84 U	0.87 U	0.84 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-879-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-4.0-5.0
				Sample Type	FD	N	N
				Sample Date	09/19/2013	10/02/2013	10/02/2013
				SDG	PH111	PH120	PH120
				Start Depth	0	0	4
				End Depth	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit				
8081B	1024-57-3	Heptachlor Epoxide	µg/kg		0.84 U	0.88 U	0.92 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg		1.7 U	1.8 U	1.9 U
8081B	2385-85-5	Mirex	µg/kg		1.7 U	1.8 U	1.9 U
8081B	309-00-2	Aldrin	µg/kg		0.84 U	0.88 U	0.92 U
8081B	319-84-6	Alpha-Bhc	µg/kg		0.84 U	0.88 U	0.92 U
8081B	319-85-7	Beta-Bhc	µg/kg		1.9 U	2.0 U	2.1 U
8081B	319-86-8	Delta-Bhc	µg/kg		0.84 U	0.88 U	0.92 U
8081B	33213-65-9	Endosulfan II	µg/kg		1.7 U	1.8 U	1.9 U
8081B	50-29-3	4,4'-DDT	µg/kg		1.0 J Z	1.8 U	1.9 U
8081B	53494-70-5	Endrin Ketone	µg/kg		1.8 U	1.9 U	2.0 U
8081B	57-74-9	Chlordane	µg/kg		17 U	18 U	19 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg		0.84 U	0.88 U	0.92 U
8081B	60-57-1	Dieldrin	µg/kg		1.7 U	1.8 U	1.9 U
8081B	72-20-8	Endrin	µg/kg		1.7 U	1.8 U	1.9 U
8081B	72-43-5	Methoxychlor	µg/kg		6.8 U	7.1 U	7.4 U
8081B	72-54-8	4,4'-DDD	µg/kg		1.7 U	1.8 U	1.9 U
8081B	72-55-9	4,4'-DDE	µg/kg		0.82 J Z	1.8 U	1.9 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg		1.7 U	1.8 U	1.9 U
8081B	76-44-8	Heptachlor	µg/kg		0.84 U	0.88 U	0.92 U
8081B	8001-35-2	Technical Toxaphene	µg/kg		33 U	35 U	36 U
8081B	959-98-8	Endosulfan I	µg/kg		0.84 U	0.88 U	0.92 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-501-SA5D-SB-0.0-0.5	SL-501-SA5D-SB-4.0-5.0	SL-501-SA5D-SB-9.0-10.0	SL-501-SA5D-SB-14.0-15.0	SL-501-SA5D-SB-19.0-20.0	SL-501-SA5D-SB-24.0-25.0	SL-501-SA5D-SB-28.0-29.0	SL-502-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	10/03/2013
			SDG	PH109	PH109	PH109	PH109	PH109	PH109	PH109	PH122
			Start Depth	0	4	9	14	19	24	28	0
			End Depth	0.5	5	10	15	20	25	29	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.28	8.25	8.12	8.41	8.38	8.47	8.52	6.97

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-502-SA5D-SB-6.5-7.5	SL-503-SA5D-SB-0.0-0.5	SL-503-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-0.0-0.5	SL-504-SA5D-SB-4.0-5.0	SL-804-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-9.0-10.0	SL-504-SA5D-SB-16.0-17.0
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	10/03/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013
			SDG	PH122	PH109	PH109	PH109	PH109	PH109	PH109	PH109
			Start Depth	6.5	0	4	0	4	4	9	16
			End Depth	7.5	0.5	5	0.5	5	5	10	17
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.48	6.68	8.41	8.12	8.17	8.38	8.28	8.14

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-505-SA5D-SB-0.0-0.5	SL-505-SA5D-SB-4.0-5.0	SL-505-SA5D-SB-9.0-10.0	SL-505-SA5D-SB-14.0-15.0	SL-505-SA5D-SB-19.0-20.0	SL-506-SA5D-SB-0.0-0.5	SL-506-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/11/2013	09/11/2013	10/03/2013
			SDG	PH108	PH108	PH108	PH108	PH108	PH106	PH106	PH122
			Start Depth	0	4	9	14	19	0	4	0
			End Depth	0.5	5	10	15	20	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.92	7.96	8.41	8.56	8.27	8.15	8.40	7.92

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-507-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-10.5-11.5	SL-508-SA5D-SB-0.0-0.5	SL-508-SA5D-SB-4.0-5.0	SL-508-SA5D-SB-9.0-10.0	SL-508-SA5D-SB-14.0-15.0	SL-508-SA5D-SB-19.0-20.0	SL-508-SA5D-SB-23.0-24.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013
			SDG	PH122	PH122	PH122	PH122	PH122	PH122	PH122	PH122
			Start Depth	4	10.5	0	4	9	14	19	23
			End Depth	5	11.5	0.5	5	10	15	20	24
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.74	6.99	7.45	7.72	8.12	8.25	8.37	8.38

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-509-SA5D-SB-0.0-0.5	SL-509-SA5D-SB-4.0-5.0	SL-510-SA5D-SB-0.0-0.5	SL-510-SA5D-SB-4.0-5.0	SL-512-SA5D-SB-0.0-0.5	SL-512-SA5D-SB-4.0-5.0	SL-513-SA5D-SB-0.0-0.5	SL-513-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/26/2013	09/26/2013	09/18/2013	09/18/2013
			SDG	PH110	PH110	PH110	PH110	PH116	PH116	PH110	PH110
			Start Depth	0	4	0	4	0	4	0	4
			End Depth	0.5	5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.77	8.06	7.58	8.05	7.89	7.99	8.02	7.95

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-513-SA5D-SB-9.0-10.0	SL-513-SA5D-SB-16.0-17.0	SL-514-SA5D-SB-0.0-0.5	SL-514-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-0.0-0.5	SL-815-SA5D-SB-0.0-0.5	SL-515-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013
			SDG	PH110	PH110	PH110	PH110	PH104	PH104	PH104	PH104
			Start Depth	9	16	0	4	0	0	4	9
			End Depth	10	17	0.5	5	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.33	8.31	8.14	8.29	7.60	8.05	7.99	8.12

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-515-SA5D-SB-22.0-23.0	SL-516-SA5D-SB-0.0-0.5	SL-516-SA5D-SB-4.0-5.0	SL-816-SA5D-SB-4.0-5.0	SL-516-SA5D-SB-9.0-10.0	SL-516-SA5D-SB-13.0-14.0	SL-518-SA5D-SB-0.0-0.5	SL-518-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	09/09/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	09/10/2013	09/10/2013
			SDG	PH104	PH130	PH130	PH130	PH130	PH130	PH105	PH105
			Start Depth	22	0	4	4	9	13	0	4
			End Depth	23	0.5	5	5	10	14	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.46	7.48	7.79	8.32	7.16	7.11	7.88	7.96

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-518-SA5D-SB-9.0-10.0	SL-518-SA5D-SB-15.0-16.0	SL-519-SA5D-SB-0.0-0.5	SL-519-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-0.0-0.5	SL-520-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-8.0-9.0	SL-521-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/10/2013	09/10/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013
			SDG	PH105	PH105	PH106	PH106	PH106	PH106	PH106	PH106
			Start Depth	9	15	0	4	0	4	8	0
			End Depth	10	16	0.5	5	0.5	5	9	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.90	7.88	8.08	8.01	7.63	8.14	8.18	6.50

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-521-SA5D-SB-5.5-6.5	SL-522-SA5D-SB-0.0-0.5	SL-522-SA5D-SB-6.0-7.0	SL-523-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-5.5-6.5	SL-824-SA5D-SB-5.5-6.5	SL-525-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/04/2013	09/04/2013	09/04/2013	09/03/2013
			SDG	PH106	PH106	PH106	PH106	PH101	PH101	PH101	PH100
			Start Depth	5.5	0	6	0	0	5.5	5.5	0
			End Depth	6.5	0.5	7	0.5	0.5	6.5	6.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.15	7.92	8.28	7.34	7.45	7.74	7.78	6.32

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-525-SA5D-SB-2.5-3.5	SL-526-SA5D-SB-0.0-0.5	SL-526-SA5D-SB-3.0-4.0	SL-527-SA5D-SB-0.0-0.5	SL-527-SA5D-SB-4.0-5.0	SL-528-SA5D-SB-0.0-0.5	SL-528-SA5D-SB-2.5-3.5	SL-529-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013	09/03/2013	09/11/2013
			SDG	PH100	PH098	PH098	PH100	PH100	PH100	PH100	PH106
			Start Depth	2.5	0	3	0	4	0	2.5	0
			End Depth	3.5	0.5	4	0.5	5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.35	8.12	8.21	6.93	6.80	6.29	7.88	7.00

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-529-SA5D-SB-3.0-4.0	SL-530-SA5D-SB-0.0-0.5	SL-530-SA5D-SB-2.5-3.5	SL-531-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-2.5-3.5	SL-533-SA5D-SB-0.0-0.5	SL-533-SA5D-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/11/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013
			SDG	PH106	PH099	PH099	PH099	PH099	PH099	PH099	PH099
			Start Depth	3	0	2.5	0	0	2.5	0	2.5
			End Depth	4	0.5	3.5	0.5	0.5	3.5	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.07	6.54	7.77	6.54	6.18	7.88	7.02	7.62

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-534-SA5D-SB-0.0-0.5	SL-534-SA5D-SB-6.5-7.5	SL-535-SA5D-SB-0.0-0.5	SL-835-SA5D-SB-0.0-0.5	SL-535-SA5D-SB-2.0-3.0	SL-536-SA5D-SB-0.0-0.5	SL-536-SA5D-SB-3.5-4.5	SL-537-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/28/2013	08/28/2013	08/28/2013
			SDG	PH099	PH099	PH099	PH099	PH099	PH095	PH095	PH095
			Start Depth	0	6.5	0	0	2	0	3.5	0
			End Depth	0.5	7.5	0.5	0.5	3	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.87	7.67	6.34	6.44	7.36	8.36	8.07	7.09

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-537-SA5D-SB-2.5-3.5	SL-538-SA5D-SB-0.0-0.5	SL-538-SA5D-SB-3.0-4.0	SL-539-SA5D-SB-0.0-0.5	SL-539-SA5D-SB-3.0-4.0	SL-540-SA5D-SB-0.0-0.5	SL-540-SA5D-SB-5.0-6.0	SL-541-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/28/2013	08/28/2013	08/28/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013
			SDG	PH095	PH095	PH095	PH098	PH098	PH100	PH100	PH100
			Start Depth	2.5	0	3	0	3	0	5	0
			End Depth	3.5	0.5	4	0.5	4	0.5	6	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.32	7.73	8.12	7.89	8.09	6.58	8.56	6.74

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-541-SA5D-SB-2.5-3.5	SL-542-SA5D-SB-0.0-0.5	SL-542-SA5D-SB-4.0-5.0	SL-543-SA5D-SB-0.0-0.5	SL-543-SA5D-SB-4.0-5.0	SL-544-SA5D-SB-0.0-0.5	SL-544-SA5D-SB-6.5-7.5	SL-545-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	08/29/2013	08/29/2013	08/29/2013	08/29/2013	09/04/2013	09/04/2013	09/03/2013
			SDG	PH100	PH098	PH098	PH098	PH098	PH101	PH101	PH100
			Start Depth	2.5	0	4	0	4	0	6.5	0
			End Depth	3.5	0.5	5	0.5	5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.87	6.78	7.71	6.49	7.49	6.85	8.21	6.42

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-545-SA5D-SB-6.0-7.0	SL-546-SA5D-SB-0.0-0.5	SL-546-SA5D-SB-4.0-5.0	SL-547-SA5D-SB-0.0-0.5	SL-547-SA5D-SB-4.0-5.0	SL-548-SA5D-SB-0.0-0.5	SL-548-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	09/04/2013	09/04/2013	09/04/2013	09/04/2013	08/26/2013	08/26/2013	11/12/2013
			SDG	PH100	PH101	PH101	PH101	PH101	PH093	PH093	PH127
			Start Depth	6	0	4	0	4	0	4	0
			End Depth	7	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.25	6.73	7.58	6.94	7.66	7.43	7.13	7.92

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-549-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-11.0-12.0	SL-550-SA5D-SB-0.0-0.5	SL-550-SA5D-SB-4.0-5.0	SL-850-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-0.0-0.5	SL-551-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	11/12/2013	11/12/2013	09/06/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013
			SDG	PH127	PH127	PH103	PH103	PH103	PH107	PH107	PH107
			Start Depth	4	11	0	4	4	0	4	9
			End Depth	5	12	0.5	5	5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.31	7.31	7.05	7.74	7.63	6.78	7.51	7.66

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-551-SA5D-SB-14.0-15.0	SL-551-SA5D-SB-17.5-18.5	SL-552-SA5D-SB-0.0-0.5	SL-552-SA5D-SB-4.0-5.0	SL-553-SA5D-SB-0.0-0.5	SL-853-SA5D-SB-0.0-0.5	SL-553-SA5D-SB-4.5-5.5	SL-554-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/12/2013	09/12/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013	09/05/2013
			SDG	PH107	PH107	PH103	PH103	PH107	PH107	PH107	PH102
			Start Depth	14	17.5	0	4	0	0	4.5	0
			End Depth	15	18.5	0.5	5	0.5	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.84	8.11	6.67	7.31	7.11	7.66	8.00	6.68

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-554-SA5D-SB-4.0-5.0	SL-554-SA5D-SB-7.0-8.0	SL-555-SA5D-SB-0.0-0.5	SL-555-SA5D-SB-4.0-5.0	SL-555-SA5D-SB-10.5-11.5	SL-556-SA5D-SB-0.0-0.5	SL-556-SA5D-SB-4.0-5.0	SL-556-SA5D-SB-11.0-12.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013
			SDG	PH102	PH102	PH102	PH102	PH102	PH102	PH102	PH102
			Start Depth	4	7	0	4	10.5	0	4	11
			End Depth	5	8	0.5	5	11.5	0.5	5	12
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.65	7.16	6.27	7.12	7.47	6.86	7.40	7.71

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-557-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-4.0-5.0	SL-559-SA5D-SB-0.0-0.5	SL-559-SA5D-SB-6.0-7.0	SL-560-SA5D-SB-0.0-0.5	SL-560-SA5D-SB-4.0-5.0	SL-860-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	FD
			Sample Date	09/24/2013	09/24/2013	09/24/2013	09/05/2013	09/05/2013	11/12/2013	11/12/2013	11/12/2013
			SDG	PH113	PH113	PH113	PH102	PH102	PH127	PH127	PH127
			Start Depth	0	0	4	0	6	0	4	4
			End Depth	0.5	0.5	5	0.5	7	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.78	7.53	8.11	8.09	8.45	7.34	7.40	8.50

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-560-SA5D-SB-7.0-8.0	SL-561-SA5D-SB-0.0-0.5	SL-561-SA5D-SB-4.0-5.0	SL-561-SA5D-SB-9.0-10.0	SL-562-SA5D-SB-0.0-0.5	SL-562-SA5D-SB-4.0-5.0	SL-563-SA5D-SB-0.0-0.5	SL-563-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/12/2013	10/08/2013	10/08/2013	10/08/2013	09/25/2013	09/25/2013	09/25/2013	09/25/2013
			SDG	PH127	PH124	PH124	PH124	PH114	PH114	PH114	PH114
			Start Depth	7	0	4	9	0	4	0	4
			End Depth	8	0.5	5	10	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.22	7.46	7.76	7.85	7.86	8.11	7.75	8.29

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-863-SA5D-SB-4.0-5.0	SL-564-SA5D-SB-0.0-0.5	SL-564-SA5D-SB-4.0-5.0	SL-565-SA5D-SB-0.0-0.5	SL-865-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-4.0-5.0	SL-567-SA5D-SB-0.0-0.5
			Sample Type	FD	N	N	N	FD	N	N	N
			Sample Date	09/25/2013	10/01/2013	10/01/2013	09/24/2013	09/24/2013	09/24/2013	09/24/2013	10/07/2013
			SDG	PH114	PH119	PH119	PH113	PH113	PH113	PH113	PH123
			Start Depth	4	0	4	0	0	0	4	0
			End Depth	5	0.5	5	0.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.35	7.70	8.20	7.54	7.72	7.19	7.68	7.42

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-567-SA5D-SB-3.5-4.5	SL-568-SA5D-SB-0.0-0.5	SL-568-SA5D-SB-2.5-3.5	SL-868-SA5D-SB-2.5-3.5	SL-569-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-4.0-5.0	SL-571-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	10/07/2013	09/23/2013	09/23/2013	09/23/2013	09/25/2013	10/01/2013	10/01/2013	09/23/2013
			SDG	PH123	PH112	PH112	PH112	PH114	PH119	PH119	PH112
			Start Depth	3.5	0	2.5	2.5	0	0	4	0
			End Depth	4.5	0.5	3.5	3.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.12	7.64	7.99	8.14	6.80	7.17	7.67	7.90

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-577-SA5D-SB-0.0-0.5	SL-580-SA5D-SB-0.0-0.5	SL-581-SA5D-SB-0.0-0.5	SL-581-SA5D-SB-2.5-3.5	SL-582-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-4.0-5.0	SL-882-SA5D-SB-4.0-5.0	SL-582-SA5D-SB-10.0-11.0
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	09/19/2013	09/19/2013	09/19/2013	09/19/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013
			SDG	PH111	PH111	PH111	PH111	PH118	PH118	PH118	PH118
			Start Depth	0	0	0	2.5	0	4	4	10
			End Depth	0.5	0.5	0.5	3.5	0.5	5	5	11
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.16	5.81	6.20	6.32	7.82	8.18	8.26	8.18

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-583-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-4.0-5.0	SL-590-SA5D-SB-0.0-0.5	SL-590-SA5D-SB-4.0-5.0	SL-890-SA5D-SB-4.0-5.0	SL-590-SA5D-SB-11.0-12.0	SL-591-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/23/2013	10/02/2013	10/02/2013	09/06/2013	09/06/2013	09/06/2013	09/06/2013	09/12/2013
			SDG	PH112	PH120	PH120	PH103	PH103	PH103	PH103	PH107
			Start Depth	0	0	4	0	4	4	11	0
			End Depth	0.5	0.5	5	0.5	5	5	12	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.67	6.71	7.19	6.83	7.23	7.27	7.04	7.14

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-591-SA5D-SB-6.5-7.5	SL-593-SA5D-SB-0.0-0.5	SL-593-SA5D-SB-3.5-4.5	SL-595-SA5D-SB-0.0-0.5	SL-595-SA5D-SB-4.0-5.0	SL-595-SA5D-SB-9.0-10.0	SL-595-SA5D-SB-14.0-15.0	SL-595-SA5D-SB-17.0-18.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/12/2013	10/07/2013	10/07/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013
			SDG	PH107	PH123	PH123	PH118	PH118	PH118	PH118	PH118
			Start Depth	6.5	0	3.5	0	4	9	14	17
			End Depth	7.5	0.5	4.5	0.5	5	10	15	18
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.81	6.17	7.16	8.35	8.14	8.18	8.19	8.32

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-597-SA5D-SB-0.0-0.5	SL-597-SA5D-SB-4.0-5.0	SL-597-SA5D-SB-9.0-10.0	SL-597-SA5D-SB-14.0-15.0	SL-597-SA5D-SB-17.0-18.0	SL-599-SA5D-SB-0.0-0.5	SL-599-SA5D-SB-4.0-5.0	SL-599-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013	09/09/2013	09/09/2013	09/09/2013
			SDG	PH118	PH118	PH118	PH118	PH118	PH104	PH104	PH104
			Start Depth	0	4	9	14	17	0	4	9
			End Depth	0.5	5	10	15	18	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.08	8.13	8.12	8.28	8.35	8.06	7.93	7.96

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-599-SA5D-SB-14.0-15.0	SL-599-SA5D-SB-19.0-20.0	SL-599-SA5D-SB-22.0-23.0	SL-600-SA5D-SB-0.0-0.5	SL-900-SA5D-SB-0.0-0.5	SL-600-SA5D-SB-4.0-5.0	SL-600-SA5D-SB-9.0-10.0	SL-600-SA5D-SB-14.0-15.0
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	09/09/2013	09/09/2013	09/09/2013	10/02/2013	10/02/2013	10/02/2013	10/02/2013	10/02/2013
			SDG	PH104	PH104	PH104	PH120	PH120	PH120	PH120	PH120
			Start Depth	14	19	22	0	0	4	9	14
			End Depth	15	20	23	0.5	0.5	5	10	15
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.27	8.27	8.52	6.83	7.26	7.19	7.56	7.64

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-600-SA5D-SB-18.5-19.5	SL-602-SA5D-SB-0.0-0.5	SL-602-SA5D-SB-4.0-5.0	SL-602-SA5D-SB-9.0-10.0	SL-603-SA5D-SB-0.0-0.5	SL-603-SA5D-SB-4.0-5.0	SL-603-SA5D-SB-9.0-10.0	SL-603-SA5D-SB-13.0-14.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/02/2013	10/08/2013	10/08/2013	10/08/2013	09/10/2013	09/10/2013	09/10/2013	09/10/2013
			SDG	PH120	PH124	PH124	PH124	PH105	PH105	PH105	PH105
			Start Depth	18.5	0	4	9	0	4	9	12
			End Depth	19.5	0.5	5	10	0.5	5	10	14
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.06	7.48	7.68	7.87	8.22	7.97	7.98	7.99

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-606-SA5D-SB-0.0-0.5	SL-606-SA5D-SB-4.0-5.0	SL-606-SA5D-SB-9.0-10.0	SL-606-SA5D-SB-13.0-14.0	SL-607-SA5D-SB-0.0-0.5	SL-607-SA5D-SB-4.0-5.0	SL-608-SA5D-SB-0.0-0.5	SL-608-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/10/2013	09/10/2013	09/10/2013	09/10/2013	10/01/2013	10/01/2013	10/03/2013	10/03/2013
			SDG	PH105	PH105	PH105	PH105	PH119	PH119	PH122	PH122
			Start Depth	0	4	9	13	0	4	0	4
			End Depth	0.5	5	10	14	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.02	7.87	8.13	8.29	8.08	8.04	7.21	7.42

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-609-SA5D-SB-0.0-0.5
			Sample Type	N
			Sample Date	11/15/2013
			SDG	PH130
			Start Depth	0
			End Depth	0.5
Analytic Method	CAS Number	Chemical Name	Unit	
9045M	pH	pH	pH	7.03

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-549-SA5D-SB-0.0-0.5	SL-549-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-11.0-12.0	SL-560-SA5D-SB-0.0-0.5	SL-560-SA5D-SB-4.0-5.0	SL-860-SA5D-SB-4.0-5.0	SL-560-SA5D-SB-7.0-8.0
		Sample Type	N	N	N	N	N	FD	N
		Sample Date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013
		SDG	PH127	PH127	PH127	PH127	PH127	PH127	PH127
		Start Depth	0	4	11	0	4	4	7
		End Depth	0.5	5	12	0.5	5	5	8
Analytic Method	CAS Number	Chemical Name	Unit						
8270D	100-01-6	4-Nitroaniline	µg/kg	180 U	190 U	190 U	190 U	170 U	170 U	170 U
8270D	100-02-7	4-Nitrophenol	µg/kg	540 U	560 U	560 U	560 U	520 U	520 U	520 U
8270D	100-51-6	Benzyl Alcohol	µg/kg	360 U	380 U	370 U	370 U	340 U	350 U	340 U
8270D	101-55-3	4-Bromophenyl-phenylether	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	105-67-9	2,4-Dimethylphenol	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	106-44-5	4-Methylphenol	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	106-46-7	1,4-Dichlorobenzene	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	106-47-8	4-Chloroaniline	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	108-68-9	3,5-Dimethylphenol	µg/kg	180 U	190 U	190 U	190 U	170 U	170 U	170 U
8270D	108-95-2	Phenol	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	110-86-1	Pyridine	µg/kg	180 U	190 U	190 U	190 U	170 U	170 U	170 U
8270D	111-44-4	bis(2-chloroethyl) ether	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	111-91-1	bis(2-chloroethoxy)methane	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	118-74-1	Hexachlorobenzene	µg/kg	18 U	19 U	19 U	19 U	18 U	18 U	18 U
8270D	120-82-1	1,2,4-Trichlorobenzene	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	120-83-2	2,4-Dichlorophenol	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	122-66-7	1,2-Diphenylhydrazine	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	132-64-9	Dibenzofuran	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	39638-32-9	bis(2-chloroisopropyl) ether	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	51-28-5	2,4-Dinitrophenol	µg/kg	710 U	740 U	730 U	740 U	680 U	690 U	680 U
8270D	534-52-1	4,6-Dinitro-2-methylphenol	µg/kg	540 U	560 U	560 U	560 U	520 U	520 U	520 U
8270D	541-73-1	1,3-Dichlorobenzene	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	59-50-7	4-Chloro-3-methylphenol	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	621-64-7	N-Nitroso-di-n-propylamine	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	62-53-3	Aniline	µg/kg	360 U	380 U	370 U	370 U	340 U	350 U	340 U
8270D	65-85-0	Benzoic Acid	µg/kg	540 U	560 U	560 U	560 U	520 U	520 U	520 U
8270D	67-72-1	Hexachloroethane	µg/kg	180 U	190 U	190 U	190 U	170 U	170 U	170 U
8270D	7005-72-3	4-Chlorophenyl-phenylether	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	77-47-4	Hexachlorocyclopentadiene	µg/kg	540 U	560 U	560 U	560 U	520 U	520 U	520 U
8270D	78-59-1	Isophorone	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	86-30-6	N-Nitrosodiphenylamine	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	86-74-8	Carbazole	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	87-65-0	2,6-Dichlorophenol	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	87-68-3	Hexachlorobutadiene	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	87-86-5	Pentachlorophenol	µg/kg	180 U	190 U	190 U	190 U	180 U	180 U	180 U
8270D	88-06-2	2,4,6-Trichlorophenol	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	88-74-4	2-Nitroaniline	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	88-75-5	2-Nitrophenol	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	91-58-7	2-Chloronaphthalene	µg/kg	35 U	37 U	37 U	37 U	34 U	34 U	34 U
8270D	91-94-1	3,3'-Dichlorobenzidine	µg/kg	360 U	380 U	370 U	370 U	340 U	350 U	340 U
8270D	92-52-4	1,1'-Biphenyl	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	92-87-5	Benzidine	µg/kg	1800 U	1900 U	1800 U	1900 U	1700 U	1700 U	1700 U
8270D	95-48-7	2-Methylphenol	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	95-50-1	1,2-Dichlorobenzene	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	95-57-8	2-Chlorophenol	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	95-95-4	2,4,5-Trichlorophenol	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	98-95-3	Nitrobenzene	µg/kg	36 U	38 U	37 U	37 U	34 U	35 U	34 U
8270D	99-09-2	3-Nitroaniline	µg/kg	180 U	190 U	190 U	190 U	170 U	170 U	170 U
8270D	NDPA122-39-4	Diphenylamine	µg/kg	180 U	190 U	190 U	190 U	170 U	170 U	170 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-501-SA5D-SB-0.0-0.5	SL-501-SA5D-SB-4.0-5.0	SL-501-SA5D-SB-9.0-10.0	SL-501-SA5D-SB-14.0-15.0	SL-501-SA5D-SB-19.0-20.0	SL-501-SA5D-SB-24.0-25.0	SL-501-SA5D-SB-28.0-29.0	SL-502-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	10/03/2013
			SDG	PH109	PH109	PH109	PH109	PH109	PH109	PH109	PH122
			Start Depth	0	4	9	14	19	24	28	0
			End Depth	0.5	5	10	15	20	25	29	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.4 U	5.7 U	5.5 U	5.5 U	5.5 U	5.4 U	5.4 U	100 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.4 U	5.7 U	5.5 U	5.5 U	5.5 U	5.4 U	5.4 U	48 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	3.9 J Z	5.7 U	5.5 U	5.5 U	5.5 U	5.4 U	5.4 U	870
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	6.5 J Z	11 U	11 U	11 U	11 U	11 U	11 U	1400
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.4 U	5.7 U	5.5 U	5.5 U	5.5 U	5.4 U	5.4 U	100 U

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			Sample Name	SL-502-SA5D-SB-6.5-7.5	SL-503-SA5D-SB-0.0-0.5	SL-503-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-0.0-0.5	SL-504-SA5D-SB-4.0-5.0	SL-804-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-9.0-10.0	SL-504-SA5D-SB-16.0-17.0
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	10/03/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013
			SDG	PH122	PH109	PH109	PH109	PH109	PH109	PH109	PH109
			Start Depth	6.5	0	4	0	4	4	9	16
			End Depth	7.5	0.5	5	0.5	5	5	10	17
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	37 U	5.5 U	5.7 U	5.5 U	5.7 U	5.6 U	5.5 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	37 U	5.5 U	5.7 U	5.5 U	5.7 U	5.6 U	5.5 U	5.4 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	77	3.5 J Z	5.7 U	4.8 J Z	5.7 U	5.6 U	5.5 U	5.4 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	230	6.7 J Z	11 U	5.8 J Z	11 U	11 U	11 U	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	37 U	5.5 U	5.7 U	5.5 U	5.7 U	5.6 U	5.5 U	5.4 U

U-Compound not detected above reporting limit
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			Sample Name	SL-505-SA5D-SB-0.0-0.5	SL-505-SA5D-SB-4.0-5.0	SL-505-SA5D-SB-9.0-10.0	SL-505-SA5D-SB-14.0-15.0	SL-505-SA5D-SB-19.0-20.0	SL-506-SA5D-SB-0.0-0.5	SL-506-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/16/2013	09/11/2013	09/11/2013	10/03/2013
			SDG	PH108	PH108	PH108	PH108	PH108	PH106	PH106	PH122
			Start Depth	0	4	9	14	19	0	4	0
			End Depth	0.5	5	10	15	20	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.5 U	5.6 U	5.5 U	5.6 U	5.5 U	5.8 U	11 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.2 U	4.0 J Z	5.6 U	5.5 U	5.6 U	5.5 U	5.8 U	11 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	16	18	11	5.5 U	5.6 U	3.7 J Z	5.8 U	37
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	45	44	26	11 U	11 U	7.6 J Z	12 U	60
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.5 U	5.6 U	5.5 U	5.6 U	5.5 U	5.8 U	11 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-507-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-10.5-11.5	SL-508-SA5D-SB-0.0-0.5	SL-508-SA5D-SB-4.0-5.0	SL-508-SA5D-SB-9.0-10.0	SL-508-SA5D-SB-14.0-15.0	SL-508-SA5D-SB-19.0-20.0	SL-508-SA5D-SB-23.0-24.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013
			SDG	PH122	PH122	PH122	PH122	PH122	PH122	PH122	PH122
			Start Depth	4	10.5	0	4	9	14	19	23
			End Depth	5	11.5	0.5	5	10	15	20	24
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.7 U	5.3 U	5.4 U	5.8 U	5.7 U	5.6 U	5.6 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.7 U	5.3 U	5.4 U	5.8 U	5.7 U	5.6 U	5.6 U	5.4 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.7 U	5.3 U	5.9	5.8 U	5.7 U	5.6 U	5.6 U	5.4 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	11 U	11	12 U	11 U	11 U	11 U	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.7 U	5.3 U	5.4 U	5.8 U	5.7 U	5.6 U	5.6 U	5.4 U

U-Compound not detected above reporting limit
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			Sample Name	SL-509-SA5D-SB-0.0-0.5	SL-509-SA5D-SB-4.0-5.0	SL-510-SA5D-SB-0.0-0.5	SL-510-SA5D-SB-4.0-5.0	SL-512-SA5D-SB-0.0-0.5	SL-512-SA5D-SB-4.0-5.0	SL-513-SA5D-SB-0.0-0.5	SL-513-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/26/2013	09/26/2013	09/18/2013	09/18/2013
			SDG	PH110	PH110	PH110	PH110	PH116	PH116	PH110	PH110
			Start Depth	0	4	0	4	0	4	0	4
			End Depth	0.5	5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.5 U	5.7 UJ S	5.4 U	5.8 U	5.3 U	5.7 U	5.6 U	5.9 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.5 U	5.7 UJ S	5.4 U	5.8 U	5.3 U	5.7 U	5.6 U	5.9 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	6.8	5.7 UJ S	7.4	5.8 U	5.3 U	5.7 U	5.6 U	5.9 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	12	11 UJ S	12 J Q	12 U	11 U	11 U	11 U	12 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.5 U	5.7 UJ S	5.4 U	5.8 U	5.3 U	5.7 U	5.6 U	5.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-513-SA5D-SB-9.0-10.0	SL-513-SA5D-SB-16.0-17.0	SL-514-SA5D-SB-0.0-0.5	SL-514-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-0.0-0.5	SL-815-SA5D-SB-0.0-0.5	SL-515-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-9.0-10.0
				Sample Type	N	N	N	N	N	FD	N	N
				Sample Date	09/18/2013	09/18/2013	09/18/2013	09/18/2013	09/09/2013	09/09/2013	09/09/2013	09/09/2013
				SDG	PH110	PH110	PH110	PH110	PH104	PH104	PH104	PH104
				Start Depth	9	16	0	4	0	0	4	9
				End Depth	10	17	0.5	5	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.6 U	5.4 U	5.7 U	5.8 U	5.5 U	5.4 U	5.9 U	5.9 U	
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.6 U	5.4 U	5.7 U	5.8 U	5.5 U	5.4 U	5.9 U	5.9 U	
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.6 U	5.4 U	5.7 U	5.8 U	5.5 J FD, Q	10 J FD	4.4 J Z	2.8 J Z	
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	11 U	11 U	12 U	11 J FD, Q	22 J FD	9.0 J Z	6.9 J Z	
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.6 U	5.4 U	5.7 U	5.8 U	5.5 U	5.4 U	5.9 U	5.9 U	

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-515-SA5D-SB-22.0-23.0	SL-516-SA5D-SB-0.0-0.5	SL-516-SA5D-SB-4.0-5.0	SL-816-SA5D-SB-4.0-5.0	SL-516-SA5D-SB-9.0-10.0	SL-516-SA5D-SB-13.0-14.0	SL-518-SA5D-SB-0.0-0.5	SL-518-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	09/09/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	11/15/2013	09/10/2013	09/10/2013
			SDG	PH104	PH130	PH130	PH130	PH130	PH130	PH105	PH105
			Start Depth	22	0	4	4	9	13	0	4
			End Depth	23	0.5	5	5	10	14	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.8 U	5.3 U	5.5 U	5.5 U	5.5 U	5.1 U	5.4 U	5.8 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.8 U	5.3 U	5.5 U	5.5 U	5.5 U	5.1 U	5.4 U	5.8 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.8 U	3.9 J Z	5.5 U	5.5 U	5.5 U	5.3	10	5.1 J Z
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	12 U	6.2 J Z	11 U	11 U	11 U	11	21	8.6 J Z
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.8 U	5.3 U	5.5 U	5.5 U	5.5 U	5.1 U	5.4 U	5.8 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-518-SA5D-SB-9.0-10.0	SL-518-SA5D-SB-15.0-16.0	SL-519-SA5D-SB-0.0-0.5	SL-519-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-0.0-0.5	SL-520-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-8.0-9.0	SL-521-SA5D-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	09/10/2013	09/10/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/11/2013
				SDG	PH105	PH105	PH106	PH106	PH106	PH106	PH106	PH106
				Start Depth	9	15	0	4	0	4	8	0
				End Depth	10	16	0.5	5	0.5	5	9	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.8 U	5.5 U	5.4 U	5.7 U	5.6 U	5.9 U	5.6 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.8 U	5.5 U	5.4 U	5.7 U	5.6 U	5.9 U	5.6 U	2.2 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.8 U	5.5 U	5.1 J Q, Z	5.7 U	5.8	5.9 U	5.6 U	7.1
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	12 U	11 U	9.8 J Q, Z	11 U	12	12 U	11 U	14
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.8 U	5.5 U	2.2 J Q, Z	5.7 U	2.9 J Z	5.9 U	5.6 U	5.4 U

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J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-521-SA5D-SB-5.5-6.5	SL-522-SA5D-SB-0.0-0.5	SL-522-SA5D-SB-6.0-7.0	SL-523-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-0.0-0.5	SL-524-SA5D-SB-5.5-6.5	SL-824-SA5D-SB-5.5-6.5	SL-525-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/04/2013	09/04/2013	09/04/2013	09/03/2013
			SDG	PH106	PH106	PH106	PH106	PH101	PH101	PH101	PH100
			Start Depth	5.5	0	6	0	0	5.5	5.5	0
			End Depth	6.5	0.5	7	0.5	0.5	6.5	6.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.4 U	5.3 U	5.5 U	5.1 U	5.2 U	5.3 U	5.3 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.4 U	2.2 J Z	5.5 U	5.1 U	5.2 U	5.3 U	5.3 U	5.2 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.4 U	5.1 J Z	5.5 U	5.1 U	14	5.3 U	5.3 U	6.1 J Q
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	10 J Z	11 U	10 U	25	11 U	11 U	21 J Q
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	3.4 J Z	5.3 U	3.2 J Z	5.1 U	5.2 U	5.3 U	5.3 U	5.2 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-525-SA5D-SB-2.5-3.5	SL-526-SA5D-SB-0.0-0.5	SL-526-SA5D-SB-3.0-4.0	SL-527-SA5D-SB-0.0-0.5	SL-527-SA5D-SB-4.0-5.0	SL-528-SA5D-SB-0.0-0.5	SL-528-SA5D-SB-2.5-3.5	SL-529-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013	09/03/2013	09/11/2013
			SDG	PH100	PH098	PH098	PH100	PH100	PH100	PH100	PH106
			Start Depth	2.5	0	3	0	4	0	2.5	0
			End Depth	3.5	0.5	4	0.5	5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.3 U	5.2 U	5.3 U	5.1 U	5.5 U	5.1 U	5.4 U	5.3 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.3 U	5.2 U	5.3 U	5.1 U	5.5 U	5.1 U	5.4 U	5.3 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.3 U	5.2 U	5.3 U	4.7 J Z	5.5 U	4.9 J Z	5.4 U	4.7 J Z
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	10 U	11 U	12	11 U	13	11 U	11
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.3 U	5.2 U	5.3 U	5.1 U	5.5 U	5.1 U	5.4 U	5.3 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-529-SA5D-SB-3.0-4.0	SL-530-SA5D-SB-0.0-0.5	SL-530-SA5D-SB-2.5-3.5	SL-531-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-0.0-0.5	SL-532-SA5D-SB-2.5-3.5	SL-533-SA5D-SB-0.0-0.5	SL-533-SA5D-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/11/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013
			SDG	PH106	PH099	PH099	PH099	PH099	PH099	PH099	PH099
			Start Depth	3	0	2.5	0	0	2.5	0	2.5
			End Depth	4	0.5	3.5	0.5	0.5	3.5	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.3 U	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.3 U	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.4 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.3 U	5.5	5.2 U	5.2 U	9.5	5.2 U	5.1 U	5.4 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	14	10 U	10 U	45	10 U	10 U	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.3 U	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.4 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-534-SA5D-SB-0.0-0.5	SL-534-SA5D-SB-6.5-7.5	SL-535-SA5D-SB-0.0-0.5	SL-835-SA5D-SB-0.0-0.5	SL-535-SA5D-SB-2.0-3.0	SL-536-SA5D-SB-0.0-0.5	SL-536-SA5D-SB-3.5-4.5	SL-537-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/30/2013	08/28/2013	08/28/2013	08/28/2013
			SDG	PH099	PH099	PH099	PH099	PH099	PH095	PH095	PH095
			Start Depth	0	6.5	0	0	2	0	3.5	0
			End Depth	0.5	7.5	0.5	0.5	3	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.3 U	5.2 U	5.1 U	5.1 U	5.3 U	27 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U	5.3 U	5.2 U	5.1 U	5.1 U	5.3 U	27 U	2.5 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.1 U	5.3 U	5.2 UJ FD	4.7 J FD, Z	5.1 U	5.3 U	93	6.8
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	10 U	11 U	10 UJ FD	9.0 J FD, Z	10 U	11 U	420	12
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.3 U	5.2 U	5.1 U	5.1 U	5.3 U	27 U	5.2 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-537-SA5D-SB-2.5-3.5	SL-538-SA5D-SB-0.0-0.5	SL-538-SA5D-SB-3.0-4.0	SL-539-SA5D-SB-0.0-0.5	SL-539-SA5D-SB-3.0-4.0	SL-540-SA5D-SB-0.0-0.5	SL-540-SA5D-SB-5.0-6.0	SL-541-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/28/2013	08/28/2013	08/28/2013	08/29/2013	08/29/2013	09/03/2013	09/03/2013	09/03/2013
			SDG	PH095	PH095	PH095	PH098	PH098	PH100	PH100	PH100
			Start Depth	2.5	0	3	0	3	0	5	0
			End Depth	3.5	0.5	4	0.5	4	0.5	6	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.3 U	5.2 U	5.1 U	5.2 U	5.4 U	5.4 U	5.3 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.2 U	5.3 U	5.2 U	5.1 U	5.2 U	5.4 U	5.4 U	5.3 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.2 U	5.3 U	5.2 U	5.1 U	5.2 U	15	5.4 U	3.5 J Z
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	10 U	11 U	10 U	10 U	10 U	30	11 U	8.0 J Z
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.3 U	5.2 U	5.1 U	5.2 U	5.4 U	5.4 U	5.3 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-541-SA5D-SB-2.5-3.5	SL-542-SA5D-SB-0.0-0.5	SL-542-SA5D-SB-4.0-5.0	SL-543-SA5D-SB-0.0-0.5	SL-543-SA5D-SB-4.0-5.0	SL-544-SA5D-SB-0.0-0.5	SL-544-SA5D-SB-6.5-7.5	SL-545-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	08/29/2013	08/29/2013	08/29/2013	08/29/2013	09/04/2013	09/04/2013	09/03/2013
			SDG	PH100	PH098	PH098	PH098	PH098	PH101	PH101	PH100
			Start Depth	2.5	0	4	0	4	0	6.5	0
			End Depth	3.5	0.5	5	0.5	5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.4 U	5.3 U	5.3 U	5.5 U	5.2 U	5.3 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.2 U	2.5 J Z	5.3 U	5.3 U	5.5 U	5.2 U	5.3 U	5.4 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.2 U	12	5.3 U	9.3	5.5 U	4.4 J Z	5.3 U	8.9
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	10 U	21	11 U	18	11 U	11	11 U	23
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.4 U	5.3 U	5.3 U	5.5 U	5.2 U	5.3 U	5.4 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-545-SA5D-SB-6.0-7.0	SL-546-SA5D-SB-0.0-0.5	SL-546-SA5D-SB-4.0-5.0	SL-547-SA5D-SB-0.0-0.5	SL-547-SA5D-SB-4.0-5.0	SL-548-SA5D-SB-0.0-0.5	SL-548-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/03/2013	09/04/2013	09/04/2013	09/04/2013	09/04/2013	08/26/2013	08/26/2013	11/12/2013
			SDG	PH100	PH101	PH101	PH101	PH101	PH093	PH093	PH127
			Start Depth	6	0	4	0	4	0	4	0
			End Depth	7	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.3 U	5.2 U	5.6 U	5.2 U	5.7 U	10 U	5.6 U	5.3 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.3 U	5.2 U	5.6 U	5.2 U	5.7 U	10 U	5.6 U	5.3 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.3 U	5.4	5.6 U	5.1 J Z	5.7 U	42	9.0	5.3 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	14	11 U	11	11 U	110	8.3 J Z	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.3 U	5.2 U	5.6 U	5.2 U	5.7 U	10 U	5.6 U	5.3 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-549-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-11.0-12.0	SL-550-SA5D-SB-0.0-0.5	SL-550-SA5D-SB-4.0-5.0	SL-850-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-0.0-0.5	SL-551-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-9.0-10.0
				Sample Type	N	N	N	N	FD	N	N	N
				Sample Date	11/12/2013	11/12/2013	09/06/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013
				SDG	PH127	PH127	PH103	PH103	PH103	PH107	PH107	PH107
				Start Depth	4	11	0	4	4	0	4	9
				End Depth	5	12	0.5	5	5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.6 U	5.5 U	5.2 U	5.6 U	5.5 U	5.2 U	5.4 U	5.5 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.6 U	5.5 U	5.2 U	5.6 U	5.5 U	5.2 U	5.4 U	5.5 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.6 U	5.5 U	8.1	5.6 U	5.5 U	5.2 U	5.4 U	5.5 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	11 U	15	11 U	11 U	10 U	11 U	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.6 U	5.5 U	5.2 U	5.6 U	5.5 U	5.2 U	5.4 U	5.5 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-551-SA5D-SB-14.0-15.0	SL-551-SA5D-SB-17.5-18.5	SL-552-SA5D-SB-0.0-0.5	SL-552-SA5D-SB-4.0-5.0	SL-553-SA5D-SB-0.0-0.5	SL-853-SA5D-SB-0.0-0.5	SL-553-SA5D-SB-4.5-5.5	SL-554-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	09/12/2013	09/12/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013	09/12/2013	09/05/2013
			SDG	PH107	PH107	PH103	PH103	PH107	PH107	PH107	PH102
			Start Depth	14	17.5	0	4	0	0	4.5	0
			End Depth	15	18.5	0.5	5	0.5	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.7 U	5.5 U	5.2 U	5.7 U	5.1 U	5.1 U	5.3 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.7 U	5.5 U	5.2 U	5.7 U	2.5 J Z	2.1 J Z	5.3 U	5.2 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.7 U	5.5 U	6.9	5.7 U	13 J Q	11	4.4 J Z	7.3
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	11 U	15	11 U	41	32	8.2 J Z	20
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.7 U	5.5 U	5.2 U	5.7 U	5.1 U	5.1 U	5.3 U	5.2 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-554-SA5D-SB-4.0-5.0	SL-554-SA5D-SB-7.0-8.0	SL-555-SA5D-SB-0.0-0.5	SL-555-SA5D-SB-4.0-5.0	SL-555-SA5D-SB-10.5-11.5	SL-556-SA5D-SB-0.0-0.5	SL-556-SA5D-SB-4.0-5.0	SL-556-SA5D-SB-11.0-12.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013	09/05/2013
			SDG	PH102	PH102	PH102	PH102	PH102	PH102	PH102	PH102
			Start Depth	4	7	0	4	10.5	0	4	11
			End Depth	5	8	0.5	5	11.5	0.5	5	12
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.4 U	5.4 U	5.2 U	5.4 U	5.6 U	5.1 U	5.3 U	5.3 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.4 U	5.4 U	5.2 U	5.4 U	5.6 U	5.1 U	5.3 U	5.3 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.4 U	5.4 U	4.5 J Z	5.4 U	5.6 U	12	4.8 J Z	5.3 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	11 U	7.2 J Z	11 U	11 U	34	9.8 J Z	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.4 U	5.4 U	5.2 U	5.4 U	5.6 U	5.1 U	5.3 U	5.3 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-557-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-0.0-0.5	SL-558-SA5D-SB-4.0-5.0	SL-559-SA5D-SB-0.0-0.5	SL-559-SA5D-SB-6.0-7.0	SL-560-SA5D-SB-0.0-0.5	SL-560-SA5D-SB-4.0-5.0	SL-860-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	FD
			Sample Date	09/24/2013	09/24/2013	09/24/2013	09/05/2013	09/05/2013	11/12/2013	11/12/2013	11/12/2013
			SDG	PH113	PH113	PH113	PH102	PH102	PH127	PH127	PH127
			Start Depth	0	0	4	0	6	0	4	4
			End Depth	0.5	0.5	5	0.5	7	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	26 U	5.3 U	5.3 U	5.3 U	5.4 U	5.5 U	5.1 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	26 U	5.6	5.3 U	5.3 U	5.4 U	5.5 U	5.1 U	5.2 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	39	34	5.3 U	15	5.4 U	5.5 U	5.1 U	5.2 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	170	72	11 U	45	11 U	11 U	10 U	10 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	26 U	5.3 U	5.3 U	5.3 U	5.4 U	5.5 U	5.1 U	5.2 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-560-SA5D-SB-7.0-8.0	SL-561-SA5D-SB-0.0-0.5	SL-561-SA5D-SB-4.0-5.0	SL-561-SA5D-SB-9.0-10.0	SL-562-SA5D-SB-0.0-0.5	SL-562-SA5D-SB-4.0-5.0	SL-563-SA5D-SB-0.0-0.5	SL-563-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/12/2013	10/08/2013	10/08/2013	10/08/2013	09/25/2013	09/25/2013	09/25/2013	09/25/2013
			SDG	PH127	PH124	PH124	PH124	PH114	PH114	PH114	PH114
			Start Depth	7	0	4	9	0	4	0	4
			End Depth	8	0.5	5	10	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.3 U	5.5 U	5.4 U	5.2 U	5.5 U	5.3 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U	5.7	5.5 U	5.4 U	4.1 J Z	2.2 J Z	2.9 J Z	5.4 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.1 U	19	5.1 J Z	5.4 U	22	6.9	18	5.4 UJ FD
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	10 U	42	12	11 U	41	14	39	11 UJ FD
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.3 U	5.5 U	5.4 U	5.2 U	5.5 U	5.3 U	5.4 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-863-SA5D-SB-4.0-5.0	SL-564-SA5D-SB-0.0-0.5	SL-564-SA5D-SB-4.0-5.0	SL-565-SA5D-SB-0.0-0.5	SL-865-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-0.0-0.5	SL-566-SA5D-SB-4.0-5.0	SL-567-SA5D-SB-0.0-0.5
			Sample Type	FD	N	N	N	FD	N	N	N
			Sample Date	09/25/2013	10/01/2013	10/01/2013	09/24/2013	09/24/2013	09/24/2013	09/24/2013	10/07/2013
			SDG	PH114	PH119	PH119	PH113	PH113	PH113	PH113	PH123
			Start Depth	4	0	4	0	0	0	4	0
			End Depth	5	0.5	5	0.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.3 U	5.4 U	5.6 U	5.3 U	5.2 U	5.1 U	5.4 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.3 U	5.4 U	5.6 U	5.3 U	5.2 U	4.9 J Z	5.4 U	2.9 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.0 J FD, Z	5.4 U	5.6 U	4.3 J FD, Q, Z	8.7 J FD	22	5.4 U	21
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	8.5 J FD, Z	11 U	11 U	13 J FD, Q	29 J FD	60	11 U	33
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.3 U	5.4 U	5.6 U	5.3 U	5.2 U	5.1 U	5.4 U	5.2 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-567-SA5D-SB-3.5-4.5	SL-568-SA5D-SB-0.0-0.5	SL-568-SA5D-SB-2.5-3.5	SL-868-SA5D-SB-2.5-3.5	SL-569-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-0.0-0.5	SL-570-SA5D-SB-4.0-5.0	SL-571-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	10/07/2013	09/23/2013	09/23/2013	09/23/2013	09/25/2013	10/01/2013	10/01/2013	09/23/2013
			SDG	PH123	PH112	PH112	PH112	PH114	PH119	PH119	PH112
			Start Depth	3.5	0	2.5	2.5	0	0	4	0
			End Depth	4.5	0.5	3.5	3.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.4 U	130 U	5.3 U	5.1 U	5.1 U	5.4 U	5.6 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.4 U	130 U	5.3 U	5.1 U	8.3	5.4 U	5.6 U	5.2 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	9.3	280	22 J FD, Q	12 J FD	51	5.4 U	5.6 U	12
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	21	1100	26 J FD, Q	45 J FD	79	11 U	11 U	13
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.4 U	130 U	5.3 U	5.1 U	3.8 J Z	5.4 U	5.6 U	5.2 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-576-SA5D-SB-0.0-0.5	SL-576-SA5D-SB-3.5-4.5	SL-577-SA5D-SB-0.0-0.5	SL-578-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-0.0-0.5	SL-582-SA5D-SB-4.0-5.0	SL-882-SA5D-SB-4.0-5.0	SL-582-SA5D-SB-10.0-11.0
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	09/19/2013	09/19/2013	09/19/2013	09/19/2013	09/30/2013	09/30/2013	09/30/2013	09/30/2013
			SDG	PH111	PH111	PH111	PH111	PH118	PH118	PH118	PH118
			Start Depth	0	3.5	0	0	0	4	4	10
			End Depth	0.5	4.5	0.5	0.5	0.5	5	5	11
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.3 U	25 U	5.3 U	5.3 U	5.6 U	5.6 U	5.5 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U	5.3 U	25 U	2.6 J Z	5.3 U	5.6 U	5.6 U	5.5 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	10	5.1 J Z	49	17	5.3 U	5.6 U	5.6 U	5.5 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	25	11	150	36	11 U	11 U	11 U	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.3 U	25 U	5.3 U	5.3 U	5.6 U	5.6 U	5.5 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-583-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-0.0-0.5	SL-589-SA5D-SB-4.0-5.0	SL-607-SA5D-SB-0.0-0.5	SL-607-SA5D-SB-4.0-5.0	SL-608-SA5D-SB-0.0-0.5	SL-608-SA5D-SB-4.0-5.0	SL-609-SA5D-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	09/23/2013	10/02/2013	10/02/2013	10/01/2013	10/01/2013	10/03/2013	10/03/2013	11/15/2013
			SDG	PH112	PH120	PH120	PH119	PH119	PH122	PH122	PH130
			Start Depth	0	0	4	0	4	0	4	0
			End Depth	0.5	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.3 U	5.5 U	5.3 U	5.7 U	5.3 U	5.6 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	3.6 J Z	5.3 U	5.5 U	5.3 U	5.7 U	5.3 U	5.6 U	5.2 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	17	5.3 U	5.5 U	5.3 U	5.7 U	5.3 U	5.6 U	2.6 J Z
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	43	11 U	11 U	11 U	11 U	11 U	11 U	5.5 J Z
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.3 U	5.5 U	5.3 U	5.7 U	5.3 U	5.6 U	5.2 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-501-SA5D-SB-4.0-5.0	SL-501-SA5D-SB-9.0-10.0	SL-501-SA5D-SB-14.0-15.0	SL-501-SA5D-SB-19.0-20.0	SL-501-SA5D-SB-24.0-25.0	SL-501-SA5D-SB-28.0-29.0	SL-502-SA5D-SB-6.5-7.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	10/03/2013
			SDG	PH109	PH109	PH109	PH109	PH109	PH109	PH122
			Start Depth	4	9	14	19	24	28	6.5
			End Depth	5	10	15	20	25	29	7.5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.0 U	0.9 U	1 U	1.0 U	1.1 U	1.0 U	1.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-503-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-4.0-5.0	SL-804-SA5D-SB-4.0-5.0	SL-504-SA5D-SB-9.0-10.0	SL-504-SA5D-SB-16.0-17.0	SL-505-SA5D-SB-4.0-5.0	SL-505-SA5D-SB-9.0-10.0
			Sample Type	N	N	FD	N	N	N	N
			Sample Date	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/17/2013	09/16/2013	09/16/2013
			SDG	PH109	PH109	PH109	PH109	PH109	PH108	PH108
			Start Depth	4	4	4	9	16	4	9
			End Depth	5	5	5	10	17	5	10
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1 U	1.0 U	1 U	1.0 U	1 U	1.1 U	1.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-505-SA5D-SB-14.0-15.0	SL-505-SA5D-SB-19.0-20.0	SL-506-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-4.0-5.0	SL-507-SA5D-SB-10.5-11.5	SL-508-SA5D-SB-4.0-5.0	SL-508-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	09/16/2013	09/16/2013	09/11/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013
			SDG	PH108	PH108	PH106	PH122	PH122	PH122	PH122
			Start Depth	14	19	4	4	10.5	4	9
			End Depth	15	20	5	5	11.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-508-SA5D-SB-14.0-15.0	SL-508-SA5D-SB-19.0-20.0	SL-508-SA5D-SB-23.0-24.0	SL-509-SA5D-SB-4.0-5.0	SL-510-SA5D-SB-4.0-5.0	SL-512-SA5D-SB-4.0-5.0	SL-513-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	10/03/2013	10/03/2013	10/03/2013	09/18/2013	09/18/2013	09/26/2013	09/18/2013
			SDG	PH122	PH122	PH122	PH110	PH110	PH116	PH110
			Start Depth	14	19	23	4	4	4	4
			End Depth	15	20	24	5	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	0.9 U	0.9 U	1 U	1 U	1.0 U	1.1 U	1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-513-SA5D-SB-9.0-10.0	SL-513-SA5D-SB-16.0-17.0	SL-514-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-4.0-5.0	SL-515-SA5D-SB-9.0-10.0	SL-515-SA5D-SB-22.0-23.0	SL-516-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	09/18/2013	09/18/2013	09/18/2013	09/09/2013	09/09/2013	09/09/2013	11/15/2013
			SDG	PH110	PH110	PH110	PH104	PH104	PH104	PH130
			Start Depth	9	16	4	4	9	22	4
			End Depth	10	17	5	5	10	23	5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1 U	1.0 U	1.0 U	1 U	1.0 U	0.9 U	1.2 UJ H

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-816-SA5D-SB-4.0-5.0	SL-516-SA5D-SB-9.0-10.0	SL-516-SA5D-SB-13.0-14.0	SL-518-SA5D-SB-4.0-5.0	SL-518-SA5D-SB-9.0-10.0	SL-518-SA5D-SB-15.0-16.0	SL-519-SA5D-SB-4.0-5.0
			Sample Type	FD	N	N	N	N	N	N
			Sample Date	11/15/2013	11/15/2013	11/15/2013	09/10/2013	09/10/2013	09/10/2013	09/11/2013
			SDG	PH130	PH130	PH130	PH105	PH105	PH105	PH106
			Start Depth	4	9	13	4	9	15	4
			End Depth	5	10	14	5	10	16	5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.2 UJ H	1.0 UJ H	1.0 UJ H	1.1 U	1 U	1.0 U	0.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-520-SA5D-SB-4.0-5.0	SL-520-SA5D-SB-8.0-9.0	SL-521-SA5D-SB-5.5-6.5	SL-522-SA5D-SB-6.0-7.0	SL-524-SA5D-SB-5.5-6.5	SL-824-SA5D-SB-5.5-6.5	SL-525-SA5D-SB-2.5-3.5
			Sample Type	N	N	N	N	N	FD	N
			Sample Date	09/11/2013	09/11/2013	09/11/2013	09/11/2013	09/04/2013	09/04/2013	09/03/2013
			SDG	PH106	PH106	PH106	PH106	PH101	PH101	PH100
			Start Depth	4	8	5.5	6	5.5	5.5	2.5
			End Depth	5	9	6.5	7	6.5	6.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	0.9 U	1.0 U	1 U	1.1 U	1 U	1.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-526-SA5D-SB-3.0-4.0	SL-527-SA5D-SB-4.0-5.0	SL-528-SA5D-SB-2.5-3.5	SL-529-SA5D-SB-3.0-4.0	SL-530-SA5D-SB-2.5-3.5	SL-532-SA5D-SB-2.5-3.5	SL-533-SA5D-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	08/29/2013	09/03/2013	09/03/2013	09/11/2013	08/30/2013	08/30/2013	08/30/2013
			SDG	PH098	PH100	PH100	PH106	PH099	PH099	PH099
			Start Depth	3	4	2.5	3	2.5	2.5	2.5
			End Depth	4	5	3.5	4	3.5	3.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.0 U	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-534-SA5D-SB-6.5-7.5	SL-535-SA5D-SB-2.0-3.0	SL-536-SA5D-SB-3.5-4.5	SL-537-SA5D-SB-2.5-3.5	SL-538-SA5D-SB-3.0-4.0	SL-539-SA5D-SB-3.0-4.0	SL-540-SA5D-SB-5.0-6.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	08/30/2013	08/30/2013	08/28/2013	08/28/2013	08/28/2013	08/29/2013	09/03/2013
			SDG	PH099	PH099	PH095	PH095	PH095	PH098	PH100
			Start Depth	6.5	2	3.5	2.5	3	3	5
			End Depth	7.5	3	4.5	3.5	4	4	6
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	1.2 U	1.0 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-541-SA5D-SB-2.5-3.5	SL-542-SA5D-SB-4.0-5.0	SL-543-SA5D-SB-4.0-5.0	SL-544-SA5D-SB-6.5-7.5	SL-545-SA5D-SB-6.0-7.0	SL-546-SA5D-SB-4.0-5.0	SL-547-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	09/03/2013	08/29/2013	08/29/2013	09/04/2013	09/03/2013	09/04/2013	09/04/2013
			SDG	PH100	PH098	PH098	PH101	PH100	PH101	PH101
			Start Depth	2.5	4	4	6.5	6	4	4
			End Depth	3.5	5	5	7.5	7	5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.1 U	0.9 U	1.0 U	1.0 U	1 U	1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-548-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-4.0-5.0	SL-549-SA5D-SB-11.0-12.0	SL-550-SA5D-SB-4.0-5.0	SL-850-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-4.0-5.0	SL-551-SA5D-SB-9.0-10.0
			Sample Type	N	N	N	N	FD	N	N
			Sample Date	08/26/2013	11/12/2013	11/12/2013	09/06/2013	09/06/2013	09/12/2013	09/12/2013
			SDG	PH093	PH127	PH127	PH103	PH103	PH107	PH107
			Start Depth	4	4	11	4	4	4	9
			End Depth	5	5	12	5	5	5	10
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1 U	1 U	1 U	0.9 U	1 U	0.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-551-SA5D-SB-14.0-15.0	SL-551-SA5D-SB-17.5-18.5	SL-552-SA5D-SB-4.0-5.0	SL-553-SA5D-SB-4.5-5.5	SL-554-SA5D-SB-4.0-5.0	SL-554-SA5D-SB-7.0-8.0	SL-555-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	09/12/2013	09/12/2013	09/06/2013	09/12/2013	09/05/2013	09/05/2013	09/05/2013
			SDG	PH107	PH107	PH103	PH107	PH102	PH102	PH102
			Start Depth	14	17.5	4	4.5	4	7	4
			End Depth	15	18.5	5	5.5	5	8	5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	0.9 U	1.0 U	1 U	0.2 J Z	1.0 U	1 U	0.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-555-SA5D-SB-10.5-11.5	SL-556-SA5D-SB-4.0-5.0	SL-556-SA5D-SB-11.0-12.0	SL-558-SA5D-SB-4.0-5.0	SL-559-SA5D-SB-6.0-7.0	SL-560-SA5D-SB-4.0-5.0	SL-860-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	FD
			Sample Date	09/05/2013	09/05/2013	09/05/2013	09/24/2013	09/05/2013	11/12/2013	11/12/2013
			SDG	PH102	PH102	PH102	PH113	PH102	PH127	PH127
			Start Depth	10.5	4	11	4	6	4	4
			End Depth	11.5	5	12	5	7	5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.0 U	1.1 U	1.2 U	1.1 U	1.0 U	0.4 J FD, Z	1.0 UJ FD

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-560-SA5D-SB-7.0-8.0	SL-561-SA5D-SB-4.0-5.0	SL-561-SA5D-SB-9.0-10.0	SL-562-SA5D-SB-4.0-5.0	SL-563-SA5D-SB-4.0-5.0	SL-863-SA5D-SB-4.0-5.0	SL-564-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	N	N	FD	N
			Sample Date	11/12/2013	10/08/2013	10/08/2013	09/25/2013	09/25/2013	09/25/2013	10/01/2013
			SDG	PH127	PH124	PH124	PH114	PH114	PH114	PH119
			Start Depth	7	4	9	4	4	4	4
			End Depth	8	5	10	5	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	0.3 J Z	1.1 U	1.1 U	1.2 U	1.1 U	1.0 U	1 U

U-Compound not detected above reporting limit
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R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-566-SA5D-SB-4.0-5.0	SL-567-SA5D-SB-3.5-4.5	SL-568-SA5D-SB-2.5-3.5	SL-868-SA5D-SB-2.5-3.5	SL-570-SA5D-SB-4.0-5.0	SL-576-SA5D-SB-3.5-4.5	SL-582-SA5D-SB-4.0-5.0
			Sample Type	N	N	N	FD	N	N	N
			Sample Date	09/24/2013	10/07/2013	09/23/2013	09/23/2013	10/01/2013	09/19/2013	09/30/2013
			SDG	PH113	PH123	PH112	PH112	PH119	PH111	PH118
			Start Depth	4	3.5	2.5	2.5	4	3.5	4
			End Depth	5	4.5	3.5	3.5	5	4.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.2 U	1.1 U	1.0 U	1.0 U	1.1 U	1.1 U	1.1 UJ H

U-Compound not detected above reporting limit
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			Sample Name	SL-882-SA5D-SB-4.0-5.0	SL-582-SA5D-SB-10.0-11.0	SL-589-SA5D-SB-4.0-5.0	SL-607-SA5D-SB-4.0-5.0	SL-608-SA5D-SB-4.0-5.0
			Sample Type	FD	N	N	N	N
			Sample Date	09/30/2013	09/30/2013	10/02/2013	10/01/2013	10/03/2013
			SDG	PH118	PH118	PH120	PH119	PH122
			Start Depth	4	10	4	4	4
			End Depth	5	11	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit					
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1 U	1.0 U	1 U	1 U

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			Sample Name	SL-523-SA8-SB-4.0-5.0	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0
			Sample Type	N	FD	N
			Sample Date	07/25/2013	07/25/2013	07/25/2013
			SDG	PH075	PH075	PH075
			Start Depth	4	4	4
			End Depth	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit			
9012B	57-12-5	Cyanide	mg/kg	0.57 U	0.56 U	0.55 U

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			Sample Name	SL-501-SA8-SB-0.0-0.5	SL-801-SA8-SB-0.0-0.5	SL-501-SA8-SB-4.0-5.0	SL-501-SA8-SB-9.0-10.0	SL-501-SA8-SB-12.0-13.0	SL-502-SA8-SB-0.0-0.5	SL-502-SA8-SB-4.0-5.0
			Sample Type	N	FD	N	N	N	N	N
			Sample Date	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013
			SDG	PH067	PH067	PH067	PH067	PH067	PH067	PH067
			Start Depth	0	0	4	9	12	0	4
			End Depth	0.5	0.5	5	10	13	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0816 J FD, Z	1.02 UJ FD	1.06 U	1.07 U	1.05 U	1.12	0.149 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.996 J Z	0.808 J Z	0.471 J Z	5.33 U B	5.26 U B	24.9	2.14 J Z
1613B	3268-87-9	OCDD	ng/kg	240 J FD, Q	137 J FD	16.2	10.7 U B	2.26 J Z	5590	571
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	19.1	11.7	1.33 J Z	5.33 U B	5.26 U B	957	76.6
1613B	39001-02-0	OCDF	ng/kg	5.69 J Z	4.72 J Z	0.543 J Z	10.7 U B	10.5 U B	73.7	8.63 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.303 J Z	0.265 J Z	0.0621 J Z	5.33 U	0.0304 J Z	26.5	1.75 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.263 J FD, Z	0.149 J FD, Z	0.0925 J Z	5.33 U	5.26 U	8.29	0.906 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.540 J Z	0.685 J Z	0.105 J Z	1.07 U	1.05 U	0.571 J Z	0.205 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.317 J Z	0.224 J Z	5.30 U	0.0295 J Z	5.26 U	5.30	0.577 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.653 J FD, Z	0.208 J FD, Z	0.0585 J Z	5.33 U	5.26 U	1.46 J Z	0.440 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	1.09 J Z	1.18 J Z	5.30 U B	5.33 U	5.26 U B	4.56 J Z	1.75 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.379 J FD, Z	5.10 UJ B, FD	5.30 U B	5.33 U	5.26 U B	3.19 J Z	0.566 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	1.14 J Z	0.803 J Z	0.301 J Z	5.33 U	5.26 U	26.2	2.30 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.262 J Z	5.10 U B	5.30 U B	5.33 U B	5.26 U B	2.77 J Z	0.396 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	3.22 J Z	2.24 J Z	0.243 J Z	5.33 U B	5.26 U B	46.2	4.77 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.312 J Z	5.10 U B	5.30 U B	5.33 U B	5.26 U B	4.75 J Z	0.715 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.415 J Z	0.431 J Z	0.123 J Z	0.0522 J Z	0.0198 J Z	5.10 U	0.513 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.665	0.516	0.0278	0.00184	0.00543	29.1	1.97

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			Sample Name	SL-502-SA8-SB-7.5-8.5	SL-503-SA8-SB-0.0-0.5	SL-503-SA8-SB-3.0-4.0	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-505-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N
			Sample Date	07/15/2013	07/15/2013	07/15/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013
			SDG	PH067	PH067	PH067	PH068	PH068	PH068	PH068
			Start Depth	7.5	0	3	0	2.5	2.5	0
			End Depth	8.5	0.5	4	0.5	3.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0961 J Z	1.04 U	1.03 U	1.04 U	1.02 U	1.04 U	1.04 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.638 J Z	0.815 J Z	0.222 J Z	0.497 J Z	5.08 UJ FD	0.181 J FD, Z	0.210 J Z
1613B	3268-87-9	OCDD	ng/kg	211	284	2.77 J Z	881	1.89 J FD, Z	18.8 J FD	290
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	29.9	20.3	0.403 J Z	43.2	5.08 UJ B, FD	2.15 J FD, Z	11.7
1613B	39001-02-0	OCDF	ng/kg	3.40 J Z	3.21 J Z	10.3 U B	8.29 J Z	10.2 UJ B, FD	0.988 J FD, Z	1.60 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.665 J Z	0.270 J Z	5.17 U	0.280 J Z	5.08 UJ B, FD	5.19 UJ B, FD	5.22 U
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.268 J Z	0.148 J Z	0.0679 J Z	0.188 J Z	5.08 UJ FD	0.168 J FD, Z	0.141 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0929 J Z	1.04 U	1.03 U	0.0670 J Z	1.02 U	1.04 U	1.04 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.230 J Z	0.209 J Z	0.0431 J Z	0.408 J Z	0.0343 J FD, Z	0.130 J FD, Z	0.162 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.206 J Z	0.210 J Z	0.0300 J Z	0.0795 J Z	0.0347 J FD, Z	0.203 J FD, Z	0.128 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.541 J Z	2.52 J Z	5.17 U B	0.752 J Z	0.203 J FD, Z	1.07 J FD, Z	1.21 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.228 J Z	0.441 J Z	5.17 U B	5.18 U B	5.08 UJ B, FD	0.197 J FD, Z	5.22 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.871 J Z	0.868 J Z	0.140 J Z	0.891 J Z	0.0391 J FD, Z	0.253 J FD, Z	0.195 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.24 U B	5.19 U B	5.17 U	0.213 J Z	5.08 UJ B, FD	5.19 UJ B, FD	5.22 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	1.83 J Z	2.16 J Z	5.17 U B	2.93 J Z	5.08 UJ B, FD	0.440 J FD, Z	0.565 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.309 J Z	0.303 J Z	5.17 U B	0.225 J Z	5.08 UJ B, FD	0.158 J FD, Z	5.22 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.324 J Z	0.471 J Z	0.436 J Z	5.18 U B	5.08 UJ FD	5.19 UJ B, FD	5.22 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.541	0.676	0.0449	0.944	0.0160	0.116	0.276

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			Sample Name	SL-505-SA8-SB-4.0-5.0	SL-506-SA8-SB-0.0-0.5	SL-506-SA8-SB-4.0-5.0	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5	SL-509-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/16/2013	07/16/2013	07/18/2013
			SDG	PH068	PH070	PH070	PH068	PH068	PH068	PH070
			Start Depth	4	0	4	0	3	0	0
			End Depth	5	0.5	5	0.5	4	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.08 U	1.06 U	1.05 U	0.132 J Z	0.0702 J Z	0.0654 J Z	1.06 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.41 U B	0.394 J Z	5.26 U B	0.960 J Z	5.10 U B	0.231 J Z	5.28 U B
1613B	3268-87-9	OCDD	ng/kg	3.36 J Z	114	10.5 U B	244	10.2 U B	22.7	16.6
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.392 J Z	5.80	5.26 U B	27.7	5.10 U B	1.98 J Z	1.98 J Z
1613B	39001-02-0	OCDF	ng/kg	10.8 U B	4.13 J Z	0.150 J Z	3.70 J Z	10.2 U B	7.54 J Z	0.597 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.41 U	0.0550 J Z	5.26 U	0.603 J Z	5.10 U B	5.23 U B	0.0416 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.41 U	5.29 U	5.26 U	0.493 J Z	0.322 J Z	0.216 J Z	0.0696 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.08 U	0.102 J Z	0.0324 J Z	0.722 J Z	0.0858 J Z	0.370 J Z	0.0695 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.41 U	5.29 U B	5.26 U	0.427 J Z	0.0662 J Z	0.192 J Z	5.28 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.0459 J Z	5.29 U B	5.26 U B	1.05 J Z	0.324 J Z	0.579 J Z	5.28 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.41 U	0.678 J Z	5.26 U B	7.38	0.402 J Z	9.93	0.656 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.41 U B	0.111 J Z	5.26 U B	0.698 J Z	0.152 J Z	0.746 J Z	5.28 U
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0425 J Z	0.345 J Z	5.26 U B	1.35 J Z	0.110 J Z	0.179 J Z	5.28 U B
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.41 U B	5.29 U B	5.26 U B	0.562 J Z	5.10 U B	0.205 J Z	5.28 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.41 U B	2.50 J Z	5.26 U B	2.30 J Z	5.10 U B	2.91 J Z	0.154 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.41 U B	5.29 U B	5.26 U B	0.702 J Z	0.207 J Z	0.598 J Z	5.28 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.41 U B	0.229 J Z	5.26 U B	0.408 J Z	5.10 U B	0.263 J Z	5.28 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.000997	0.221	0.00811	2.10	0.490	0.729	0.0331

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			Sample Name	SL-509-SA8-SB-4.0-5.0	SL-510-SA8-SB-0.0-0.5	SL-511-SA8-SB-0.0-0.5	SL-511-SA8-SB-6.0-7.0	SL-512-SA8-SB-0.0-0.5	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/18/2013	07/16/2013	07/15/2013	07/15/2013	07/17/2013	07/17/2013	07/17/2013
			SDG	PH070	PH068	PH067	PH067	PH069	PH069	PH069
			Start Depth	4	0	0	6	0	0	4
			End Depth	5	0.5	0.5	7	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.03 U	0.989 U	1.00 U	1.15 U	0.980 U	1.07 U	0.0431 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.14 U B	0.790 J Z	5.01 U B	5.77 U	0.587 J Z	1.06 J Z	5.38 U B
1613B	3268-87-9	OCDD	ng/kg	1.83 J Z	138	10.0 U B	11.5 U B	40.8	348	10.8
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.14 U B	13.1	5.01 U B	5.77 U B	4.39 J Z	43.1	0.995 J Z
1613B	39001-02-0	OCDF	ng/kg	0.750 J Z	2.98 J Z	10.0 U B	11.5 U	1.57 J Z	6.36 J Z	3.42 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.14 U	0.279 J Z	0.0339 J Z	5.77 U	4.90 U B	0.714 J Z	5.38 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.14 U	0.142 J Z	5.01 U	5.77 U	0.243 J Z	0.296 J Z	0.0586 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.03 U	0.151 J Z	1.00 U	1.15 U	1.34	0.365 J Z	1.08 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.14 U	0.226 J Z	0.0230 J Z	0.0478 J Z	0.111 J Z	0.472 J Z	0.0465 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.14 U	0.146 J Z	5.01 U	5.77 U	0.384 J Z	0.599 J Z	5.38 U
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.14 U	0.728 J Z	5.01 U	5.77 U	0.930 J Z	3.88 J Z	5.38 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.14 U	0.339 J Z	5.01 U	5.77 U	0.235 J Z	0.443 J Z	5.38 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.14 U B	0.874 J Z	5.01 U	5.77 U	0.473 J Z	1.57 J Z	0.0702 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.14 U	0.364 J Z	5.01 U B	5.77 U	4.90 U B	0.318 J Z	5.38 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.14 U B	1.98 J Z	5.01 U B	5.77 U B	0.827 J Z	3.96 J Z	0.539 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.14 U	0.372 J Z	5.01 U B	5.77 U B	0.193 J Z	0.658 J Z	5.38 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.14 U B	4.95 U B	0.0613 J Z	5.77 U	0.328 J Z	0.423 J Z	5.38 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.00716	0.506	0.00155	0 U	0.441	1.44	0.0408

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-513-SA8-SB-8.0-9.0	SL-514-SA8-SB-0.0-0.5	SL-514-SA8-SB-4.0-5.0	SL-515-SA8-SB-0.0-0.5	SL-515-SA8-SB-4.0-5.0	SL-515-SA8-SB-9.0-10.0	SL-515-SA8-SB-14.0-15.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013
			SDG	PH069	PH069	PH069	PH069	PH069	PH069	PH069
			Start Depth	8	0	4	0	4	9	14
			End Depth	9	0.5	5	0.5	5	10	15
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.987 U	0.0488 J Z	1.13 U	0.0615 J Z	1.12 U	0.0765 J Z	0.0811 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	4.94 U B	0.557 J Z	5.67 U B	0.637 J Z	5.59 U B	5.82 U B	5.71 U B
1613B	3268-87-9	OCDD	ng/kg	9.87 U B	114	11.3 U B	134	11.2 U B	11.6 U B	11.4 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	4.94 U B	8.00	5.67 U B	12.6	5.59 U B	5.82 U B	5.71 U B
1613B	39001-02-0	OCDF	ng/kg	9.87 U B	9.21 J Z	11.3 U B	3.24 J Z	11.2 U B	11.6 U B	11.4 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.94 U	5.21 U B	5.67 U	5.54 U B	5.59 U B	5.82 U B	5.71 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	4.94 U	0.0902 J Z	0.0833 J Z	0.191 J Z	5.59 U	0.101 J Z	5.71 U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.987 U	0.678 J Z	1.13 U	0.0827 J Z	1.12 U	0.0766 J Z	0.0687 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.0564 J Z	0.196 J Z	5.67 U	0.185 J Z	0.0563 J Z	0.0377 J Z	0.136 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	4.94 U	0.171 J Z	0.0591 J Z	5.54 U	0.0722 J Z	0.146 J Z	0.151 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	4.94 U	1.28 J Z	5.67 U	0.476 J Z	5.59 U B	5.82 U B	0.333 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	4.94 U B	0.159 J Z	5.67 U	0.143 J Z	5.59 U B	0.118 J Z	0.164 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.94 U	0.515 J Z	0.0534 J Z	0.698 J Z	0.0382 J Z	0.105 J Z	0.121 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	4.94 U B	5.21 U B	5.67 U B	5.54 U B	5.59 U B	5.82 U B	5.71 U
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	4.94 U B	2.65 J Z	5.67 U B	1.64 J Z	5.59 U B	5.82 U B	5.71 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	4.94 U B	0.198 J Z	5.67 U B	5.54 U B	5.59 U B	0.118 J Z	0.165 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	4.94 U B	0.272 J Z	5.67 U B	0.724 J Z	5.59 U B	5.82 U B	5.71 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.00523	0.399	0.00995	0.427	0.00865	0.0728	0.0296

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-516-SA8-SB-0.0-0.5	SL-517-SA8-SB-0.0-0.5	SL-517-SA8-SB-3.0-4.0	SL-518-SA8-SB-0.0-0.5	SL-518-SA8-SB-4.0-5.0	SL-519-SA8-SB-0.0-0.5	SL-519-SA8-SB-3.5-4.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/18/2013	07/18/2013
			SDG	PH071	PH071	PH071	PH071	PH071	PH070	PH070
			Start Depth	0	0	3	0	4	0	3.5
			End Depth	0.5	0.5	4	0.5	5	0.5	4.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.981 U	1.00 U	1.02 U	1.01 U	0.0255 J Z	1.07 U	0.996 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.312 J Z	0.183 J Z	5.08 U	5.05 U B	5.06 U B	0.394 J Z	4.98 U B
1613B	3268-87-9	OCDD	ng/kg	5.46 J Z	9.54 J Z	10.2 U B	10.1 U B	10.1 U B	55.5	9.96 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.966 J Z	1.29 J Z	5.08 U B	5.05 U B	5.06 U B	8.45	4.98 U B
1613B	39001-02-0	OCDF	ng/kg	0.462 J Z	0.559 J Z	0.0748 J Z	0.0879 J Z	0.149 J Z	3.25 J Z	0.120 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.91 U	5.02 U	5.08 U	5.05 U	0.0194 J Z	0.115 J Z	4.98 U
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	4.91 U	5.02 U	0.0383 J Z	5.05 U	0.0479 J Z	0.134 J Z	0.0944 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.981 U	0.611 J Z	1.02 U	1.01 U	0.0204 J Z	0.519 J Z	0.996 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	4.91 U	5.02 U B	5.08 U B	5.05 U B	5.06 U B	0.161 J Z	4.98 U
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	4.91 U B	0.366 J Z	5.08 U	5.05 U B	5.06 U B	1.17 J Z	4.98 U
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	4.91 U B	2.59 J Z	5.08 U B	5.05 U	5.06 U B	2.90 J Z	4.98 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	4.91 U B	0.234 J Z	5.08 U B	5.05 U B	5.06 U B	0.426 J Z	4.98 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.211 J Z	5.02 U B	5.08 U	5.05 U	5.06 U B	0.481 J Z	4.98 U B
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	4.91 U B	0.167 J Z	5.08 U B	5.05 U B	5.06 U B	0.526 J Z	4.98 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.241 J Z	0.628 J Z	5.08 U B	5.05 U B	5.06 U B	1.92 J Z	4.98 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	4.91 U B	0.179 J Z	5.08 U B	5.05 U B	5.06 U B	0.397 J Z	4.98 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	4.91 U B	5.02 U B	5.08 U B	5.05 U B	5.06 U B	5.35 U B	4.98 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.0718	0.262	0 U	0.000205	0.0299	0.455	0.00711

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-520-SA8-SB-0.0-0.5	SL-521-SA8-SB-0.0-0.5	SL-522-SA8-SB-0.0-0.5	SL-522-SA8-SB-4.0-5.0	SL-523-SA8-SB-4.0-5.0	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	FD	N
			Sample Date	07/18/2013	07/19/2013	07/26/2013	07/26/2013	07/25/2013	07/25/2013	07/25/2013
			SDG	PH070	PH071	PH076	PH076	PH075	PH075	PH075
			Start Depth	0	0	0	4	4	4	4
			End Depth	0.5	0.5	0.5	5	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0360 J Z	0.964 U	1.09 U	0.0230 J Z	1.14 U	1.13 U	0.0425 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.412 J Z	2.71 J Z	0.759 J Z	5.47 U B	0.189 J Z	0.188 J Z	5.65 U B
1613B	3268-87-9	OCDD	ng/kg	5.20 J Z	15.3	808	10.9 U B	11.4 U B	11.3 U B	11.3 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.553 J Z	1.72 J Z	80.8	5.47 U B	5.69 U B	5.67 U B	5.65 U B
1613B	39001-02-0	OCDF	ng/kg	0.920 J Z	0.879 J Z	8.96 J Z	10.9 U B	11.4 UJ B, FD	11.3 UJ B, FD	11.3 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0392 J Z	0.0760 J Z	0.257 J Z	5.47 U B	5.69 UJ FD	5.67 UJ B, FD	5.65 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.01 U	0.297 J Z	0.178 J Z	5.47 U B	5.69 U	5.67 U	5.65 U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.274 J Z	0.120 J Z	0.0519 J Z	1.09 U	1.14 U	1.13 U	0.0557 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.01 U B	4.82 U B	0.518 J Z	5.47 U B	0.0426 J FD, Z	0.126 J FD, Z	0.0282 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.01 U	4.82 U B	5.47 U B	5.47 U B	5.69 UJ FD	0.0762 J FD, Z	0.0594 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	7.97	0.298 J Z	5.47 U B	5.47 U B	5.69 U B	5.67 U B	5.65 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.480 J Z	0.162 J Z	0.299 J Z	5.47 U B	5.69 UJ B, FD	5.67 UJ B, FD	5.65 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.01 U B	1.81 J Z	2.96 J Z	5.47 U B	0.0765 J Z	0.109 J Z	0.112 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.01 U B	4.82 U B	0.603 J Z	5.47 U B	5.69 UJ B, FD	0.0896 J FD, Z	5.65 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.672 J Z	0.443 J Z	8.26	5.47 U B	0.0361 J FD, Z	0.0755 J FD, Z	0.0430 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.213 J Z	4.82 U B	0.363 J Z	5.47 U B	0.0376 J FD, Z	0.114 J FD, Z	0.0921 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.223 J Z	0.623 J Z	5.47 U	5.47 U B	0.215 J Z	0.139 J Z	0.116 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.331	0.901	1.71	0.0196	0.0411	0.0235	0.00542

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-525-SA8-SB-0.0-0.5	SL-525-SA8-SB-4.0-5.0	SL-526-SA8-SB-0.0-0.5	SL-526-SA8-SB-4.0-5.0	SL-527-SA8-SB-0.0-0.5	SL-527-SA8-SB-4.0-5.0	SL-528-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/25/2013	07/25/2013	07/29/2013	07/29/2013	07/24/2013	07/24/2013	07/24/2013
			SDG	PH075	PH075	PH078	PH078	PH074	PH074	PH074
			Start Depth	0	4	0	4	0	4	4
			End Depth	0.5	5	0.5	5	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.05 U	1.09 U	1.06 U	1.12 U	1.07 U	1.17 U	1.14 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.312 J Z	0.227 J Z	0.913 J Z	5.60 U B	0.266 J Z	5.87 U B	5.69 U B
1613B	3268-87-9	OCDD	ng/kg	10.5	10.9 U B	265	5.12 J Z	35.1	1.77 J Z	11.4 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	1.33 J Z	5.47 U B	30.8	0.693 J Z	4.53 J Z	5.87 U B	5.69 U B
1613B	39001-02-0	OCDF	ng/kg	0.759 J Z	10.9 U B	7.79 J Z	11.2 U B	0.656 J Z	11.7 U B	11.4 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.23 U B	5.47 U B	0.382 J Z	5.60 U B	5.36 U B	5.87 U B	5.69 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.346 J Z	0.501 J Z	0.194 J Z	0.0338 J Z	0.119 J Z	0.0807 J Z	5.69 U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.153 J Z	0.0966 J Z	0.299 J Z	1.12 U	0.141 J Z	1.17 U	1.14 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.0566 J Z	0.109 J Z	0.242 J Z	5.60 U B	0.0490 J Z	5.87 U	0.0220 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.198 J Z	0.413 J Z	0.351 J Z	5.60 U B	0.0959 J Z	5.87 U	0.0274 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	1.81 J Z	0.505 J Z	0.893 J Z	5.60 U B	5.36 U B	5.87 U B	5.69 U
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.227 J Z	0.185 J Z	0.283 J Z	5.60 U B	5.36 U B	5.87 U B	5.69 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.229 J Z	0.107 J Z	1.05 J Z	5.60 U B	0.285 J Z	0.0426 J Z	0.0345 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.132 J Z	0.197 J Z	0.280 J Z	5.60 U B	5.36 U B	5.87 U B	5.69 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.433 J Z	0.0576 J Z	3.44 J Z	5.60 U B	0.507 J Z	0.0161 J Z	0.0360 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.242 J Z	0.260 J Z	0.319 J Z	5.60 U B	0.0863 J Z	5.87 U	0.0252 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.357 J Z	0.261 J Z	0.462 J Z	5.60 U B	0.192 J Z	5.87 U	0.0345 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.478	0.235	0.679	0.0174	0.208	0.00341	0.00380

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-529-SA8-SB-0.0-0.5	SL-529-SA8-SB-4.0-5.0	SL-530-SA8-SB-0.0-0.5	SL-530-SA8-SB-4.0-5.0	SL-830-SA8-SB-4.0-5.0	SL-531-SA8-SB-0.0-0.5	SL-531-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	FD	N	N
			Sample Date	07/29/2013	07/29/2013	08/09/2013	08/09/2013	08/09/2013	07/18/2013	07/18/2013
			SDG	PH078	PH078	PH088	PH088	PH088	PH070	PH070
			Start Depth	0	4	0	4	4	0	4
			End Depth	0.5	5	0.5	5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.05 U	1.13 U B	1.03 U	1.09 U	1.09 U	0.0392 J Z	1.10 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.23 U B	5.66 U B	0.292 J Z	0.0392 J FD, Z	0.0771 J FD, Z	0.200 J Z	5.49 U
1613B	3268-87-9	OCDD	ng/kg	28.0	11.3 U B	44.9	1.59 J FD, Z	10.9 UJ B, FD	14.6	11.0 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	3.21 J Z	0.303 J Z	5.30	5.46 UJ B, FD	5.46 UJ B, FD	1.15 J Z	5.49 U B
1613B	39001-02-0	OCDF	ng/kg	2.41 J Z	11.3 U B	2.73 J Z	10.9 U B	10.9 U B	1.44 J Z	0.0502 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.23 U B	5.66 U B	0.144 J Z	5.46 UJ FD	0.0499 J FD, Z	5.20 U	0.0210 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.0707 J Z	0.0444 J Z	5.13 U B	5.46 U	5.46 U	5.20 U	0.0482 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.108 J Z	1.13 U	0.226 J Z	1.09 U	1.09 U	0.0875 J Z	1.10 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.23 U B	5.66 U B	0.108 J Z	0.0212 J FD, Z	0.0620 J FD, Z	5.20 U B	5.49 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.23 U B	5.66 U	5.13 U B	5.46 U B	5.46 U B	5.20 U B	5.49 U
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.610 J Z	5.66 U B	1.02 J Z	5.46 UJ B, FD	5.46 UJ B, FD	0.483 J Z	5.49 U
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.107 J Z	5.66 U B	0.177 J Z	5.46 UJ FD	5.46 UJ B, FD	5.20 U B	5.49 U
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.230 J Z	5.66 U B	0.316 J Z	5.46 UJ FD	5.46 UJ B, FD	5.20 U B	5.49 U B
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.23 U B	5.66 U B	5.13 U B	5.46 UJ B, FD	5.46 UJ B, FD	5.20 U B	5.49 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.841 J Z	5.66 U B	0.964 J Z	5.46 U B	5.46 U B	0.486 J Z	5.49 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.23 U B	5.66 U B	5.13 U B	5.46 UJ FD	5.46 UJ B, FD	5.20 U B	5.49 U
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.23 U B	0.283 J Z	5.13 U B	5.46 UJ B, FD	5.46 UJ B, FD	5.20 U B	5.49 U
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.166	0.0316	0.371	0.000454	0.0134	0.0981	0.000905

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			Sample Name	SL-532-SA8-SB-0.0-0.5	SL-532-SA8-SB-6.5-7.5	SL-536-SA8-SB-0.0-0.5	SL-536-SA8-SB-4.0-5.0	SL-537-SA8-SB-0.0-0.5	SL-537-SA8-SB-4.0-5.0	SL-538-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/19/2013	07/19/2013	07/31/2013	07/31/2013	07/31/2013	07/31/2013	08/09/2013
			SDG	PH071	PH071	PH081	PH081	PH081	PH081	PH088
			Start Depth	0	6.5	0	4	0	4	0
			End Depth	0.5	7.5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.02 U	0.0271 J Z	1.02 U	1.08 U	0.0298 J Z	0.0254 J Z	0.0675 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.11 U B	5.62 U B	0.222 J Z	5.42 U B	0.352 J Z	5.44 U B	3.32 J Z
1613B	3268-87-9	OCDD	ng/kg	10.2 U B	11.2 U B	24.4	3.18 J Z	33.6	4.35 J Z	1280
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.11 U B	5.62 U B	2.90 J Z	0.421 J Z	4.06 J Z	0.681 J Z	175
1613B	39001-02-0	OCDF	ng/kg	0.0752 J Z	0.0891 J Z	0.878 J Z	10.8 U B	1.46 J Z	10.9 U B	8.30 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.11 U	0.0356 J Z	5.10 U B	5.42 U B	4.98 U B	5.44 U B	1.26 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.0440 J Z	5.62 U	5.10 U B	5.42 U	4.98 U B	5.44 U	0.869 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.02 U	0.0117 J Z	0.233 J Z	1.08 U	0.352 J Z	1.09 U B	0.343 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.11 U B	5.62 U B	5.10 U B	5.42 U B	0.289 J Z	5.44 U B	0.807 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.11 U	5.62 U B	5.10 U	0.0413 J Z	0.477 J Z	0.102 J Z	0.615 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.11 U B	5.62 U B	0.886 J Z	5.42 U	1.96 J Z	5.44 U B	1.93 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.11 U	5.62 U B	5.10 U B	5.42 U B	0.434 J Z	5.44 U B	1.17 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.11 U B	5.62 U	0.231 J Z	5.42 U B	0.409 J Z	5.44 U B	11.5
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.11 U B	5.62 U B	0.347 J Z	5.42 U B	0.468 J Z	5.44 U B	1.98 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.11 U B	5.62 U B	0.637 J Z	5.42 U B	0.955 J Z	0.203 J Z	14.5
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.11 U B	5.62 U B	5.10 U B	5.42 U B	0.338 J Z	5.44 U B	1.40 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.11 U B	5.62 U B	5.10 U B	5.42 U B	4.98 U B	5.44 U B	0.989 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.000966	0.00276	0.183	0.0321	0.377	0.0580	5.27

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			Sample Name	SL-538-SA8-SB-4.0-5.0	SL-838-SA8-SB-4.0-5.0	SL-539B-SA8-SB-0.0-0.5	SL-539B-SA8-SB-2.0-3.0	SL-540-SA8-SB-0.0-0.5	SL-540-SA8-SB-4.0-5.0	SL-541-SA8-SB-0.0-0.5
			Sample Type	N	FD	N	N	N	N	N
			Sample Date	08/09/2013	08/09/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	08/09/2013
			SDG	PH088	PH088	PH076	PH076	PH076	PH076	PH088
			Start Depth	4	4	0	2	0	4	0
			End Depth	5	5	0.5	3	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.11 UJ FD	0.106 J FD, Z	1.15 U B	1.14 U	1.09 U B	1.09 U	1.05 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.55 UJ B, FD	0.526 J FD, Z	0.303 J Z	5.68 U B	5.45 U B	5.43 U B	5.24 U B
1613B	3268-87-9	OCDD	ng/kg	56.6 J FD	166 J FD	56.8	12.7	10.9 U B	5.67 J Z	28.8
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	6.07 J FD	18.2 J FD	7.00	1.72 J Z	5.45 U B	0.631 J Z	3.06 J Z
1613B	39001-02-0	OCDF	ng/kg	11.1 UJ B, FD	1.45 J FD, Z	1.63 J Z	11.4 U B	10.9 U B	10.9 U B	1.23 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.55 UJ B, FD	5.72 UJ B, FD	5.73 U B	5.68 U B	5.45 U B	5.43 U B	5.24 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.55 UJ FD	5.72 UJ B, FD	0.142 J Z	5.68 U	0.0518 J Z	5.43 U B	5.24 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.11 UJ FD	0.104 J FD, Z	0.0783 J Z	1.14 U	1.09 U	0.0334 J Z	0.603 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.55 UJ B, FD	5.72 UJ B, FD	5.73 U B	5.68 U B	5.45 U B	5.43 U B	5.24 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.55 UJ B, FD	5.72 UJ B, FD	5.73 U	5.68 U B	5.45 U B	5.43 U B	5.24 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.55 UJ B, FD	5.72 UJ B, FD	5.73 U B	5.68 U B	5.45 U B	5.43 U B	11.7
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.55 UJ B, FD	5.72 UJ B, FD	0.144 J Z	0.0570 J Z	5.45 U B	5.43 U B	0.664 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.55 UJ B, FD	1.07 J FD, Z	0.329 J Z	5.68 U B	5.45 U B	5.43 U B	5.24 U B
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.55 UJ B, FD	5.72 UJ B, FD	5.73 U B	5.68 U B	5.45 U B	5.43 U B	5.24 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.543 J FD, Z	1.43 J FD, Z	0.643 J Z	0.281 J Z	5.45 U B	5.43 U B	0.796 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.55 UJ B, FD	5.72 UJ B, FD	5.73 U B	5.68 U B	5.45 U B	5.43 U B	5.24 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.55 UJ B, FD	5.72 UJ B, FD	0.275 J Z	5.68 U	0.281 J Z	5.43 U B	5.24 U
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.161	0.419	0.187	0.0502	0.0992	0.146	0.793

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			Sample Name	SL-541-SA8-SB-4.0-5.0	SL-542-SA8-SB-0.0-0.5	SL-542-SA8-SB-4.0-5.0	SL-543-SA8-SB-0.0-0.5	SL-543-SA8-SB-4.0-5.0	SL-843-SA8-SB-4.0-5.0	SL-549-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N
			Sample Date	08/09/2013	09/26/2013	09/26/2013	08/13/2013	08/13/2013	08/13/2013	07/30/2013
			SDG	PH088	PH117	PH117	PH090	PH090	PH090	PH080
			Start Depth	4	0	4	0	4	4	0
			End Depth	5	0.5	5	0.5	5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.08 U	1.01 U	0.0684 J Z	1.03 U	1.11 U	1.07 U	0.0209 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.40 U B	5.05 U B	5.53 U B	0.532 J Z	0.380 J Z	0.386 J Z	0.325 J Z
1613B	3268-87-9	OCDD	ng/kg	10.8 U B	10.1 U B	11.1 U B	41.0	2.26 J FD, Z	5.06 J FD, Z	20.2
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.40 U B	5.05 U B	5.53 U B	3.71 J Z	0.436 J Z	0.690 J Z	2.18 J Z
1613B	39001-02-0	OCDF	ng/kg	10.8 U B	10.1 U B	11.1 U B	2.33 J Z	11.1 U B	10.7 U B	1.13 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.40 U B	5.05 U B	5.53 U B	0.0961 J Z	5.54 UJ FD	0.0875 J FD, Z	5.31 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.40 U	5.05 U B	5.53 U B	5.17 U B	5.54 UJ FD	5.37 UJ B, FD	5.31 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.08 U	1.01 U	0.0670 J Z	0.355 J Z	1.11 U	1.07 U	0.105 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.40 U B	5.05 U B	5.53 U B	5.17 U B	5.54 UJ FD	5.37 UJ B, FD	5.31 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.40 U B	5.05 U B	5.53 U B	5.17 U B	5.54 UJ FD	5.37 UJ B, FD	0.151 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.40 U	5.05 U B	5.53 U B	1.48 J Z	0.181 J Z	0.219 J Z	0.377 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.40 U B	5.05 U B	5.53 U B	5.17 U	5.54 U B	5.37 U B	5.31 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.40 U	5.05 U B	5.53 U B	0.532 J Z	0.245 J Z	0.220 J Z	0.269 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.40 U	5.05 U B	5.53 U B	0.164 J Z	5.54 UJ FD	0.112 J FD, Z	5.31 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.40 U B	5.05 U B	5.53 U B	1.05 J Z	5.54 UJ B, FD	5.37 UJ B, FD	0.475 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.40 U B	5.05 U B	5.53 U B	5.17 U B	5.54 UJ B, FD	5.37 UJ B, FD	5.31 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.40 U B	5.05 U B	5.53 U B	0.266 J Z	0.359 J FD, Z	0.607 J FD, Z	0.519 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.00111	0.0167	0.109	0.0689	0.0444	0.247	0.240

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			Sample Name	SL-549-SA8-SB-4.0-5.0	SL-550-SA8-SB-0.0-0.5	SL-550-SA8-SB-4.0-5.0	SL-551-SA8-SB-0.0-0.5	SL-551-SA8-SB-4.0-5.0	SL-851-SA8-SB-4.0-5.0	SL-552-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N
			Sample Date	07/30/2013	07/22/2013	07/22/2013	07/23/2013	07/23/2013	07/23/2013	08/02/2013
			SDG	PH080	PH072	PH072	PH073	PH073	PH073	PH083
			Start Depth	4	0	4	0	4	4	0
			End Depth	5	0.5	5	0.5	5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0318 J Z	1.11 U	1.11 U B	1.13 U B	0.997 UJ FD	1.14 UJ B, FD	1.04 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.58 U B	0.253 J Z	0.204 J Z	0.223 J Z	4.99 UJ B, FD	5.71 UJ B, FD	1.94 J Z
1613B	3268-87-9	OCDD	ng/kg	11.2 U B	34.8	2.83 J Z	2.02 J Z	9.97 UJ B, FD	11.4 UJ B, FD	835
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.58 U B	3.65 J Z	0.381 J Z	0.392 J Z	4.99 U B	5.71 U B	92.6
1613B	39001-02-0	OCDF	ng/kg	11.2 U B	2.04 J Z	11.1 U B	11.3 U B	9.97 U B	11.4 U B	26.5
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.58 U B	5.57 U B	5.54 U B	5.63 U B	4.99 U B	5.71 U B	1.02 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.58 U B	5.57 U B	0.168 J Z	0.300 J Z	4.99 U B	5.71 U B	0.616 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.12 U	0.0351 J Z	0.0349 J Z	0.132 J Z	0.0673 J FD, Z	1.14 UJ FD	0.570 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.58 U B	5.57 U B	5.54 U B	5.63 U B	4.99 UJ B, FD	5.71 UJ B, FD	1.54 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.0418 J Z	5.57 U B	5.54 U B	0.301 J Z	4.99 UJ B, FD	5.71 UJ B, FD	0.497 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.58 U B	5.57 U B	5.54 U B	0.417 J Z	4.99 UJ B, FD	5.71 UJ B, FD	1.18 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.58 U B	5.57 U B	5.54 U B	0.208 J Z	4.99 UJ B, FD	5.71 UJ B, FD	0.638 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.58 U B	0.243 J Z	0.132 J Z	0.143 J Z	4.99 U B	5.71 U B	4.21 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.58 U B	5.57 U B	5.54 U B	5.63 U B	4.99 UJ B, FD	5.71 UJ B, FD	0.758 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.58 U B	0.823 J Z	5.54 U B	5.63 U B	4.99 U B	5.71 U B	11.7
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.58 U B	5.57 U B	5.54 U B	5.63 U B	4.99 U B	5.71 U B	0.781 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.58 U B	5.57 U B	5.54 U B	5.63 U B	4.99 U B	5.71 U B	0.395 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.0319	0.144	0.241	0.540	0.0282	0.111	2.41

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			Sample Name	SL-552-SA8-SB-4.0-5.0	SL-553-SA8-SB-0.0-0.5	SL-553-SA8-SB-4.0-5.0	SL-853-SA8-SB-4.0-5.0	SL-554-SA8-SB-0.0-0.5	SL-554-SA8-SB-4.0-5.0	SL-555-SA8-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N
			Sample Date	08/02/2013	08/27/2013	08/27/2013	08/27/2013	07/22/2013	07/22/2013	07/23/2013
			SDG	PH083	PH094	PH094	PH094	PH072	PH072	PH073
			Start Depth	4	0	4	4	0	4	0
			End Depth	5	0.5	5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0775 J Z	0.0678 J Z	0.0496 J FD, Z	1.12 UJ FD	1.09 U B	1.13 U	1.15 U B
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.130 J Z	6.06 U B	5.48 U B	0.446 J Z	0.227 J Z	5.64 U B	0.231 J Z
1613B	3268-87-9	OCDD	ng/kg	8.37 J Z	65.5	2.73 J Z	11.2 U B	3.57 J Z	11.3 U B	35.2
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.928 J Z	6.29	5.48 U B	5.59 U B	0.506 J Z	5.64 U B	3.42 J Z
1613B	39001-02-0	OCDF	ng/kg	11.3 U B	10.2 J Z	11.0 U B	11.2 U B	10.9 U B	11.3 U B	5.92 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0977 J Z	6.06 U B	5.48 UJ B, FD	5.59 UJ B, FD	5.47 U B	5.64 U	5.74 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.63 U B	6.06 U B	5.48 UJ B, FD	5.59 UJ B, FD	0.193 J Z	5.64 U B	5.74 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0702 J Z	0.144 J Z	1.10 UJ FD	0.0616 J FD, Z	0.0462 J Z	1.13 U	0.0476 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.63 U B	6.06 U B	5.48 UJ B, FD	5.59 UJ B, FD	5.47 U B	5.64 U B	5.74 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.63 U B	6.06 U B	5.48 U B	5.59 U B	0.207 J Z	5.64 U	0.228 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.267 J Z	0.340 J Z	5.48 U B	5.59 U B	0.353 J Z	5.64 U B	0.331 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.113 J Z	0.142 J Z	5.48 UJ FD	0.156 J FD, Z	5.47 U B	5.64 U B	5.74 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.63 U B	0.322 J Z	5.48 U B	0.311 J Z	0.171 J Z	5.64 U B	0.203 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.0662 J Z	6.06 U B	5.48 UJ B, FD	5.59 UJ B, FD	5.47 U B	5.64 U B	5.74 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.173 J Z	4.06 J Z	0.309 J Z	5.59 U B	0.200 J Z	5.64 U B	2.35 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.136 J Z	6.06 U B	5.48 UJ B, FD	5.59 UJ B, FD	5.47 U B	5.64 U B	5.74 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.153 J Z	0.313 J Z	0.705 J Z	0.736 J Z	0.341 J Z	5.64 U B	0.297 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.0986	0.263	0.219	0.0781	0.226	0.0454	0.233

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-555-SA8-SB-4.0-5.0	SL-556-SA8-SB-0.0-0.5	SL-556-SA8-SB-4.0-5.0	SL-558-SA8-SB-0.0-0.5	SL-558-SA8-SB-4.0-5.0	SL-559-SA8-SB-0.0-0.5	SL-559-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/23/2013	07/22/2013	07/22/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013
			SDG	PH073	PH072	PH072	PH083	PH083	PH083	PH083
			Start Depth	4	0	4	0	4	0	4
			End Depth	5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.10 U B	1.10 U B	1.08 U B	1.00 U	1.17 U	1.02 U	1.12 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.243 J Z	0.198 J Z	5.38 U B	1.36 J Z	0.0560 J Z	3.31 J Z	1.07 J Z
1613B	3268-87-9	OCDD	ng/kg	11.0 U B	1.46 J Z	7.71 J Z	746	5.38 J Z	1980	570
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.51 U B	0.342 J Z	0.898 J Z	64.2	0.412 J Z	172	50.4
1613B	39001-02-0	OCDF	ng/kg	11.0 U B	11.0 U B	10.8 U B	24.6	11.7 U B	65.5	19.1
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.51 U B	5.50 U B	5.38 U B	0.607 J Z	5.84 U	1.34 J Z	0.426 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.51 U B	5.50 U B	0.233 J Z	5.01 U B	5.84 U	0.617 J Z	5.60 U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0630 J Z	0.0754 J Z	0.0531 J Z	1.02	1.17 U	1.51	0.528 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.51 U B	5.50 U B	5.38 U B	0.738 J Z	5.84 U B	2.68 J Z	0.655 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.51 U B	5.50 U B	0.232 J Z	0.918 J Z	5.84 U	1.50 J Z	0.640 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.51 U B	5.50 U B	5.38 U B	2.92 J Z	5.84 U	6.79	1.53 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.51 U B	5.50 U B	5.38 U B	0.667 J Z	0.0324 J Z	1.83 J Z	0.648 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.149 J Z	5.50 U B	5.38 U B	2.26 J Z	5.84 U	5.80	1.89 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.51 U B	5.50 U B	5.38 U B	0.643 J Z	0.0258 J Z	1.87 J Z	0.422 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.51 U B	5.50 U B	0.173 J Z	10.8	5.84 U B	29.6	8.84
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.51 U B	5.50 U B	5.38 U B	0.664 J Z	0.0366 J Z	1.44 J Z	0.684 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.350 J Z	5.50 U B	5.38 U B	0.394 J Z	5.84 U	0.349 J Z	0.347 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.300	0.153	0.503	2.31	0.0102	5.64	1.38

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-560-SA8-SB-0.0-0.5	SL-560-SA8-SB-4.0-5.0	SL-561-SA8-SB-0.0-0.5	SL-561-SA8-SB-4.0-5.0	SL-562-SA8-SB-0.0-0.5	SL-563-SA8-SB-0.0-0.5	SL-563-SA8-SB-2.0-3.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/30/2013	07/30/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013
			SDG	PH080	PH080	PH063	PH063	PH063	PH063	PH063
			Start Depth	0	4	0	4	0	0	2
			End Depth	0.5	5	0.5	5	0.5	0.5	3
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0384 J Z	0.0192 J Z	1.02 U	0.0640 J Z	1.02 U	0.0540 J Z	0.0293 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	1.86 J Z	0.186 J Z	1.14 J Z	0.199 J Z	1.08 J Z	0.982 J Z	0.658 J Z
1613B	3268-87-9	OCDD	ng/kg	1140	32.4	91.3	9.19 J Z	26.5	44.5	4.24 J Z
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	98.1	3.95 J Z	10.6	1.26 J Z	3.38 J Z	4.37 J Z	0.454 J Z
1613B	39001-02-0	OCDF	ng/kg	6.57 J Z	10.8 U B	3.70 J Z	0.457 J Z	1.40 J Z	2.97 J Z	10.4 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.800 J Z	5.40 U B	0.185 J Z	0.162 J Z	0.165 J Z	0.184 J Z	5.22 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.508 J Z	5.40 U B	0.205 J Z	0.255 J Z	0.343 J Z	0.315 J Z	0.211 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.321 J Z	1.08 U	0.349 J Z	0.124 J Z	0.177 J Z	0.110 J Z	0.0655 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.384 J Z	5.40 U B	0.187 J Z	5.42 U B	5.09 U B	5.03 U B	5.22 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.446 J Z	0.0742 J Z	0.475 J Z	0.259 J Z	0.496 J Z	0.380 J Z	0.194 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	1.11 J Z	5.40 U B	0.484 J Z	0.419 J Z	0.561 J Z	0.498 J Z	0.342 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.514 J Z	5.40 U B	0.284 J Z	0.181 J Z	0.299 J Z	0.260 J Z	0.157 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	2.94 J Z	0.244 J Z	0.945 J Z	0.213 J Z	0.835 J Z	0.827 J Z	0.449 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.581 J Z	5.40 U B	0.281 J Z	5.42 U B	0.200 J Z	0.190 J Z	5.22 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.78	0.398 J Z	1.81 J Z	0.248 J Z	0.812 J Z	1.03 J Z	0.152 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.505 J Z	5.40 U B	0.229 J Z	0.182 J Z	0.229 J Z	0.236 J Z	5.22 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.717 J Z	5.40 U B	0.844 J Z	0.193 J Z	0.716 J Z	0.729 J Z	0.732 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	2.16	0.105	0.940	0.174	0.781	0.826	0.199

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-564-SA8-SB-0.0-0.5	SL-565-SA8-SB-0.0-0.5	SL-565-SA8-SB-4.0-5.0	SL-566-SA8-SB-0.0-0.5	SL-566-SA8-SB-4.0-5.0	SL-567-SA8-SB-0.0-0.5	SL-567-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	08/06/2013	08/08/2013	08/08/2013	08/07/2013	08/07/2013	08/08/2013	08/08/2013
			SDG	PH085	PH087	PH087	PH086	PH086	PH087	PH087
			Start Depth	0	0	4	0	4	0	4
			End Depth	0.5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0834 J Z	0.0747 J Z	0.102 J Z	1.00 U	1.09 U	1.16 U	1.17 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.437 J Z	0.843 J Z	0.0868 J Z	0.556 J Z	0.145 J Z	0.663 J Z	0.0767 J Z
1613B	3268-87-9	OCDD	ng/kg	50.6	198	11.7 U B	45.9	7.14 J Z	22.8	11.7 U B
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.42	23.3	5.83 U B	4.88 J Z	0.915 J Z	2.81 J Z	5.84 U
1613B	39001-02-0	OCDF	ng/kg	3.91 J Z	5.11 J Z	11.7 U B	1.53 J Z	10.9 U B	0.759 J Z	11.7 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.157 J Z	0.356 J Z	0.0928 J Z	0.0923 J Z	0.0633 J Z	0.0803 J Z	5.84 U
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.06 U B	5.16 U B	5.83 U B	5.00 U	5.43 U	5.82 U B	5.84 U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.241 J Z	0.283 J Z	0.0357 J Z	1.00 U	0.0575 J Z	0.325 J Z	1.17 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.06 U B	0.297 J Z	0.0715 J Z	0.0906 J Z	0.0504 J Z	0.0896 J Z	0.0313 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.06 U B	0.451 J Z	5.83 U B	5.00 U B	5.43 U B	5.82 U	5.84 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.456 J Z	0.890 J Z	5.83 U B	0.233 J Z	5.43 U B	0.416 J Z	5.84 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.196 J Z	0.273 J Z	5.83 U B	5.00 U B	5.43 U B	5.82 U B	5.84 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.426 J Z	1.03 J Z	5.83 U B	0.420 J Z	5.43 U B	0.478 J Z	5.84 U
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.222 J Z	0.275 J Z	5.83 U B	5.00 U B	5.43 U B	5.82 U B	5.84 U
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	1.38 J Z	2.64 J Z	5.83 U B	0.637 J Z	5.43 U B	0.524 J Z	5.84 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.211 J Z	0.323 J Z	5.83 U B	5.00 U B	5.43 U B	5.82 U B	5.84 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.295 J Z	0.475 J Z	5.83 U B	0.811 J Z	5.43 U B	0.864 J Z	5.84 U
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.465	0.776	0.0208	0.237	0.0297	0.289	0.00765

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-568-SA8-SB-0.0-0.5	SL-568-SA8-SB-4.0-5.0	SL-569-SA8-SB-0.0-0.5	SL-569-SA8-SB-4.0-5.0	SL-570-SA8-SB-0.0-0.5	SL-570-SA8-SB-4.0-5.0	SL-571-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	08/05/2013	08/05/2013	08/05/2013	08/05/2013	07/11/2013	07/11/2013	07/10/2013
			SDG	PH084	PH084	PH084	PH084	PH065	PH065	PH064
			Start Depth	0	4	0	4	0	4	0
			End Depth	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0663 J Z	1.09 U	1.08 U	0.0819 J Z	1.09 U B	1.12 U B	1.12 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.390 J Z	0.0332 J Z	0.307 J Z	0.434 J Z	0.861 J Z	5.60 U B	5.60 U B
1613B	3268-87-9	OCDD	ng/kg	26.4	10.9 U B	13.5	65.5	353	9.62 J Z	24.3
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	3.16 J Z	5.45 U B	1.77 J Z	7.37	42.7	1.20 J Z	2.93 J Z
1613B	39001-02-0	OCDF	ng/kg	1.06 J Z	10.9 U B	10.8 U B	2.32 J Z	9.42 J Z	11.2 U B	0.728 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.113 J Z	5.45 U	0.0758 J Z	0.206 J Z	0.431 J Z	5.60 U B	5.60 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.44 U B	5.45 U B	5.41 U	5.53 U B	5.45 U B	5.60 U B	5.60 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.118 J Z	1.09 U	1.08 U	0.102 J Z	0.201 J Z	1.12 U	0.0577 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.44 U B	5.45 U	5.41 U B	5.53 U B	0.542 J Z	5.60 U B	5.60 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.320 J Z	5.45 U B	5.41 U B	5.53 U B	1.08 J Z	5.60 U B	5.60 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.517 J Z	0.0958 J Z	0.674 J Z	0.240 J Z	5.45 U B	5.60 U B	0.335 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.177 J Z	0.0340 J Z	0.184 J Z	0.132 J Z	0.464 J Z	5.60 U B	5.60 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.298 J Z	5.45 U B	0.214 J Z	0.530 J Z	2.08 J Z	5.60 U B	0.184 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.0925 J Z	0.0249 J Z	0.0457 J Z	0.168 J Z	0.660 J Z	5.60 U B	5.60 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.615 J Z	5.45 U B	0.238 J Z	1.41 J Z	6.54	0.265 J Z	0.425 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.547 J Z	0.0797 J Z	0.0669 J Z	0.199 J Z	0.763 J Z	5.60 U B	5.60 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.353 J Z	0.0406 J Z	0.288 J Z	0.110 J Z	0.271 J Z	5.60 U B	5.60 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.265	0 U	0.0657	0.199	1.56	0.0593	0.240

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-571-SA8-SB-6.5-7.5	SL-571-SA8-SB-12.5-13.5	SL-572-SA8-SB-0.0-0.5	SL-572-SA8-SB-4.0-5.0	SL-572-SA8-SB-9.0-10.0	SL-573-SA8-SB-0.0-0.5	SL-573-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013
			SDG	PH064	PH064	PH064	PH064	PH064	PH064	PH064
			Start Depth	6.5	12.5	0	4	9	0	4
			End Depth	7.5	13.5	0.5	5	10	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.06 U B	1.07 U B	1.16 U	1.11 U B	1.07 U	1.16 U	1.10 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.32 U B	5.37 U B	5.82 U B	5.53 U B	5.34 U B	5.80 U B	5.51 U B
1613B	3268-87-9	OCDD	ng/kg	3.66 J Z	8.87 J Z	19.6	6.56 J Z	8.94 J Z	32.3	5.37 J Z
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.296 J Z	0.616 J Z	2.58 J Z	0.895 J Z	1.04 J Z	5.29 J Z	0.682 J Z
1613B	39001-02-0	OCDF	ng/kg	10.6 U B	10.7 U B	0.630 J Z	11.1 U B	10.7 U B	1.04 J Z	11.0 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.32 U B	5.37 U B	5.82 U B	5.53 U B	5.34 U	5.80 U	5.51 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.32 U B	5.37 U	5.82 U B	5.53 U	5.34 U	5.80 U B	5.51 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0589 J Z	0.0241 J Z	1.16 U	1.11 U	1.07 U	1.16 U	1.10 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.32 U B	5.37 U B	5.82 U B	5.53 U B	5.34 U B	5.80 U B	5.51 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.155 J Z	5.37 U B	5.82 U B	5.53 U B	5.34 U B	5.80 U B	5.51 U
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.32 U B	5.37 U B	5.82 U B	5.53 U B	5.34 U B	5.80 U B	5.51 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.32 U B	5.37 U B	5.82 U B	5.53 U B	5.34 U B	5.80 U B	5.51 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.32 U B	5.37 U B	0.195 J Z	5.53 U B	5.34 U B	0.258 J Z	5.51 U B
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.32 U B	5.37 U B	5.82 U B	5.53 U B	5.34 U B	5.80 U B	5.51 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.32 U B	0.130 J Z	0.362 J Z	0.139 J Z	0.208 J Z	0.492 J Z	5.51 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.32 U B	5.37 U B	5.82 U B	5.53 U B	5.34 U B	5.80 U B	5.51 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.32 U B	5.37 U B	5.82 U B	5.53 U B	5.34 U B	0.247 J Z	5.51 U B
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.0534	0.0144	0.0857	0.0269	0.0192	0.125	0.0179

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-574-SA8-SB-0.0-0.5	SL-574-SA8-SB-4.0-5.0	SL-575-SA8-SB-0.0-0.5	SL-575-SA8-SB-4.0-5.0	SL-578-SA8-SB-0.0-0.5	SL-578-SA8-SB-4.0-5.0	SL-878-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	FD
			Sample Date	07/11/2013	07/11/2013	08/07/2013	08/07/2013	07/12/2013	07/12/2013	07/12/2013
			SDG	PH065	PH065	PH086	PH086	PH066	PH066	PH066
			Start Depth	0	4	0	4	0	4	4
			End Depth	0.5	5	0.5	5	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.15 U B	1.04 U B	1.08 U	1.11 U	1.06 U	1.10 U	1.08 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.533 J Z	5.19 U B	0.616 J Z	0.0711 J Z	0.131 J Z	0.800 J Z	0.735 J Z
1613B	3268-87-9	OCDD	ng/kg	97.0	5.70 J Z	61.6	1.59 J Z	12.7	13.2	1.52 J Z
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	11.7	1.17 J Z	3.71 J Z	5.57 U B	1.41 J Z	1.41 J Z	5.40 U B
1613B	39001-02-0	OCDF	ng/kg	2.47 J Z	10.4 U B	1.73 J Z	11.1 U B	0.478 J Z	0.414 J Z	0.147 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.136 J Z	5.19 U B	0.0707 J Z	5.57 U	5.30 U	0.0838 J Z	0.0627 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.76 U B	5.19 U B	5.39 U B	5.57 U B	5.30 U	5.49 U	0.144 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.192 J Z	1.04 U	1.08 U	1.11 U	0.0326 J Z	1.10 U	1.08 U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.76 U B	5.19 U B	0.0411 J Z	0.0286 J Z	5.30 U B	5.49 U	5.40 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.476 J Z	5.19 U B	5.39 U B	5.57 U	0.0735 J Z	0.131 J Z	0.0415 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.76 U B	5.19 U B	0.239 J Z	5.57 U B	5.30 U B	5.49 U B	5.40 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.178 J Z	5.19 U B	5.39 U B	5.57 U B	5.30 U B	5.49 U B	5.40 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.893 J Z	0.157 J Z	0.420 J Z	5.57 U B	0.0938 J Z	0.520 J Z	0.430 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.262 J Z	5.19 U B	5.39 U B	5.57 U	5.30 U B	5.49 U B	5.40 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	1.47 J Z	0.143 J Z	0.711 J Z	5.57 U B	0.194 J Z	0.204 J Z	5.40 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.76 U B	5.19 U B	5.39 U B	5.57 U	5.30 U B	5.49 U B	5.40 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.265 J Z	5.19 U B	0.503 J Z	5.57 U B	0.168 J Z	0.901 J Z	1.06 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.640	0.0821	0.229	0.00393	0.0525	0.206	0.230

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			Sample Name	SL-578-SA8-SB-9.0-10.0	SL-580-SA8-SB-0.0-0.5	SL-580-SA8-SB-4.0-5.0	SL-580-SA8-SB-10.5-11.5	SL-581-SA8-SB-0.0-0.5	SL-581-SA8-SB-4.5-5.5	SL-582-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	08/06/2013
			SDG	PH066	PH066	PH066	PH066	PH066	PH066	PH085
			Start Depth	9	0	4	10.5	0	4.5	0
			End Depth	10	0.5	5	11.5	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.01 U	1.09 U	0.0295 J Z	0.0524 J Z	0.0438 J Z	0.983 U	0.135 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0353 J Z	0.144 J Z	0.473 J Z	0.0783 J Z	1.02 J Z	0.0290 J Z	0.918 J Z
1613B	3268-87-9	OCDD	ng/kg	10.1 U B	24.0	5.04 J Z	2.19 J Z	16.7	9.83 U B	105
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.05 U B	2.09 J Z	0.560 J Z	0.316 J Z	1.63 J Z	4.91 U B	12.2
1613B	39001-02-0	OCDF	ng/kg	0.0542 J Z	0.300 J Z	0.195 J Z	0.136 J Z	0.720 J Z	0.0513 J Z	3.45 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.05 U	5.43 U	0.0489 J Z	0.0653 J Z	0.0682 J Z	4.91 U	0.206 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.05 U	5.43 U	0.0910 J Z	0.198 J Z	0.147 J Z	0.0469 J Z	5.19 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.01 U	1.09 U	1.06 U	1.00 U	1.05 U	0.0283 J Z	0.444 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.05 U B	5.43 U	5.29 U B	5.00 U B	5.27 U B	4.91 U B	5.19 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.0155 J Z	0.0531 J Z	0.137 J Z	0.230 J Z	0.145 J Z	0.0294 J Z	0.534 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.05 U B	5.43 U B	5.29 U B	5.00 U B	0.495 J Z	4.91 U	2.74 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.05 U B	5.43 U B	5.29 U B	5.00 U B	5.27 U B	4.91 U B	0.441 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.05 U	0.100 J Z	0.332 J Z	0.115 J Z	0.758 J Z	4.91 U	0.978 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.05 U	5.43 U B	5.29 U B	5.00 U B	5.27 U B	4.91 U B	0.284 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.05 U B	5.43 U B	5.29 U B	5.00 U B	0.345 J Z	4.91 U B	1.98 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.05 U	5.43 U	5.29 U B	5.00 U B	5.27 U B	4.91 U B	0.327 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.0288 J Z	0.216 J Z	0.705 J Z	0.0682 J Z	1.36 J Z	0.0210 J Z	0.896 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.00380	0.0497	0.132	0.226	0.398	0.00340	1.16

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			Sample Name	SL-582-SA8-SB-2.5-3.5	SL-583-SA8-SB-0.0-0.5	SL-883-SA8-SB-0.0-0.5	SL-584-SA8-SB-0.0-0.5	SL-585-SA8-SB-0.0-0.5	SL-586-SA8-SB-0.0-0.5	SL-587-SA8-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N
			Sample Date	08/06/2013	08/06/2013	08/06/2013	08/06/2013	08/12/2013	07/08/2013	07/12/2013
			SDG	PH085	PH085	PH085	PH085	PH089	PH062	PH066
			Start Depth	2.5	0	0	0	0	0	0
			End Depth	3.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.02 U	0.990 UJ FD	0.0550 J FD, Z	0.972 U	0.996 U	0.0950 J Z	0.978 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.650 J Z	0.861 J FD, Z	1.93 J FD, Z	0.584 J Z	4.98 U B	0.711 J Z	0.556 J Z
1613B	3268-87-9	OCDD	ng/kg	3.23 J Z	122 J FD, Q	414 J FD	14.4	32.3	143	21.1
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.453 J Z	12.8 J FD	45.6 J FD	1.60 J Z	3.49 J Z	14.0	1.88 J Z
1613B	39001-02-0	OCDF	ng/kg	10.2 U B	3.08 J FD, Z	11.5 J FD	0.646 J Z	1.10 J Z	5.49 J Z	0.372 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.12 U	0.266 J FD, Z	0.778 J FD, Z	0.0701 J Z	4.98 U	0.249 J Z	4.89 U
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.12 U B	4.95 UJ B, FD	0.548 J FD, Z	4.86 U B	4.98 U B	0.397 J Z	0.0615 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.02 U	0.581 J FD, Z	2.32 J FD	0.972 U	0.161 J Z	0.538 J Z	0.0401 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.12 U	4.95 UJ B, FD	0.551 J FD, Z	0.0350 J Z	4.98 U	0.221 J Z	4.89 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.12 U	0.252 J FD, Z	1.66 J FD, Z	4.86 U B	4.98 U B	0.566 J Z	4.89 U
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.173 J Z	2.10 J FD, Z	5.96 J FD	4.86 U B	4.98 U B	0.914 J Z	4.89 U B
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.12 U	0.403 J FD, Z	1.11 J FD, Z	4.86 U B	4.98 U B	0.383 J Z	4.89 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.444 J Z	0.870 J FD, Z	2.27 J FD, Z	0.489 J Z	4.98 U B	0.807 J Z	0.352 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.0207 J Z	0.237 J FD, Z	0.767 J FD, Z	4.86 U B	4.98 U B	0.337 J Z	4.89 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.12 U B	1.65 J FD, Z	5.73 J FD	0.326 J Z	0.601 J Z	2.14 J Z	0.209 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.12 U	0.347 J FD, Z	1.37 J FD, Z	4.86 U B	4.98 U B	0.378 J Z	4.89 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.940 J Z	0.396 J Z	0.642 J Z	0.352 J Z	0.243 J Z	0.345 J Z	0.374 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.0765	0.843	3.04	0.129	0.0914	1.24	0.0908

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			Sample Name	SL-587-SA8-SB-6.5-7.5	SL-588-SA8-SB-0.0-0.5	SL-888-SA8-SB-0.0-0.5	SL-588-SA8-SB-2.0-3.0	SL-589-SA8-SB-0.0-0.5	SL-589-SA8-SB-2.5-3.5	SL-590-SA8-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N
			Sample Date	07/12/2013	07/08/2013	07/08/2013	07/08/2013	07/30/2013	07/30/2013	08/12/2013
			SDG	PH066	PH062	PH062	PH062	PH080	PH080	PH089
			Start Depth	6.5	0	0	2	0	2.5	0
			End Depth	7.5	0.5	0.5	3	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.996 U	0.0397 J FD, Z	0.0222 J FD, Z	0.995 U	0.0432 J Z	0.0913 J Z	0.177 J Z
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	4.98 U	0.467 J Z	0.484 J Z	0.266 J Z	0.342 J Z	0.333 J Z	0.462 J Z
1613B	3268-87-9	OCDD	ng/kg	9.96 U B	70.3 J Q	55.8	62.2	10.2 U B	11.9	33.2
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	4.98 U B	6.94	5.63	5.11	5.10 U B	1.09 J Z	4.00 J Z
1613B	39001-02-0	OCDF	ng/kg	0.110 J Z	1.80 J Z	1.73 J Z	1.03 J Z	10.2 U B	10.1 U B	1.47 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.98 U	0.130 J Z	0.152 J Z	4.97 U B	5.10 U B	5.04 U B	0.408 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	4.98 U	0.178 J Z	0.148 J Z	4.97 U B	5.10 U B	5.04 U B	5.07 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.996 U	0.345 J Z	0.265 J Z	0.0981 J Z	1.02 U B	0.0962 J Z	0.275 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	4.98 U B	4.91 U B	5.03 U B	4.97 U B	5.10 U B	5.04 U B	5.07 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	4.98 U	0.518 J Z	0.330 J Z	4.97 U B	0.138 J Z	0.253 J Z	0.497 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	4.98 U B	0.397 J Z	0.307 J Z	4.97 U B	5.10 U B	0.338 J Z	0.746 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	4.98 U B	0.223 J Z	0.206 J Z	4.97 U B	5.10 U B	5.04 U B	0.426 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.98 U	0.460 J Z	0.410 J Z	0.257 J Z	5.10 U B	0.260 J Z	5.07 U B
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	4.98 U	0.243 J Z	0.184 J Z	4.97 U B	5.10 U B	5.04 U B	5.07 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	4.98 U B	0.972 J Z	0.910 J Z	0.508 J Z	5.10 U B	0.285 J Z	0.640 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	4.98 U B	0.270 J Z	0.190 J Z	4.97 U B	5.10 U B	5.04 U B	5.07 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.0155 J Z	0.309 J Z	0.304 J Z	0.163 J Z	5.10 U B	5.04 U B	0.323 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.00259	0.666	0.344	0.167	0.0975	0.211	0.608

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J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-590-SA8-SB-4.0-5.0	SL-591-SA8-SB-0.0-0.5	SL-592-SA8-SB-0.0-0.5	SL-592-SA8-SB-3.5-4.5	SL-593-SA8-SB-0.0-0.5	SL-593-SA8-SB-4.0-5.0	SL-594-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/15/2013
			SDG	PH089	PH089	PH089	PH089	PH089	PH089	PH092
			Start Depth	4	0	0	3.5	0	4	0
			End Depth	5	0.5	0.5	4.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.02 U	0.982 U	0.984 U	1.03 U	0.981 U	1.02 U	1.00 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.12 U B	4.91 U B	4.92 U B	5.17 U	0.663 J Z	5.10 U B	0.177 J Z
1613B	3268-87-9	OCDD	ng/kg	9.36 J Z	27.5	28.9	7.93 J Z	128	55.2	34.2
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.976 J Z	2.68 J Z	2.40 J Z	0.773 J Z	13.9	4.32 J Z	3.89 J Z
1613B	39001-02-0	OCDF	ng/kg	10.2 U B	1.07 J Z	9.84 U B	10.3 U B	3.36 J Z	1.25 J Z	3.16 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.12 U B	4.91 U B	4.92 U	5.17 U	4.90 U B	5.10 U	0.107 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.12 U B	4.91 U B	4.92 U B	5.17 U	4.90 U B	5.10 U	5.01 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.109 J Z	0.143 J Z	0.0976 J Z	1.03 U	0.532 J Z	0.114 J Z	0.938 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.12 U	4.91 U	4.92 U	5.17 U B	4.90 U B	5.10 U B	5.01 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.12 U B	4.91 U B	4.92 U B	5.17 U B	4.90 U B	5.10 U	1.95 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.12 U B	4.91 U	4.92 U B	5.17 U	1.21 J Z	5.10 U B	7.84
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.12 U B	4.91 U B	4.92 U B	5.17 U	4.90 U B	5.10 U	0.273 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.12 U B	4.91 U B	4.92 U B	5.17 U	0.828 J Z	5.10 U B	0.275 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.12 U B	4.91 U B	4.92 U B	5.17 U	4.90 U B	5.10 U B	0.185 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.12 U B	0.510 J Z	0.477 J Z	5.17 U B	1.69 J Z	0.599 J Z	1.12 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.12 U B	4.91 U B	4.92 U B	5.17 U	4.90 U B	5.10 U B	0.878 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.12 U B	4.91 U B	4.92 U B	5.17 U B	4.90 U B	5.10 U B	0.189 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.0906	0.224	0.0951	0.0120	0.298	0.0883	1.09

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-595-SA8-SB-0.0-0.5	SL-596-SA8-SB-0.0-0.5	SL-597-SA8-SB-0.0-0.5	SL-599-SA8-SB-0.0-0.5	SL-599-SA8-SB-3.0-4.0	SL-600-SA8-SB-0.0-0.5	SL-600-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	08/15/2013	07/30/2013	08/15/2013	07/31/2013	07/31/2013	08/14/2013	08/14/2013
			SDG	PH092	PH080	PH092	PH081	PH081	PH091	PH091
			Start Depth	0	0	0	0	3	0	4
			End Depth	0.5	0.5	0.5	0.5	4	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.990 U	0.0191 J Z	0.0900 J Z	0.0151 J Z	1.04 U	0.986 U	1.05 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.695 J Z	4.93 U B	0.195 J Z	4.96 U B	5.22 U B	0.169 J Z	0.0629 J Z
1613B	3268-87-9	OCDD	ng/kg	197	8.00 J Z	27.7	8.01 J Z	10.4 U B	15.7	2.35 J Z
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	20.9	0.924 J Z	2.93 J Z	1.09 J Z	5.22 U B	2.12 J Z	0.319 J Z
1613B	39001-02-0	OCDF	ng/kg	11.5	9.86 U B	1.23 J Z	9.92 U B	10.4 U B	0.780 J Z	10.5 U B
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.352 J Z	4.93 U B	0.0966 J Z	4.96 U B	5.22 U B	0.0772 J Z	0.0774 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	4.95 U B	4.93 U B	4.86 U B	4.96 U	5.22 U B	4.93 U B	5.26 U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	5.17	0.986 U B	0.108 J Z	0.530 J Z	1.04 U	0.109 J Z	0.0724 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.626 J Z	4.93 U B	4.86 U B	4.96 U B	5.22 U B	4.93 U B	5.26 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	7.74	0.0741 J Z	4.86 U B	0.453 J Z	0.0395 J Z	0.325 J Z	5.26 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	13.2	4.93 U B	0.309 J Z	5.36	5.22 U B	0.356 J Z	0.105 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.772 J Z	4.93 U B	4.86 U B	0.421 J Z	5.22 U B	0.155 J Z	5.26 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.972 J Z	4.93 U B	0.185 J Z	4.96 U B	5.22 U B	0.163 J Z	0.0531 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.791 J Z	4.93 U B	0.111 J Z	4.96 U B	5.22 U B	0.208 J Z	0.0537 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	4.38 J Z	0.199 J Z	0.561 J Z	0.373 J Z	5.22 U B	0.447 J Z	5.26 U B
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	2.07 J Z	4.93 U B	4.86 U B	0.316 J Z	5.22 U B	4.93 U B	5.26 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.412 J Z	4.93 U B	0.102 J Z	4.96 U B	5.22 U B	0.0570 J Z	0.0774 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	3.88	0.104	0.174	0.419	0.0496	0.160	0.0340

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-601-SA8-SB-0.0-0.5	SL-601-SA8-SB-4.0-5.0	SL-602-SA8-SB-0.0-0.5	SL-602-SA8-SB-4.0-5.0	SL-606-SA8-SB-0.0-0.5	SL-606-SA8-SB-4.0-5.0	SL-607-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/18/2013	07/18/2013	08/14/2013	08/14/2013	07/19/2013	07/19/2013	08/09/2013
			SDG	PH070	PH070	PH091	PH091	PH071	PH071	PH088
			Start Depth	0	4	0	4	0	4	0
			End Depth	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.06 U	1.05 U	1.00 U	1.05 U	1.05 U	1.10 U	1.02 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.30 U B	5.26 U B	0.161 J Z	5.26 U	0.307 J Z	5.51 U B	0.413 J Z
1613B	3268-87-9	OCDD	ng/kg	10.6 U B	10.5 U B	88.3	3.37 J Z	43.1	11.0 U B	55.8
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.30 U B	5.26 U B	6.64	0.485 J Z	5.30	5.51 U B	8.77
1613B	39001-02-0	OCDF	ng/kg	0.178 J Z	0.0885 J Z	7.14 J Z	10.5 U B	1.53 J Z	11.0 U B	1.67 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0367 J Z	5.26 U	0.112 J Z	5.26 U	0.146 J Z	5.51 U B	5.12 U B
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.30 U	5.26 U	5.01 U	5.26 U B	0.0779 J Z	5.51 U B	5.12 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.06 U	1.05 U	0.357 J Z	1.05 U	0.562 J Z	0.0407 J Z	1.48
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.30 U	5.26 U B	5.01 U B	5.26 U	0.141 J Z	5.51 U B	5.12 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.30 U	5.26 U	5.01 U B	5.26 U B	0.695 J Z	5.51 U B	5.12 U B
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.30 U B	5.26 U B	0.511 J Z	0.231 J Z	1.20 J Z	5.51 U B	0.487 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.30 U B	5.26 U B	0.195 J Z	5.26 U B	0.287 J Z	5.51 U B	5.12 U B
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.30 U B	5.26 U	0.295 J Z	0.0522 J Z	0.375 J Z	5.51 U B	5.12 U B
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.30 U B	5.26 U B	0.297 J Z	0.0319 J Z	0.394 J Z	5.51 U B	5.12 U B
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.30 U B	5.26 U B	2.21 J Z	5.26 U B	1.06 J Z	5.51 U B	1.01 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.30 U B	5.26 U B	5.01 U B	5.26 U B	0.202 J Z	5.51 U B	5.12 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.30 U B	5.26 U B	5.01 U	0.0370 J Z	5.23 U B	5.51 U B	5.12 U
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.00728	0.0132	0.258	0.00909	0.564	0.0494	0.357

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-607-SA8-SB-5.0-6.0	SL-608-SA8-SB-0.0-0.5	SL-608-SA8-SB-4.0-5.0	SL-608-SA8-SB-7.0-8.0	SL-609-SA8-SB-0.0-0.5	SL-609-SA8-SB-4.0-5.0	SL-610-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	08/09/2013	08/01/2013	08/01/2013	08/01/2013	08/13/2013	08/13/2013	08/01/2013
			SDG	PH088	PH082	PH082	PH082	PH090	PH090	PH082
			Start Depth	5	0	4	7	0	4	0
			End Depth	6	0.5	5	8	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.08 U	1.00 U	1.07 U	1.09 U	1.03 U	1.09 U	1.02 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.42 U B	0.105 J Z	0.0692 J Z	5.44 U	0.107 J Z	0.0377 J Z	0.202 J Z
1613B	3268-87-9	OCDD	ng/kg	10.8 U B	21.5	3.56 J Z	6.83 J Z	6.00 J Z	1.75 J Z	51.3
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.42 U B	1.73 J Z	0.423 J Z	0.483 J Z	1.08 J Z	0.302 J Z	5.59
1613B	39001-02-0	OCDF	ng/kg	10.8 U B	10.0 U B	10.7 U B	10.9 U B	10.3 U B	10.9 U B	2.49 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.42 U B	5.02 U	0.0654 J Z	5.44 U	5.16 U	0.0806 J Z	0.106 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.42 U B	5.02 U	5.33 U B	5.44 U	5.16 U	5.47 U	5.11 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0941 J Z	0.194 J Z	0.128 J Z	0.145 J Z	0.148 J Z	0.0753 J Z	1.31
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.42 U	5.02 U B	5.33 U B	5.44 U	5.16 U B	5.47 U B	5.11 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.42 U B	5.02 U B	0.376 J Z	5.44 U	5.16 U B	5.47 U B	0.411 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.42 U B	4.47 J Z	1.18 J Z	0.943 J Z	0.114 J Z	5.47 U	10.3
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.42 U B	0.203 J Z	0.0906 J Z	0.0967 J Z	5.16 U B	5.47 U B	0.757 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.42 U B	5.02 U B	5.33 U B	5.44 U	0.109 J Z	0.0532 J Z	0.279 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.42 U B	0.215 J Z	0.102 J Z	0.0529 J Z	0.0676 J Z	0.0309 J Z	0.399 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.42 U B	0.460 J Z	5.33 U B	0.136 J Z	5.16 U B	5.47 U B	1.24 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.42 U B	0.161 J Z	0.163 J Z	0.169 J Z	5.16 U B	5.47 U B	0.376 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.42 U B	5.02 U	0.0397 J Z	5.44 U	5.16 U	5.47 U	5.11 U
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.00798	0.174	0.0405	0.0264	0.0275	0.0364	0.746

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-610-SA8-SB-4.0-5.0	SL-612-SA8-SB-0.0-0.5	SL-612-SA8-SB-4.0-5.0	SL-613-SA8-SB-0.0-0.5	SL-613-SA8-SB-4.0-5.0	SL-614-SA8-SB-0.0-0.5	SL-614-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	08/01/2013	07/30/2013	07/30/2013	08/14/2013	08/14/2013	08/13/2013	08/13/2013
			SDG	PH082	PH080	PH080	PH091	PH091	PH090	PH090
			Start Depth	4	0	4	0	4	0	4
			End Depth	5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.11 U	0.0276 J Z	0.0231 J Z	0.987 U	1.08 U	0.106 J Z	1.08 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.55 U	5.61 U B	5.22 U B	0.253 J Z	5.41 U	0.228 J Z	0.169 J Z
1613B	3268-87-9	OCDD	ng/kg	1.62 J Z	11.2 U B	4.69 J Z	107	10.8 U B	34.4	29.2
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.55 U B	5.61 U B	0.364 J Z	6.69	5.41 U B	4.27 J Z	2.73 J Z
1613B	39001-02-0	OCDF	ng/kg	11.1 U B	11.2 U B	10.4 U B	2.66 J Z	10.8 U B	1.56 J Z	0.958 J Z
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.55 U	5.61 U B	5.22 U B	0.135 J Z	5.41 U	0.201 J Z	0.208 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.55 U	5.61 U B	5.22 U	4.93 U	5.41 U	5.15 U B	5.41 U B
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.11 U	1.12 U B	1.04 U B	0.287 J Z	0.114 J Z	0.262 J Z	0.224 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.55 U	5.61 U B	5.22 U B	4.93 U	5.41 U	5.15 U B	5.41 U B
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.55 U	0.0540 J Z	0.0839 J Z	0.258 J Z	5.41 U	0.470 J Z	0.284 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.0546 J Z	5.61 U B	5.22 U B	0.617 J Z	5.41 U	0.358 J Z	0.438 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.55 U	5.61 U B	5.22 U B	4.93 U	5.41 U B	0.223 J Z	0.213 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.55 U B	5.61 U B	5.22 U	0.195 J Z	0.0446 J Z	0.296 J Z	0.215 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.55 U	5.61 U B	5.22 U B	0.231 J Z	5.41 U	0.266 J Z	0.176 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.55 U B	5.61 U B	5.22 U B	1.23 J Z	5.41 U B	0.832 J Z	0.406 J Z
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.0370 J Z	5.61 U B	5.22 U B	4.93 U B	5.41 U B	5.15 U B	5.41 U B
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.0505 J Z	5.61 U B	5.22 U B	4.93 U	5.41 U	5.15 U	5.41 U
1613B	TCDD TEQ	TCDD TEQ	ng/kg	0.000451	0.00125	0.0202	0.300	0 U	0.262	0.0934

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-615-SA8-SB-0.0-0.5
			Sample Type	N
			Sample Date	08/27/2013
			SDG	PH094
			Start Depth	0
			End Depth	0.5
Analytic Method	CAS Number	Chemical Name	Unit	
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.988 U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	1.31 J Z
1613B	3268-87-9	OCDD	ng/kg	949
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	41.2
1613B	39001-02-0	OCDF	ng/kg	28.3
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.446 J Z
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.444 J Z
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.265 J Z
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.900 J Z
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.481 J Z
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.574 J Z
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.572 J Z
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	2.47 J Z
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.690 J Z
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	13.5
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.851 J Z
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	1.08 J Z
1613B	TCDD TEQ	TCDD TEQ	ng/kg	2.22

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			Sample Name	SL-604-SA8-SB-0.0-0.5	SL-904-SA8-SB-0.0-0.5	SL-605-SA8-SB-0.0-0.5
			Sample Type	N	FD	N
			Sample Date	08/29/2013	08/29/2013	08/29/2013
			SDG	PH097	PH097	PH097
			Start Depth	0	0	0
			End Depth	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit			
300.0	16984-48-8	Fluoride	mg/kg	0.87 J Q, Z	1.4 J Q	1.1 J Q

U-Compound not detected above reporting limit
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				Sample Name	SL-501-SA8-SB-0.0-0.5	SL-801-SA8-SB-0.0-0.5	SL-501-SA8-SB-4.0-5.0	SL-501-SA8-SB-9.0-10.0	SL-501-SA8-SB-12.0-13.0	SL-514-SA8-SB-0.0-0.5	SL-514-SA8-SB-4.0-5.0	SL-514-SA8-SB-7.5-8.5
				Sample Type	N	FD	N	N	N	N	N	N
				Sample Date	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/17/2013	07/17/2013	07/17/2013
				SDG	PH067	PH067	PH067	PH067	PH067	PH069	PH069	PH069
				Start Depth	0	0	4	9	12	0	4	7.5
				End Depth	0.5	0.5	5	10	13	0.5	5	8.5
Analytic Method	CAS Number	Chemical Name	Unit									
8151A	120-36-5	Dichlorprop	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	20 U	20 U
8151A	1918-00-9	Dicamba	µg/kg	12 U	12 U	13 U	13 U	13 U	13 U	14 U	14 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	93 U	94 U	96 U	97 U	96 U	94 UJ C	110 UJ C	110 UJ C
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	25 U	25 U	25 U	26 U	25 U	25 U	28 U	28 U
8151A	93-65-2	MCPP	µg/kg	2600 U	2600 U	2700 U	2700 U	2700 U	2600 UJ C	3000 UJ C	3000 UJ C
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	1.8 R	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.0 U	2.0 U
8151A	93-76-5	2,4,5-T	µg/kg	1.8 R	1.8 U	1.8 U	1.8 U	1.8 U	1.8 UJ C	2.0 UJ C	2.0 UJ C
8151A	94-74-6	MCPA	µg/kg	2600 U	2600 U	2700 U	2700 U	2700 U	2600 UJ C	3000 UJ C	3000 UJ C
8151A	94-75-7	2,4-D	µg/kg	37 R	37 U	38 U	39 U	38 U	38 UJ C	43 UJ C	43 UJ C
8151A	94-82-6	2,4-DB	µg/kg	18 R	18 U	18 U	18 U	18 U	18 UJ C	20 UJ C	20 UJ C

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				Sample Name	SL-542-SA8-SB-0.0-0.5	SL-542-SA8-SB-4.0-5.0	SL-542-SA8-SB-9.0-10.0	SL-542-SA8-SB-14.0-15.0	SL-542-SA8-SB-17.5-18.5	SL-553-SA8-SB-0.0-0.5	SL-553-SA8-SB-4.0-5.0	SL-853-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	FD
				Sample Date	09/26/2013	09/26/2013	09/26/2013	09/26/2013	09/26/2013	08/27/2013	08/27/2013	08/27/2013
				SDG	PH117	PH117	PH117	PH117	PH117	PH094	PH094	PH094
				Start Depth	0	4	9	14	17.5	0	4	4
				End Depth	0.5	5	10	15	18.5	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8151A	120-36-5	Dichlorprop	µg/kg	18 U	19 U	20 U	20 U	19 U	19 U	19 U	19 U	19 U
8151A	1918-00-9	Dicamba	µg/kg	13 U	14 U	14 U	14 U	14 U	13 U	14 U	14 U	14 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	95 U	100 U	100 U	110 U	100 U	99 U	100 U	100 U	100 U
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	25 R	27 R	28 R	28 R	27 R	27 U	27 U	27 U	27 U
8151A	93-65-2	MCPP	µg/kg	2600 U	2900 U	2900 U	2900 U	2800 U	2800 U	2800 U	2800 U	2800 U
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	1.8 U	1.9 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
8151A	93-76-5	2,4,5-T	µg/kg	1.8 U	1.9 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
8151A	94-74-6	MCPA	µg/kg	2600 U	2900 U	2900 U	2900 U	2800 U	2800 U	2800 UJ FD	1300 J FD, Z	
8151A	94-75-7	2,4-D	µg/kg	38 U	41 U	42 U	42 U	41 U	40 U	41 U	41 U	
8151A	94-82-6	2,4-DB	µg/kg	18 U	19 U	20 U	20 U	19 U	19 U	19 U	19 U	

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			Sample Name	SL-553-SA8-SB-9.0-10.0	SL-553-SA8-SB-14.0-15.0	SL-553-SA8-SB-18.0-19.0	SL-564-SA8-SB-0.0-0.5	SL-567-SA8-SB-0.0-0.5	SL-567-SA8-SB-4.0-5.0	SL-567-SA8-SB-9.0-10.0	SL-575-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/28/2013	08/28/2013	08/28/2013	08/06/2013	08/08/2013	08/08/2013	08/08/2013	08/07/2013
			SDG	PH096	PH096	PH096	PH085	PH087	PH087	PH087	PH086
			Start Depth	9	14	18	0	0	4	9	0
			End Depth	10	15	19	0.5	0.5	5	10	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8151A	120-36-5	Dichlorprop	µg/kg	20 U	20 U	18 U	18 U	20 U	20 U	20 U	19 U
8151A	1918-00-9	Dicamba	µg/kg	14 U	14 U	13 U	12 U	14 U	14 U	14 U	13 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	110 U	100 U	97 U	93 U	110 U	110 U	110 U	99 U
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	28 U	28 U	26 U	25 U	28 U	28 U	28 U	26 U
8151A	93-65-2	MCPP	µg/kg	2900 U	2900 U	2700 U	2600 U	2900 U	2900 U	2900 U	2800 U
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	2.0 U	2.0 U	1.8 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U
8151A	93-76-5	2,4,5-T	µg/kg	2.0 U	2.0 U	1.8 U	1.8	2.0 U	2.4	2.0 U	1.9 U
8151A	94-74-6	MCPA	µg/kg	2900 U	2900 U	2700 U	2600 U	2900 U	2900 U	2900 U	2800 U
8151A	94-75-7	2,4-D	µg/kg	42 U	42 U	39 U	23 J Z	42 U	42 U	42 U	40 U
8151A	94-82-6	2,4-DB	µg/kg	20 U	20 U	18 U	32 U	20 U	20 U	20 U	19 U

U-Compound not detected above reporting limit
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				Sample Name	SL-575-SA8-SB-4.0-5.0	SL-575-SA8-SB-9.0-10.0	SL-583-SA8-SB-0.0-0.5	SL-883-SA8-SB-0.0-0.5	SL-590-SA8-SB-0.0-0.5	SL-590-SA8-SB-4.0-5.0	SL-590-SA8-SB-7.0-8.0	SL-607-SA8-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	08/07/2013	08/07/2013	08/06/2013	08/06/2013	08/12/2013	08/12/2013	08/12/2013	08/09/2013
				SDG	PH086	PH086	PH085	PH085	PH089	PH089	PH089	PH088
				Start Depth	4	9	0	0	0	4	7	0
				End Depth	5	10	0.5	0.5	0.5	5	8	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8151A	120-36-5	Dichlorprop	µg/kg	19 U	19 U	17 U	17 U	17 U	18 U	18 U	18 U
8151A	1918-00-9	Dicamba	µg/kg	14 U	13 U	12 U	12 U	12 U	13 U	12 U	12 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	100 U	100 U	91 R	92 U	91 U	94 U	93 U	93 U
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	27 U	27 U	24 U	24 U	24 U	25 U	25 U	25 U
8151A	93-65-2	MCPP	µg/kg	2800 U	2800 U	2500 U	2600 U	2500 U	2600 U	2600 U	2600 U
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	1.9 U	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8151A	93-76-5	2,4,5-T	µg/kg	1.9 U	1.9 U	1.7	2.3	1.7 U	1.8 U	1.8 U	1.8 U
8151A	94-74-6	MCPA	µg/kg	2800 U	2800 U	2500 U	2600 U	2500 U	2600 U	2600 U	2600 U
8151A	94-75-7	2,4-D	µg/kg	41 U	40 U	23 J Z	23 J Z	25 J Z	20 J Z	37 U	19 J Z
8151A	94-82-6	2,4-DB	µg/kg	19 U	19 U	30 U	35 U	24 U	22	18 U	32

U-Compound not detected above reporting limit
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			Sample Name	SL-607-SA8-SB-5.0-6.0	SL-610-SA8-SB-0.0-0.5	SL-610-SA8-SB-4.0-5.0	SL-610-SA8-SB-6.8-7.8
			Sample Type	N	N	N	N
			Sample Date	08/09/2013	08/01/2013	08/01/2013	08/01/2013
			SDG	PH088	PH082	PH082	PH082
			Start Depth	5	0	4	6.8
			End Depth	6	0.5	5	7.8
Analytic Method	CAS Number	Chemical Name	Unit				
8151A	120-36-5	Dichlorprop	µg/kg	18 U	18 UJ S	19 U	19 U
8151A	1918-00-9	Dicamba	µg/kg	13 U	12 UJ S	13 U	13 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	97 U	93 UJ S	100 U	99 U
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	26 U	25 UJ S	27 U	26 U
8151A	93-65-2	MCPP	µg/kg	2700 U	2600 UJ S	2800 U	2800 U
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	1.8 U	1.8 UJ S	1.9 U	1.9 U
8151A	93-76-5	2,4,5-T	µg/kg	1.8 U	1.8 UJ S	1.9 U	1.9 U
8151A	94-74-6	MCPA	µg/kg	2700 U	2600 UJ S	2800 U	2800 U
8151A	94-75-7	2,4-D	µg/kg	39 U	37 UJ S	40 U	40 U
8151A	94-82-6	2,4-DB	µg/kg	27	28 J S	19 U	19 U

U-Compound not detected above reporting limit
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			Sample Name	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-506-SA8-SB-0.0-0.5	SL-506-SA8-SB-4.0-5.0	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/16/2013	07/16/2013
			SDG	PH068	PH068	PH068	PH070	PH070	PH068	PH068	PH068
			Start Depth	0	2.5	2.5	0	4	0	3	0
			End Depth	0.5	3.5	3.5	0.5	5	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7199	18540-29-9	Chromium (Hexavalent Compounds)	mg/kg	0.52 J E	1.4 J FD, E	0.43 UJ FD, E	0.30 J Z	0.44 U	0.35 J E, Z	0.40 UJ E	0.30 J E, Z

U-Compound not detected above reporting limit
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			Sample Name	SL-509-SA8-SB-0.0-0.5	SL-509-SA8-SB-4.0-5.0	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-517-SA8-SB-0.0-0.5	SL-517-SA8-SB-3.0-4.0	SL-518-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/18/2013	07/18/2013	07/17/2013	07/17/2013	07/17/2013	07/19/2013	07/19/2013	07/19/2013
			SDG	PH070	PH070	PH069	PH069	PH069	PH071	PH071	PH071
			Start Depth	0	4	0	4	8	0	3	0
			End Depth	0.5	5	0.5	5	9	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7199	18540-29-9	Chromium (Hexavalent Compounds)	mg/kg	0.18 J Z	0.18 J Z	0.49	0.18 J Z	0.42 U	0.17 J Z	0.42 U	0.41 U

U-Compound not detected above reporting limit
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R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-518-SA8-SB-4.0-5.0
			Sample Type	N
			Sample Date	07/19/2013
			SDG	PH071
			Start Depth	4
			End Depth	5
Analytic Method	CAS Number	Chemical Name	Unit	
7199	18540-29-9	Chromium (Hexavalent Compounds)	mg/kg	0.43 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-501-SA8-SB-0.0-0.5	SL-801-SA8-SB-0.0-0.5	SL-501-SA8-SB-4.0-5.0	SL-501-SA8-SB-9.0-10.0	SL-501-SA8-SB-12.0-13.0	SL-502-SA8-SB-0.0-0.5	SL-502-SA8-SB-4.0-5.0	SL-502-SA8-SB-7.5-8.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013
			SDG	PH067	PH067	PH067	PH067	PH067	PH067	PH067	PH067
			Start Depth	0	0	4	9	12	0	4	7.5
			End Depth	0.5	0.5	5	10	13	0.5	5	8.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0276 J FD	0.0493 J FD	0.0107 J Z	0.0173 U	0.0171 U	0.0408	0.0164 J Z	0.0118 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-503-SA8-SB-0.0-0.5	SL-503-SA8-SB-3.0-4.0	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-505-SA8-SB-0.0-0.5	SL-505-SA8-SB-4.0-5.0	SL-506-SA8-SB-0.0-0.5	SL-506-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	FD	N	N	N	N
			Sample Date	07/15/2013	07/15/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013
			SDG	PH067	PH067	PH068	PH068	PH068	PH068	PH068	PH070	PH070
			Start Depth	0	3	0	2.5	2.5	0	4	0	4
			End Depth	0.5	4	0.5	3.5	3.5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	0.0244	0.0175 U	0.0466	0.0168 U	0.0171 U	0.0128 J Z	0.0140 J Z	0.0503	0.0174 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5	SL-509-SA8-SB-0.0-0.5	SL-509-SA8-SB-4.0-5.0	SL-510-SA8-SB-0.0-0.5	SL-511-SA8-SB-0.0-0.5	SL-511-SA8-SB-6.0-7.0	SL-512-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/15/2013	07/15/2013	07/17/2013
			SDG	PH068	PH068	PH068	PH070	PH070	PH068	PH067	PH067	PH069
			Start Depth	0	3	0	0	4	0	0	6	0
			End Depth	0.5	4	0.5	0.5	5	0.5	0.5	7	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	0.346	0.0170 U	0.0382	0.0181 U	0.0169 U	0.0144 J Z	0.0169 U	0.0323	0.0213

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J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-514-SA8-SB-0.0-0.5	SL-514-SA8-SB-4.0-5.0	SL-514-SA8-SB-7.5-8.5	SL-515-SA8-SB-0.0-0.5	SL-515-SA8-SB-4.0-5.0	SL-515-SA8-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013
			SDG	PH069	PH069	PH069	PH069	PH069	PH069	PH069	PH069	PH069
			Start Depth	0	4	8	0	4	7.5	0	4	9
			End Depth	0.5	5	9	0.5	5	8.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	1.03	0.0266	0.0171 U	0.0296	0.0194 U	0.0191 U	0.0136 J Z	0.0185 U	0.0195 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-515-SA8-SB-14.0-15.0	SL-516-SA8-SB-0.0-0.5	SL-517-SA8-SB-0.0-0.5	SL-517-SA8-SB-3.0-4.0	SL-518-SA8-SB-0.0-0.5	SL-518-SA8-SB-4.0-5.0	SL-519-SA8-SB-0.0-0.5	SL-519-SA8-SB-3.5-4.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/17/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/18/2013	07/18/2013
			SDG	PH069	PH071	PH071	PH071	PH071	PH071	PH070	PH070
			Start Depth	14	0	0	3	0	4	0	3.5
			End Depth	15	0.5	0.5	4	0.5	5	0.5	4.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0187 U	0.0141 J Z	0.347	0.0171 U	0.0170 U	0.0117 J Z	0.0676	0.0165 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-520-SA8-SB-0.0-0.5	SL-521-SA8-SB-0.0-0.5	SL-522-SA8-SB-0.0-0.5	SL-522-SA8-SB-0.0-0.5-DTSC	SL-522-SA8-SB-4.0-5.0	SL-523-SA8-SB-4.0-5.0	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	07/18/2013	07/19/2013	07/26/2013	07/24/2013	07/26/2013	07/25/2013	07/25/2013	07/25/2013
			SDG	PH070	PH071	PH076	PH074	PH076	PH075	PH075	PH075
			Start Depth	0	0	0	0	4	4	4	4
			End Depth	0.5	0.5	0.5	0.5	5	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0170 U	0.0152 J Z	0.0178 U	0.0168 U	0.0181 U	0.0189 U	0.0186 U	0.0182 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-525-SA8-SB-0.0-0.5	SL-525-SA8-SB-4.0-5.0	SL-526-SA8-SB-0.0-0.5	SL-526-SA8-SB-4.0-5.0	SL-527-SA8-SB-0.0-0.5	SL-527-SA8-SB-4.0-5.0	SL-528-SA8-SB-0.0-0.5-DTSC	SL-528-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/25/2013	07/25/2013	07/29/2013	07/29/2013	07/24/2013	07/24/2013	07/24/2013	07/24/2013
			SDG	PH075	PH075	PH078	PH078	PH074	PH074	PH074	PH074
			Start Depth	0	4	0	4	0	4	0	4
			End Depth	0.5	5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0133 J Z	0.0179 U	0.0502	0.0194 U	0.0178 U	0.0128 J Z	0.0126 J Z	0.0189 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-529-SA8-SB-0.0-0.5	SL-529-SA8-SB-4.0-5.0	SL-530-SA8-SB-0.0-0.5	SL-530-SA8-SB-4.0-5.0	SL-830-SA8-SB-4.0-5.0	SL-531-SA8-SB-0.0-0.5	SL-531-SA8-SB-4.0-5.0	SL-532-SA8-SB-0.0-0.5	SL-532-SA8-SB-6.5-7.5
			Sample Type	N	N	N	N	FD	N	N	N	N
			Sample Date	07/29/2013	07/29/2013	08/09/2013	08/09/2013	08/09/2013	07/18/2013	07/18/2013	07/19/2013	07/19/2013
			SDG	PH078	PH078	PH088	PH088	PH088	PH070	PH070	PH071	PH071
			Start Depth	0	4	0	4	4	0	4	0	6.5
			End Depth	0.5	5	0.5	5	5	0.5	5	0.5	7.5
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	0.0493	0.0188 U	0.0318	0.0184 U	0.0181 U	0.0166 U	0.0139 J Z	0.0177 U	0.0187 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-536-SA8-SB-0.0-0.5	SL-536-SA8-SB-0.0-0.5-DTSC	SL-536-SA8-SB-4.0-5.0	SL-537-SA8-SB-0.0-0.5	SL-537-SA8-SB-4.0-5.0	SL-538-SA8-SB-0.0-0.5	SL-538-SA8-SB-0.0-0.5-DTSC	SL-538-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/31/2013	07/24/2013	07/31/2013	07/31/2013	07/31/2013	08/09/2013	07/24/2013	08/09/2013
			SDG	PH081	PH074	PH081	PH081	PH081	PH088	PH074	PH088
			Start Depth	0	0	4	0	4	0	0	4
			End Depth	0.5	0.5	5	0.5	5	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0198	0.0156 J Z	0.0120 J Z	0.0199	0.0183	0.0212	0.0164 J Z	0.0191 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-838-SA8-SB-4.0-5.0	SL-539B-SA8-SB-0.0-0.5	SL-539B-SA8-SB-2.0-3.0	SL-540-SA8-SB-0.0-0.5	SL-540-SA8-SB-4.0-5.0	SL-541-SA8-SB-0.0-0.5	SL-541-SA8-SB-4.0-5.0	SL-542-SA8-SB-0.0-0.5
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	08/09/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	08/09/2013	08/09/2013	09/26/2013
			SDG	PH088	PH076	PH076	PH076	PH076	PH088	PH088	PH117
			Start Depth	4	0	2	0	4	0	4	0
			End Depth	5	0.5	3	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0182 U	0.0188 U	0.0186 U	0.0175 U	0.0179 U	0.0108 J Z	0.0179 U	0.0174 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-542-SA8-SB-4.0-5.0	SL-542-SA8-SB-9.0-10.0	SL-542-SA8-SB-14.0-15.0	SL-542-SA8-SB-17.5-18.5	SL-543-SA8-SB-0.0-0.5	SL-543-SA8-SB-4.0-5.0	SL-843-SA8-SB-4.0-5.0	SL-549-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	09/26/2013	09/26/2013	09/26/2013	09/26/2013	08/13/2013	08/13/2013	08/13/2013	07/30/2013
			SDG	PH117	PH117	PH117	PH117	PH090	PH090	PH090	PH080
			Start Depth	4	9	14	17.5	0	4	4	0
			End Depth	5	10	15	18.5	0.5	5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0178 U	0.0187 U	0.0147 J Z	0.0189 U	0.0108 J Z	0.0176 U	0.0185 U	0.0170 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-549-SA8-SB-4.0-5.0	SL-550-SA8-SB-0.0-0.5	SL-550-SA8-SB-4.0-5.0	SL-550-SA8-SB-9.0-10.0	SL-550-SA8-SB-14.0-15.0	SL-550-SA8-SB-17.0-18.0	SL-551-SA8-SB-0.0-0.5	SL-551-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/30/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013	07/23/2013	07/23/2013
			SDG	PH080	PH072	PH072	PH072	PH072	PH072	PH073	PH073
			Start Depth	4	0	4	9	14	17	0	4
			End Depth	5	0.5	5	10	15	18	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0186	0.0181 U	0.0180 U	0.0175 U	0.0191 U	0.0168 U	0.0185 U	0.0167 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-851-SA8-SB-4.0-5.0	SL-551-SA8-SB-9.0-10.0	SL-551-SA8-SB-14.0-15.0	SL-551-SA8-SB-19.0-20.0	SL-552-SA8-SB-0.0-0.5	SL-552-SA8-SB-4.0-5.0	SL-552-SA8-SB-7.5-8.5	SL-553-SA8-SB-0.0-0.5
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	07/23/2013	07/23/2013	07/23/2013	07/23/2013	08/02/2013	08/02/2013	08/02/2013	08/27/2013
			SDG	PH073	PH073	PH073	PH073	PH083	PH083	PH083	PH094
			Start Depth	4	9	14	19	0	4	7.5	0
			End Depth	5	10	15	20	0.5	5	8.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0180 U	0.0193 U	0.0185 U	0.0183 U	0.0484	0.0142 J Z	0.0201	0.0153 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-553-SA8-SB-4.0-5.0	SL-853-SA8-SB-4.0-5.0	SL-553-SA8-SB-9.0-10.0	SL-553-SA8-SB-14.0-15.0	SL-553-SA8-SB-18.0-19.0	SL-554-SA8-SB-0.0-0.5	SL-554-SA8-SB-4.0-5.0	SL-555-SA8-SB-0.0-0.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	08/27/2013	08/27/2013	08/28/2013	08/28/2013	08/28/2013	07/22/2013	07/22/2013	07/23/2013
			SDG	PH094	PH094	PH096	PH096	PH096	PH072	PH072	PH073
			Start Depth	4	4	9	14	18	0	4	0
			End Depth	5	5	10	15	19	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0184 U	0.0181 U	0.0147 J Z	0.0182 U	0.0168 U	0.0180 U	0.0182 U	0.0183 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-555-SA8-SB-4.0-5.0	SL-556-SA8-SB-0.0-0.5	SL-556-SA8-SB-4.0-5.0	SL-558-SA8-SB-0.0-0.5	SL-558-SA8-SB-4.0-5.0	SL-558-SA8-SB-9.0-10.0	SL-558-SA8-SB-12.5-13.5	SL-559-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/23/2013	07/22/2013	07/22/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013
			SDG	PH073	PH072	PH072	PH083	PH083	PH083	PH083	PH083
			Start Depth	4	0	4	0	4	9	12.5	0
			End Depth	5	0.5	5	0.5	5	10	13.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0198	0.0185 U	0.0177 U	0.0308	0.0161 J Z	0.0268	0.0173 J Z	0.0616

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-559-SA8-SB-4.0-5.0	SL-560-SA8-SB-0.0-0.5	SL-560-SA8-SB-4.0-5.0	SL-561-SA8-SB-0.0-0.5	SL-561-SA8-SB-4.0-5.0	SL-562-SA8-SB-0.0-0.5	SL-563-SA8-SB-0.0-0.5	SL-563-SA8-SB-2.0-3.0	SL-564-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/02/2013	07/30/2013	07/30/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	08/06/2013
			SDG	PH083	PH080	PH080	PH063	PH063	PH063	PH063	PH063	PH085
			Start Depth	4	0	4	0	4	0	0	2	0
			End Depth	5	0.5	5	0.5	5	0.5	0.5	3	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	0.0159 J Z	0.379	0.0188	0.0227	0.0176	0.0148 J Z	0.0116 J Z	0.0171 U	0.0238

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-565-SA8-SB-0.0-0.5	SL-565-SA8-SB-4.0-5.0	SL-566-SA8-SB-0.0-0.5	SL-566-SA8-SB-4.0-5.0	SL-567-SA8-SB-0.0-0.5	SL-567-SA8-SB-4.0-5.0	SL-567-SA8-SB-9.0-10.0	SL-568-SA8-SB-0.0-0.5	SL-568-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/08/2013	08/08/2013	08/07/2013	08/07/2013	08/08/2013	08/08/2013	08/08/2013	08/05/2013	08/05/2013
			SDG	PH087	PH087	PH086	PH086	PH087	PH087	PH087	PH084	PH084
			Start Depth	0	4	0	4	0	4	9	0	4
			End Depth	0.5	5	0.5	5	0.5	5	10	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	0.0160 J Z	0.0198	0.0131 J Z	0.0189	0.0185 U	0.0192 U	0.0136 J Z	0.0189 U	0.0179 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-569-SA8-SB-0.0-0.5	SL-569-SA8-SB-4.0-5.0	SL-569-SA8-SB-7.0-8.0	SL-570-SA8-SB-0.0-0.5	SL-570-SA8-SB-4.0-5.0	SL-571-SA8-SB-0.0-0.5	SL-571-SA8-SB-6.5-7.5	SL-571-SA8-SB-12.5-13.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/05/2013	08/05/2013	08/05/2013	07/11/2013	07/11/2013	07/10/2013	07/10/2013	07/10/2013
			SDG	PH084	PH084	PH084	PH065	PH065	PH064	PH064	PH064
			Start Depth	0	4	7	0	4	0	6.5	12.5
			End Depth	0.5	5	8	0.5	5	0.5	7.5	13.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0226	0.0180 U	0.0179 U	0.0412	0.0178 U	0.0184 U	0.0183 U	0.0172 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-572-SA8-SB-0.0-0.5	SL-572-SA8-SB-4.0-5.0	SL-572-SA8-SB-9.0-10.0	SL-572-SA8-SB-14.0-15.0	SL-572-SA8-SB-18.5-19.5	SL-573-SA8-SB-0.0-0.5	SL-573-SA8-SB-4.0-5.0	SL-573-SA8-SB-9.5-10.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013
			SDG	PH064	PH064	PH064	PH064	PH064	PH064	PH064	PH064
			Start Depth	0	4	9	14	18.5	0	4	9.5
			End Depth	0.5	5	10	15	19.5	0.5	5	10.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0188 U	0.0182 U	0.0180 U	0.0183 U	0.0184 U	0.0198 U	0.0284	0.0169 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-574-SA8-SB-0.0-0.5	SL-574-SA8-SB-4.0-5.0	SL-574-SA8-SB-9.0-10.0	SL-574-SA8-SB-14.0-15.0	SL-874-SA8-SB-14.0-15.0	SL-575-SA8-SB-0.0-0.5	SL-575-SA8-SB-4.0-5.0	SL-575-SA8-SB-9.0-10.0
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	07/11/2013	07/11/2013	07/11/2013	07/11/2013	07/11/2013	08/07/2013	08/07/2013	08/07/2013
			SDG	PH065	PH065	PH065	PH065	PH065	PH086	PH086	PH086
			Start Depth	0	4	9	14	14	0	4	9
			End Depth	0.5	5	10	15	15	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0264	0.0172 U	0.0163 J Z	0.0174 U	0.0170 U	0.0110 J Z	0.0163 J Z	0.0163 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-578-SA8-SB-0.0-0.5	SL-578-SA8-SB-4.0-5.0	SL-878-SA8-SB-4.0-5.0	SL-578-SA8-SB-9.0-10.0	SL-580-SA8-SB-0.0-0.5	SL-580-SA8-SB-4.0-5.0	SL-580-SA8-SB-10.5-11.5	SL-581-SA8-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013
			SDG	PH066	PH066	PH066	PH066	PH066	PH066	PH066	PH066
			Start Depth	0	4	4	9	0	4	10.5	0
			End Depth	0.5	5	5	10	0.5	5	11.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0171 U	0.0179 U	0.0177 U	0.0172 U	0.0182 U	0.0170 U	0.0168 U	0.0169 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-581-SA8-SB-4.5-5.5	SL-582-SA8-SB-0.0-0.5	SL-582-SA8-SB-2.5-3.5	SL-583-SA8-SB-0.0-0.5	SL-883-SA8-SB-0.0-0.5	SL-584-SA8-SB-0.0-0.5	SL-585-SA8-SB-0.0-0.5	SL-586-SA8-SB-0.0-0.5	SL-587-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N	N	N
			Sample Date	07/12/2013	08/06/2013	08/06/2013	08/06/2013	08/06/2013	08/06/2013	08/12/2013	07/08/2013	07/12/2013
			SDG	PH066	PH085	PH085	PH085	PH085	PH085	PH089	PH062	PH066
			Start Depth	4.5	0	2.5	0	0	0	0	0	0
			End Depth	5.5	0.5	3.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	0.0164 U	0.0296	0.0170 U	0.0225	0.0359	0.0183	0.0152 J Z	0.0288	0.0169 U

U-Compound not detected above reporting limit
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			Sample Name	SL-587-SA8-SB-6.5-7.5	SL-588-SA8-SB-0.0-0.5	SL-888-SA8-SB-0.0-0.5	SL-588-SA8-SB-2.0-3.0	SL-589-SA8-SB-0.0-0.5	SL-589-SA8-SB-2.5-3.5	SL-590-SA8-SB-4.0-5.0	SL-590-SA8-SB-7.0-8.0	SL-591-SA8-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N	N
			Sample Date	07/12/2013	07/08/2013	07/08/2013	07/08/2013	07/30/2013	07/30/2013	08/12/2013	08/12/2013	08/12/2013
			SDG	PH066	PH062	PH062	PH062	PH080	PH080	PH089	PH089	PH089
			Start Depth	6.5	0	0	2	0	2.5	4	7	0
			End Depth	7.5	0.5	0.5	3	0.5	3.5	5	8	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	0.0170 U	0.0120 J Z	0.0099 J Z	0.0163 U	0.0132 J Z	0.0225	0.0161 U	0.0171 U	0.0186

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-592-SA8-SB-0.0-0.5	SL-592-SA8-SB-3.5-4.5	SL-593-SA8-SB-0.0-0.5	SL-593-SA8-SB-4.0-5.0	SL-594-SA8-SB-0.0-0.5	SL-595-SA8-SB-0.0-0.5	SL-596-SA8-SB-0.0-0.5	SL-597-SA8-SB-0.0-0.5	SL-600-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/15/2013	08/15/2013	07/30/2013	08/15/2013	08/14/2013
			SDG	PH089	PH089	PH089	PH089	PH092	PH092	PH080	PH092	PH091
			Start Depth	0	3.5	0	4	0	0	0	0	0
			End Depth	0.5	4.5	0.5	5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	0.0173	0.0214	0.0261	0.0152 J Z	0.0162 U	0.0111 J Z	0.0137 J Z	0.0161 U	0.0192

U-Compound not detected above reporting limit
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			Sample Name	SL-600-SA8-SB-4.0-5.0	SL-601-SA8-SB-0.0-0.5	SL-601-SA8-SB-4.0-5.0	SL-602-SA8-SB-0.0-0.5	SL-602-SA8-SB-4.0-5.0	SL-604-SA8-SB-0.0-0.5	SL-904-SA8-SB-0.0-0.5	SL-605-SA8-SB-0.0-0.5	SL-606-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N	N
			Sample Date	08/14/2013	07/18/2013	07/18/2013	08/14/2013	08/14/2013	08/29/2013	08/29/2013	08/29/2013	07/19/2013
			SDG	PH091	PH070	PH070	PH091	PH091	PH097	PH097	PH097	PH071
			Start Depth	4	0	4	0	4	0	0	0	0
			End Depth	5	0.5	5	0.5	5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	0.0181 U	0.0175 U	0.0168 U	0.0251	0.0168 U	0.0165 U	0.0164 U	0.0162 U	0.0220

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-606-SA8-SB-4.0-5.0	SL-607-SA8-SB-0.0-0.5	SL-607-SA8-SB-5.0-6.0	SL-608-SA8-SB-0.0-0.5	SL-608-SA8-SB-4.0-5.0	SL-608-SA8-SB-7.0-8.0	SL-609-SA8-SB-0.0-0.5	SL-609-SA8-SB-4.0-5.0	SL-610-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/19/2013	08/09/2013	08/09/2013	08/01/2013	08/01/2013	08/01/2013	08/13/2013	08/13/2013	08/01/2013
			SDG	PH071	PH088	PH088	PH082	PH082	PH082	PH090	PH090	PH082
			Start Depth	4	0	5	0	4	7	0	4	0
			End Depth	5	0.5	6	0.5	5	8	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	0.0175 U	0.0213	0.0144 J Z	0.0167	0.0117 J Z	0.0179 J Z	0.0156 J Z	0.0178 J Z	0.0228

U-Compound not detected above reporting limit
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			Sample Name	SL-610-SA8-SB-4.0-5.0	SL-610-SA8-SB-6.8-7.8	SL-612-SA8-SB-0.0-0.5	SL-612-SA8-SB-4.0-5.0	SL-613-SA8-SB-0.0-0.5	SL-613-SA8-SB-4.0-5.0	SL-614-SA8-SB-0.0-0.5	SL-614-SA8-SB-4.0-5.0	SL-615-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/01/2013	08/01/2013	07/30/2013	07/30/2013	08/14/2013	08/14/2013	08/13/2013	08/13/2013	08/27/2013
			SDG	PH082	PH082	PH080	PH080	PH091	PH091	PH090	PH090	PH094
			Start Depth	4	6.8	0	4	0	4	0	4	0
			End Depth	5	7.8	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
7471B	7439-97-6	Mercury	mg/kg	0.0132 J Z	0.0135 J Z	0.0163 J Z	0.0148 J Z	0.0188	0.0173 U	0.0289	0.0119 J Z	0.0168 J Z

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		Sample Name	SL-501-SA8-SB-0.0-0.5	SL-801-SA8-SB-0.0-0.5	SL-501-SA8-SB-4.0-5.0	SL-501-SA8-SB-9.0-10.0	SL-501-SA8-SB-12.0-13.0	SL-502-SA8-SB-0.0-0.5	SL-502-SA8-SB-4.0-5.0	SL-502-SA8-SB-7.5-8.5
		Sample Type	N	FD	N	N	N	N	N	N
		Sample Date	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013
		SDG	PH067	PH067	PH067	PH067	PH067	PH067	PH067	PH067
		Start Depth	0	0	4	9	12	0	4	7.5
		End Depth	0.5	0.5	5	10	13	0.5	5	8.5
Analytic Method	CAS Number	Chemical Name	Unit							
6010C	7429-90-5	Aluminum	mg/kg	17500	18400	24600	26900	23600	16600	22500	19800
6010C	7439-89-6	Iron	mg/kg	20900	21900	24900	26300	24700	20400	24300	22600
6010C	7439-92-1	Lead	mg/kg	35.3 J FD, E, Q, A	18.4 J FD, E, Q, A	6.77 J E, Q, A	6.16 J E, Q, A	5.75 J E, Q, A	30.3 J E, Q, A	20.5 J E, Q, A	7.93 J E, Q, A
6010C	7439-93-2	Lithium	mg/kg	21.5 J A	21.7 J A	23.9 J A	29.7 J A	32.5 J A	20.3 J A	26.8 J A	29.9 J A
6010C	7439-95-4	Magnesium	mg/kg	4540	4900	4930	5160	5080	4570	4860	4730
6010C	7439-96-5	Manganese	mg/kg	393	410	297	294	320	376	293	274
6010C	7439-98-7	Molybdenum	mg/kg	2.06 UJ F, FD	2.03 UJ FD	2.07 U F	2.16 U	2.07 U	2.10 U	2.08 U F	2.13 U
6010C	7440-02-0	Nickel	mg/kg	12.4	12.6	13.4	14.8	14.6	13.8	13.4	14.6
6010C	7440-09-7	Potassium	mg/kg	3510	3740	2740	1910	1710	4240	2710	2050
6010C	7440-23-5	Sodium	mg/kg	77.0 J Z	85.6 J Z	105	178	176	82.3 J Z	117	127
6010C	7440-31-5	Tin	mg/kg	10.3 U B	10.2 U B	10.4 U B	10.8 U B	10.3 U B	10.5 U B	10.4 U B	10.7 U B
6010C	7440-32-6	Titanium	mg/kg	1050	1150	1200	1310	1320	1100	1170	1030
6010C	7440-36-0	Antimony	mg/kg	4.11 UJ Q	4.06 UJ Q	4.15 UJ Q	4.33 UJ Q	4.14 UJ Q	4.21 UJ Q	4.15 UJ Q	4.26 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	3.89 J Z	4.41	4.45	4.76	5.53	4.11 J Z	5.52	5.31
6010C	7440-39-3	Barium	mg/kg	103	104	110	119	106	121	96.9	83.3
6010C	7440-41-7	Beryllium	mg/kg	0.605 J Z	0.842 J Z	0.833 J Z	0.863 J Z	0.767 J Z	0.562 J Z	0.753 J Z	0.602 J Z
6010C	7440-42-8	Boron	mg/kg	10.3 UJ B, FD	16.1 J FD	10.4 U B	10.8 U B	10.3 U B	10.5 U B	10.4 U B	10.7 U B
6010C	7440-43-9	Cadmium	mg/kg	0.352 J Z	0.374 J Z	0.111 J Z	0.110 J Z	0.0910 J Z	0.787 J Z	0.221 J Z	0.220 J Z
6010C	7440-47-3	Chromium	mg/kg	20.7	21.4	23.9	26.8	24.7	20.9	24.9	21.5
6010C	7440-48-4	Cobalt	mg/kg	5.94 J A	5.67 J A	6.02 J A	6.98 J A	5.85 J A	5.81 J A	6.39 J A	6.32 J A
6010C	7440-50-8	Copper	mg/kg	12.2	11.2	12.4	11.4	11.6	14.8	12.7	10.5
6010C	7440-62-2	Vanadium	mg/kg	37.3	40.9	47.0	51.7	47.3	37.3	46.3	39.1
6010C	7440-66-6	Zinc	mg/kg	62.7	65.3	49.3	46.7	47.7	66.9	52.3	47.5
6010C	7440-67-7	Zirconium	mg/kg	1.14 J Z	0.923 J Z	1.89 J Z	2.66 J Z	2.62 J Z	2.27 J Z	2.50 J Z	2.80 J Z
6010C	7440-70-2	Calcium	mg/kg	3910 J E	5920 J E	3080 J E	3440 J E	3410 J E	5170 J E	4150 J E	3610 J E
6010C	7723-14-0	Phosphorus	mg/kg	434	466	271	160	176	532	258	249
6020A	7440-22-4	Silver	mg/kg	0.0421 J Z	0.0479 J Z	0.0344 J Z	0.0487 J Z	0.0697 J Z	0.0425 J Z	0.0428 J Z	0.0505 J Z
6020A	7440-24-6	Strontium	mg/kg	20.9	26.0	25.7	28.6	24.7	29.6	24.5	21.4
6020A	7440-28-0	Thallium	mg/kg	0.284	0.289	0.318	0.284	0.259	0.290	0.277	0.255
6020A	7782-49-2	Selenium	mg/kg	0.245 J Z	0.246 J Z	0.283 J Z	0.433 U	0.414 U	0.255 J Z	0.189 J Z	0.158 J Z

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				Sample Name	SL-503-SA8-SB-0.0-0.5	SL-503-SA8-SB-3.0-4.0	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-505-SA8-SB-0.0-0.5	SL-505-SA8-SB-4.0-5.0	SL-506-SA8-SB-0.0-0.5	SL-506-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	FD	N	N	N	N
				Sample Date	07/15/2013	07/15/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013
				SDG	PH067	PH067	PH068	PH068	PH068	PH068	PH068	PH070	PH070
				Start Depth	0	3	0	2.5	2.5	0	4	0	4
				End Depth	0.5	4	0.5	3.5	3.5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit										
6010C	7429-90-5	Aluminum	mg/kg	18500	10900	23800	11800	12100	24500	20500	20600	13800	
6010C	7439-89-6	Iron	mg/kg	22400	18800	29700	22900	23200	26900	24800	22500	17700	
6010C	7439-92-1	Lead	mg/kg	9.56 J E, Q, A	3.71 J E, Q, A	9.86	4.43	4.49	9.65	7.44	7.51	3.97	
6010C	7439-93-2	Lithium	mg/kg	21.9 J A	23.2 J A	30.1 J A	29.8 J A	29.5 J A	33.0 J A	29.0 J A	25.3	18.3	
6010C	7439-95-4	Magnesium	mg/kg	4900	5040	7820	6080	6410	7910	6010	5630	3940	
6010C	7439-96-5	Manganese	mg/kg	365	749	402	422	313	405	385	322	214	
6010C	7439-98-7	Molybdenum	mg/kg	2.07 U F	2.09 U	2.03 U F	2.04 UJ F, FD	2.02 UJ FD	2.08 U F	2.19 U	2.10 U F	2.03 U F	
6010C	7440-02-0	Nickel	mg/kg	13.8	11.4	17.8	12.6	13.0	17.4	14.3	13.8	7.22	
6010C	7440-09-7	Potassium	mg/kg	4340	1670	6080 J Q	2220 J Q	2240 J Q	6120 J Q	2270 J Q	4420	1770	
6010C	7440-23-5	Sodium	mg/kg	151	112	148	177	197	205	243	106	114	
6010C	7440-31-5	Tin	mg/kg	10.3 U B	10.5 U B	10.2 U B	10.2 U B	10.1 U B	10.4 U B	11.0 U B	10.5 U B	10.1 U B	
6010C	7440-32-6	Titanium	mg/kg	1210	1080	1480	1460	1480	1580	1490	1190	1010	
6010C	7440-36-0	Antimony	mg/kg	4.14 UJ Q	4.19 UJ Q	4.06 UJ Q	4.08 UJ Q	4.05 UJ Q	4.16 UJ Q	4.39 UJ Q	4.20 U	4.05 U	
6010C	7440-38-2	Arsenic	mg/kg	4.58	2.66 J Z	6.81	3.88 J Z	3.68 J Z	6.15	5.63	5.81	5.38	
6010C	7440-39-3	Barium	mg/kg	107	76.8	96.0	84.4	88.4	97.1	102	101	67.2	
6010C	7440-41-7	Beryllium	mg/kg	0.614 J Z	0.400 J Z	0.641 J Z	0.394 J Z	0.449 J Z	0.692 J Z	0.689 J Z	0.704 J Z	0.677 J Z	
6010C	7440-42-8	Boron	mg/kg	10.3 U B	10.5 U B	31.2	18.1	16.0	32.5	21.2	4.93 J Z	10.1 U	
6010C	7440-43-9	Cadmium	mg/kg	0.375 J Z	0.243 J Z	0.513 J Z	0.370 J Z	0.330 J Z	0.543 J Z	0.357 J Z	0.520 J Z	0.289 J Z	
6010C	7440-47-3	Chromium	mg/kg	23.4	16.5	34.9 J Q	21.8 J Q	22.0 J Q	34.5 J Q	26.9 J Q	25.0	15.8	
6010C	7440-48-4	Cobalt	mg/kg	6.76 J A	4.88 J A	9.15	4.81	5.16	8.90	6.88	6.34	6.48	
6010C	7440-50-8	Copper	mg/kg	14.4	9.26	19.0	10.6	10.9	18.6	12.1	11.4	5.50	
6010C	7440-62-2	Vanadium	mg/kg	43.2	32.2	66.0	43.8	43.2	67.8	52.7	48.5	31.2	
6010C	7440-66-6	Zinc	mg/kg	59.7	46.3	77.3	53.6	58.6	77.4	53.5	61.2	42.0	
6010C	7440-67-7	Zirconium	mg/kg	2.26 J Z	1.71 J Z	2.16 J Z	3.17 J Z	2.85 J Z	1.60 J Z	3.50 J Z	4.67 J Z	3.92 J Z	
6010C	7440-70-2	Calcium	mg/kg	11700 J E	5060 J E	38200	3670	3610	33600	4520	16000	2550	
6010C	7723-14-0	Phosphorus	mg/kg	375	367	630	423	424	639	244	422	213	
6020A	7440-22-4	Silver	mg/kg	0.0964 J Z	0.209 U	0.0343 J Z	0.204 U	0.202 U	0.0558 J Z	0.0328 J Z	0.0732 J Z	0.203 U	
6020A	7440-24-6	Strontium	mg/kg	33.7	14.1	86.6	14.9	14.9	76.9	23.5	58.8	18.7	
6020A	7440-28-0	Thallium	mg/kg	0.326	0.230	0.341	0.238	0.212	0.364	0.225	0.413	0.282	
6020A	7782-49-2	Selenium	mg/kg	0.225 J Z	0.419 U	0.251 J Z	0.408 U	0.405 U	0.329 J Z	0.132 J Z	0.315 J Z	0.405 U	

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J-Result is an estimated value
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		Sample Name	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5	SL-509-SA8-SB-0.0-0.5	SL-509-SA8-SB-4.0-5.0	SL-510-SA8-SB-0.0-0.5	SL-511-SA8-SB-0.0-0.5	SL-511-SA8-SB-6.0-7.0	SL-512-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	N	N	N	N	N
		Sample Date	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/15/2013	07/15/2013	07/17/2013
		SDG	PH068	PH068	PH068	PH070	PH070	PH068	PH067	PH067	PH069
		Start Depth	0	3	0	0	4	0	0	6	0
		End Depth	0.5	4	0.5	0.5	5	0.5	0.5	7	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	11900	10700	22700	23900	13200	12900	16500	17400	16900
6010C	7439-89-6	Iron	mg/kg	19300	18900	25500	26800	21400	18200	21500	22800	22400
6010C	7439-92-1	Lead	mg/kg	5.41	4.03	8.77	8.50	3.93	10.2	4.63 J E, Q, A	4.95 J E, Q, A	11.1
6010C	7439-93-2	Lithium	mg/kg	25.7 J A	22.2 J A	27.2 J A	28.3	26.0	24.0 J A	23.2 J A	27.2 J A	22.8 J A
6010C	7439-95-4	Magnesium	mg/kg	5230	4800	7420	7850	5940	4230	5000	5550	4590
6010C	7439-96-5	Manganese	mg/kg	309	289	361	403	301	325	325	283	323
6010C	7439-98-7	Molybdenum	mg/kg	1.98 U F	2.05 U	2.05 U F	2.19 U	2.06 U	1.99 U F	2.05 U F	2.27 U	1.95 U F
6010C	7440-02-0	Nickel	mg/kg	9.70	8.11	15.5	17.4	10.7	9.81	12.1	10.6	11.1
6010C	7440-09-7	Potassium	mg/kg	3440 J Q	1840 J Q	5690 J Q	5650	2680	3330 J Q	4010	1880	3090 J Q
6010C	7440-23-5	Sodium	mg/kg	129	157	113	208	170	82.4 J Z	75.7 J Z	125	77.2 J Z
6010C	7440-31-5	Tin	mg/kg	9.92 U B	10.3 U B	10.3 U B	11.0 U B	10.3 U B	9.93 U B	10.2 U B	11.3 U B	9.76 U B
6010C	7440-32-6	Titanium	mg/kg	1400	1280	1320	1280	1400	1110	1180	1240	1230
6010C	7440-36-0	Antimony	mg/kg	3.97 UJ Q	4.10 UJ Q	4.11 UJ Q	4.39 U	4.13 U	3.97 UJ Q	4.09 UJ Q	4.54 UJ Q	3.90 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	3.27 J Z	4.29	5.30	6.79	4.72	4.37	3.19 J Z	6.16	4.55
6010C	7440-39-3	Barium	mg/kg	97.4	72.3	90.1	100	79.4	81.7	102	71.5	86.5
6010C	7440-41-7	Beryllium	mg/kg	0.403 J Z	0.381 J Z	0.582 J Z	0.781 J Z	0.530 J Z	0.462 J Z	0.578 J Z	0.595 J Z	0.593 J Z
6010C	7440-42-8	Boron	mg/kg	15.3	13.7	10.3 U	9.98 J Z	10.3 U B	15.5	10.2 U B	11.3 U B	9.76 U
6010C	7440-43-9	Cadmium	mg/kg	0.322 J Z	0.232 J Z	0.251 J Z	0.670 J Z	0.425 J Z	0.393 J Z	0.269 J Z	0.128 J Z	0.235 J Z
6010C	7440-47-3	Chromium	mg/kg	18.7 J Q	13.6 J Q	30.4 J Q	32.8	19.7	16.5 J Q	20.6	22.1	19.5
6010C	7440-48-4	Cobalt	mg/kg	5.09	4.61	7.71	8.59	5.77	5.01	6.06 J A	5.33 J A	5.34
6010C	7440-50-8	Copper	mg/kg	9.92	6.82	15.2	15.8	8.29	10.3	11.8	8.71	14.6
6010C	7440-62-2	Vanadium	mg/kg	34.5	30.3	57.5	63.7	42.2	31.3	37.3	40.9	37.8
6010C	7440-66-6	Zinc	mg/kg	58.9	48.4	83.7	73.1	58.8	58.5	58.8	48.9	57.9
6010C	7440-67-7	Zirconium	mg/kg	2.37 J Z	3.17 J Z	2.38 J Z	6.37	5.23	1.57 J Z	1.47 J Z	1.99 J Z	4.88 U
6010C	7440-70-2	Calcium	mg/kg	8080	3060	41800	49700	4240	2620	2630 J E	3090 J E	2690
6010C	7723-14-0	Phosphorus	mg/kg	401	341	599	666	395	510	452	298	493
6020A	7440-22-4	Silver	mg/kg	0.476	0.205 U	0.0409 J Z	0.0321 J Z	0.206 U	0.199 U	0.0411 J Z	0.104 J Z	0.0426 J Z
6020A	7440-24-6	Strontium	mg/kg	21.9	11.0	87.1	100	20.2	15.4	20.8	19.4	18.4
6020A	7440-28-0	Thallium	mg/kg	0.252	0.192 J Z	0.295	0.373	0.306	0.242	0.266	0.298	0.254
6020A	7782-49-2	Selenium	mg/kg	0.186 J Z	0.410 U	0.286 J Z	0.281 J Z	0.413 U	0.133 J Z	0.204 J Z	0.142 J Z	0.204 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-514-SA8-SB-0.0-0.5	SL-514-SA8-SB-4.0-5.0	SL-514-SA8-SB-7.5-8.5	SL-515-SA8-SB-0.0-0.5	SL-515-SA8-SB-4.0-5.0	SL-515-SA8-SB-9.0-10.0
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013
				SDG	PH069	PH069	PH069	PH069	PH069	PH069	PH069	PH069	PH069
				Start Depth	0	4	8	0	4	7.5	0	4	9
				End Depth	0.5	5	9	0.5	5	8.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit										
6010C	7429-90-5	Aluminum	mg/kg	27500	22500	10100	29400	24100	22100	27700	31500	36200	
6010C	7439-89-6	Iron	mg/kg	30200	24900	21300	31900	28700	28700	30300	30600	38700	
6010C	7439-92-1	Lead	mg/kg	10.6	7.45	3.44	10.5	8.38	9.43	11.1	10.0	12.0	
6010C	7439-93-2	Lithium	mg/kg	25.9 J A	22.3 J A	21.9 J A	23.2 J A	21.4 J A	21.0 J A	23.0 J A	26.5 J A	27.4 J A	
6010C	7439-95-4	Magnesium	mg/kg	7610	6180	4800	6730	6650	6630	6950	5840	9000	
6010C	7439-96-5	Manganese	mg/kg	399	250	463	419	323	455	500	498	373	
6010C	7439-98-7	Molybdenum	mg/kg	2.14 U F	2.20 U	1.97 U	2.11 U	2.47	2.30 J Z	2.21 U	2.21 U	2.36 U	
6010C	7440-02-0	Nickel	mg/kg	18.5	14.8	10.6	18.1	15.7	17.3	19.6	19.3	22.3	
6010C	7440-09-7	Potassium	mg/kg	5480 J Q	2320 J Q	1830 J Q	5440 J Q	2590 J Q	2690 J Q	6010 J Q	3110 J Q	2930 J Q	
6010C	7440-23-5	Sodium	mg/kg	134	204	125	196	173	181	150	118	141	
6010C	7440-31-5	Tin	mg/kg	10.7 U B	11.0 U B	9.86 U B	10.6 U B	11.7 U B	11.7 U B	11.0 U B	11.0 U B	11.8 U B	
6010C	7440-32-6	Titanium	mg/kg	1520	1100	1320	1570	1280	1170	1570	1420	1570	
6010C	7440-36-0	Antimony	mg/kg	4.28 UJ F, B, Q	4.40 UJ Q	3.94 UJ Q	4.22 UJ Q	7.33 J Q	5.55 J Q	4.42 UJ Q	4.42 UJ Q	4.71 UJ Q	
6010C	7440-38-2	Arsenic	mg/kg	6.46	6.06	4.15	5.79	6.30	7.03	6.26	6.45	7.13	
6010C	7440-39-3	Barium	mg/kg	117	112	61.8	167	91.1	81.0	126	139	120	
6010C	7440-41-7	Beryllium	mg/kg	0.659 J Z	0.202 J Z	0.408 J Z	0.845 J Z	0.378 J Z	0.409 J Z	0.890 J Z	0.984 J Z	1.13 J Z	
6010C	7440-42-8	Boron	mg/kg	2.19 J Z	10.2 J Z	9.86 U	10.6 U	2.51 J Z	1.24 J Z	11.0 U	11.0 U	11.8 U	
6010C	7440-43-9	Cadmium	mg/kg	0.104 J Z	0.178 J Z	0.218 J Z	1.06 U	0.223 J Z	0.117 J Z	0.116 J Z	1.10 U	1.18 U	
6010C	7440-47-3	Chromium	mg/kg	35.7	27.4	14.8	33.2	30.5	29.6	35.5	32.7	43.3	
6010C	7440-48-4	Cobalt	mg/kg	9.93	6.54	5.04	9.07	7.67	9.37	9.35	11.2	11.2	
6010C	7440-50-8	Copper	mg/kg	25.9	9.58	12.5	24.1	19.7	19.5	24.0	18.2	26.7	
6010C	7440-62-2	Vanadium	mg/kg	66.9	50.6	34.9	63.2	62.5	60.1	64.1	62.8	83.6	
6010C	7440-66-6	Zinc	mg/kg	83.8	49.2	49.8	88.4	55.6	60.7	72.4	60.1	75.1	
6010C	7440-67-7	Zirconium	mg/kg	2.54 J Z	2.87 J Z	1.91 J Z	3.38 J Z	3.34 J Z	3.38 J Z	3.76 J Z	3.04 J Z	4.44 J Z	
6010C	7440-70-2	Calcium	mg/kg	54400	149000	3410	9780	113000	104000	6110	6750	10100	
6010C	7723-14-0	Phosphorus	mg/kg	556	376	394	1350	423	483	479	287	372	
6020A	7440-22-4	Silver	mg/kg	0.0396 J Z	0.0473 J Z	0.197 U	0.0469 J Z	0.0467 J Z	0.233 U	0.0440 J Z	0.0353 J Z	0.0431 J Z	
6020A	7440-24-6	Strontium	mg/kg	109	114	12.5	41.3	147	189	28.6	27.8	47.1	
6020A	7440-28-0	Thallium	mg/kg	0.319	0.215 J Z	0.250	0.327	0.242	0.266	0.346	0.334	0.344	
6020A	7782-49-2	Selenium	mg/kg	0.270 J Z	0.119 J Z	0.394 U	0.256 J Z	0.469 U	0.171 J Z	0.258 J Z	0.442 U	0.137 J Z	

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-515-SA8-SB-14.0-15.0	SL-516-SA8-SB-0.0-0.5	SL-517-SA8-SB-0.0-0.5	SL-517-SA8-SB-3.0-4.0	SL-518-SA8-SB-0.0-0.5	SL-518-SA8-SB-4.0-5.0	SL-519-SA8-SB-0.0-0.5	SL-519-SA8-SB-3.5-4.5
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	07/17/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/18/2013	07/18/2013
		SDG	PH069	PH071	PH071	PH071	PH071	PH071	PH070	PH070
		Start Depth	14	0	0	3	0	4	0	3.5
		End Depth	15	0.5	0.5	4	0.5	5	0.5	4.5
Analytic Method	CAS Number	Chemical Name	Unit							
6010C	7429-90-5	Aluminum	mg/kg	21900	16700	18200	19200	19000	17300	21500	9650
6010C	7439-89-6	Iron	mg/kg	28100	22800 J A	23200 J A	27300 J A	23200 J A	24500 J A	24000	18000
6010C	7439-92-1	Lead	mg/kg	8.30	9.98	8.68	6.19	7.27	6.84	13.8	3.32
6010C	7439-93-2	Lithium	mg/kg	19.0 J A	27.0 J A	21.6 J A	32.1 J A	23.1 J A	23.7 J A	19.2	24.6
6010C	7439-95-4	Magnesium	mg/kg	5180	4590	4460	5160	4210	3890	6560	4350
6010C	7439-96-5	Manganese	mg/kg	468	327	357	392	322	356	485	281
6010C	7439-98-7	Molybdenum	mg/kg	2.24 U	1.97 U F	2.01 U	2.06 U F	2.03 U F	2.04 U	2.12 U F	2.07 U
6010C	7440-02-0	Nickel	mg/kg	13.9	12.3	12.8	6.16	12.5	11.4	18.2	6.72
6010C	7440-09-7	Potassium	mg/kg	2480 J Q	3760	4250	4370	3040	2230	5530	2050
6010C	7440-23-5	Sodium	mg/kg	122	69.9 J Z	69.3 J Z	102 J Z	102	103	103 J Z	88.1 J Z
6010C	7440-31-5	Tin	mg/kg	11.2 U B	9.86 U B	10.1 U B	10.3 U B	10.1 U B	10.2 U B	10.6 U B	10.3 U B
6010C	7440-32-6	Titanium	mg/kg	1260	1200	1130	1690	1080	1090	952	1050
6010C	7440-36-0	Antimony	mg/kg	4.48 UJ Q	3.94 UJ Q	4.02 UJ Q	4.13 UJ Q	4.06 UJ Q	4.08 UJ Q	4.25 U	4.14 U
6010C	7440-38-2	Arsenic	mg/kg	7.22	11.8	5.99	4.78	7.38	6.91	6.71	3.75 J Z
6010C	7440-39-3	Barium	mg/kg	99.0	97.3	97.7	97.8	95.7	83.9	104	73.2
6010C	7440-41-7	Beryllium	mg/kg	0.869 J Z	0.575 J Z	0.625 J Z	0.640 J Z	0.579 J Z	0.599 J Z	0.827 J Z	0.458 J Z
6010C	7440-42-8	Boron	mg/kg	11.2 U	9.86 U	10.1 U	10.3 U	10.1 U	10.2 U	12.1	10.3 U
6010C	7440-43-9	Cadmium	mg/kg	1.12 U	0.131 J Z	0.179 J Z	1.03 U	0.121 J Z	1.02 U	0.751 J Z	0.339 J Z
6010C	7440-47-3	Chromium	mg/kg	23.8	18.0	19.6	10.9	20.3	17.1	29.2	10.5
6010C	7440-48-4	Cobalt	mg/kg	10.2	5.32	6.23	7.39	6.12	5.59	8.53	4.23
6010C	7440-50-8	Copper	mg/kg	19.4	13.5	16.6	11.5	13.7	11.1	19.6	5.06
6010C	7440-62-2	Vanadium	mg/kg	56.7	33.7	36.2	32.7	39.0	36.4	48.8	28.2
6010C	7440-66-6	Zinc	mg/kg	55.1	55.7	59.7	76.0	51.7	45.0	107	49.2
6010C	7440-67-7	Zirconium	mg/kg	2.60 J Z	1.03 J Z	1.18 J Z	5.16 U	5.07 U	1.23 J Z	5.41	4.37 J Z
6010C	7440-70-2	Calcium	mg/kg	5130	2690	5230	2220	28100	6980	15400	3620
6010C	7723-14-0	Phosphorus	mg/kg	368	548	534	306	304	291	595	312
6020A	7440-22-4	Silver	mg/kg	0.224 U	0.0410 J Z	0.0389 J Z	0.206 U	0.0561 J Z	0.0347 J Z	0.0699 J Z	0.207 U
6020A	7440-24-6	Strontium	mg/kg	26.1	21.1 J Q	27.4 J Q	15.3 J Q	31.9 J Q	21.8 J Q	41.7	11.6
6020A	7440-28-0	Thallium	mg/kg	0.305	0.271 J Q	0.339 J Q	0.412 J Q	0.333 J Q	0.240 J Q	0.355	0.244
6020A	7782-49-2	Selenium	mg/kg	0.448 U	0.394 U	0.156 J Z	0.413 U	0.406 U	0.408 U	0.209 J Z	0.414 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-520-SA8-SB-0.0-0.5	SL-521-SA8-SB-0.0-0.5	SL-522-SA8-SB-0.0-0.5	SL-522-SA8-SB-0.0-0.5-DTSC	SL-522-SA8-SB-4.0-5.0	SL-523-SA8-SB-4.0-5.0	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	FD	N
				Sample Date	07/18/2013	07/19/2013	07/26/2013	07/24/2013	07/26/2013	07/25/2013	07/25/2013	07/25/2013
				SDG	PH070	PH071	PH076	PH074	PH076	PH075	PH075	PH075
				Start Depth	0	0	0	0	4	4	4	4
				End Depth	0.5	0.5	0.5	0.5	5	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	20600	15900	25000	14800	25700	28600	31300	31600
6010C	7439-89-6	Iron	mg/kg	23100	21900 J A	29300 J A	19000 J A	27300 J A	26100 J A	31600 J A	32900 J A
6010C	7439-92-1	Lead	mg/kg	7.65	10.9	11.4	5.84	9.56	11.1	10.2	10.6
6010C	7439-93-2	Lithium	mg/kg	22.2	25.2 J A	22.8	13.0	23.3	23.7	26.3	26.0
6010C	7439-95-4	Magnesium	mg/kg	5440	4080	7630	4440	7420	7210	7680	7620
6010C	7439-96-5	Manganese	mg/kg	414	355	459	255	423	479	456	513
6010C	7439-98-7	Molybdenum	mg/kg	2.09 U F	1.94 U F	2.17 U	2.03 U F	2.23 U	2.25 U	2.19 U	2.31 U
6010C	7440-02-0	Nickel	mg/kg	15.6	10.5	20.6	14.0	19.7	20.7	20.9	22.0
6010C	7440-09-7	Potassium	mg/kg	4680	3570	6000 J Q	3510 J Q	5650 J Q	4140 J Q	4010 J Q	3980 J Q
6010C	7440-23-5	Sodium	mg/kg	84.3 J Z	92.0 J Z	103 J Z	128	90.4 J Z	159	179	169
6010C	7440-31-5	Tin	mg/kg	10.4 U B	9.72 U B	10.8 U B	10.2 U B	11.2 U B	11.3 U B	11.0 U B	11.5 U B
6010C	7440-32-6	Titanium	mg/kg	1160	1170	976	616	979	996	1210	1030
6010C	7440-36-0	Antimony	mg/kg	4.17 U	3.89 UJ Q	4.34 UJ Q	4.07 UJ Q	4.47 UJ Q	4.50 UJ Q	4.39 UJ Q	4.61 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	6.01	5.63	3.88 J Z	2.55 J Z	2.92 J Z	3.09 J Z	3.25 J Z	4.06 J Z
6010C	7440-39-3	Barium	mg/kg	99.0	99.3	110	67.2	114	140	148	154
6010C	7440-41-7	Beryllium	mg/kg	0.785 J Z	0.582 J Z	0.808 J Z	0.450 J Z	0.849 J Z	1.03 J Z	1.06 J Z	1.10 J Z
6010C	7440-42-8	Boron	mg/kg	10.4 U B	9.72 U	4.24 J Z	3.44 J Z	2.76 J Z	1.92 J Z	1.62 J Z	1.25 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.591 J Z	0.207 J Z	0.510 J Z	0.439 J Z	0.447 J Z	0.371 J Z	0.356 J Z	0.306 J Z
6010C	7440-47-3	Chromium	mg/kg	26.1	16.1	33.5	22.5	32.9	36.8	39.4	39.4
6010C	7440-48-4	Cobalt	mg/kg	7.65	5.25	10.4	6.11	9.81	10.5	10.3	12.1
6010C	7440-50-8	Copper	mg/kg	15.1	12.8	22.9	14.4	21.6	21.4	22.4	20.8
6010C	7440-62-2	Vanadium	mg/kg	48.3	32.0	58.5	38.2	57.2	62.2	67.8	67.2
6010C	7440-66-6	Zinc	mg/kg	65.3	61.8	77.7	44.7	74.3	70.6	71.7	72.0
6010C	7440-67-7	Zirconium	mg/kg	4.76 J Z	4.86 U	3.01 J Z	1.97 J Z	3.52 J Z	4.53 J Z	4.85 J Z	4.36 J Z
6010C	7440-70-2	Calcium	mg/kg	5010	2300	37600	25800	23900	7340	7400	7520
6010C	7723-14-0	Phosphorus	mg/kg	584	479	637	614	547	295	300	291
6020A	7440-22-4	Silver	mg/kg	0.0373 J Z	0.0410 J Z	0.0384 J Z	0.0307 J Z	0.0460 J Z	0.0484 J Z	0.0417 J Z	0.0549 J Z
6020A	7440-24-6	Strontium	mg/kg	22.0	24.0 J Q	64.9	47.7	47.1	34.8	35.8	34.3
6020A	7440-28-0	Thallium	mg/kg	0.375	0.272 J Q	0.343	0.179 J Z	0.360	0.339	0.355	0.327
6020A	7782-49-2	Selenium	mg/kg	0.156 J Z	0.227 J Z	0.283 J Z	0.781	0.237 J Z	0.192 J Z	0.176 J Z	0.208 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-525-SA8-SB-0.0-0.5	SL-525-SA8-SB-4.0-5.0	SL-526-SA8-SB-0.0-0.5	SL-526-SA8-SB-4.0-5.0	SL-527-SA8-SB-0.0-0.5	SL-527-SA8-SB-4.0-5.0	SL-528-SA8-SB-0.0-0.5-DTSC	SL-528-SA8-SB-4.0-5.0
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	07/25/2013	07/25/2013	07/29/2013	07/29/2013	07/24/2013	07/24/2013	07/24/2013	07/24/2013
		SDG	PH075	PH075	PH078	PH078	PH074	PH074	PH074	PH074
		Start Depth	0	4	0	4	0	4	0	4
		End Depth	0.5	5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
6010C	7429-90-5	Aluminum	mg/kg	24200	30300	28100	31400	27600	33100	26700	31600
6010C	7439-89-6	Iron	mg/kg	25700 J A	28600 J A	29000	35100	36300 J A	30800 J A	28400 J A	29200 J A
6010C	7439-92-1	Lead	mg/kg	11.3	10.2	14.0	11.2	11.4	10.7	10.4	10.3
6010C	7439-93-2	Lithium	mg/kg	21.0	24.3	22.7	25.4	23.9	26.3	21.7	27.9
6010C	7439-95-4	Magnesium	mg/kg	7080	7520	7600	7470	7320	7120	7050	7560
6010C	7439-96-5	Manganese	mg/kg	452	399	506	629	442	340	484	435
6010C	7439-98-7	Molybdenum	mg/kg	2.10 U	2.21 U	2.15 U F, B	2.25 U	2.17 U	2.33 U	2.07 U	2.26 U
6010C	7440-02-0	Nickel	mg/kg	19.6	20.6	20.6	23.5	20.7	18.1	19.8	20.7
6010C	7440-09-7	Potassium	mg/kg	6170 J Q	4010 J Q	6630	3480	4180 J Q	3030 J Q	6280 J Q	2970 J Q
6010C	7440-23-5	Sodium	mg/kg	85.6 J Z	127	94.9 J Z	119	123	230	82.7 J Z	119
6010C	7440-31-5	Tin	mg/kg	10.5 U B	11.0 U B	10.7 U B	11.2 U B	10.9 U B	11.6 U B	10.3 U B	11.3 U B
6010C	7440-32-6	Titanium	mg/kg	961	1060	1390	1310	895	826	1040	1100
6010C	7440-36-0	Antimony	mg/kg	4.19 UJ Q	4.42 UJ Q	4.29 U	4.50 U	4.34 UJ Q	4.65 UJ Q	4.14 UJ Q	4.51 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	3.30 J Z	3.39 J Z	4.25 J Z	5.10	3.56 J Z	3.24 J Z	3.37 J Z	5.55
6010C	7440-39-3	Barium	mg/kg	109	141	115	137	133	134	117	131
6010C	7440-41-7	Beryllium	mg/kg	0.854 J Z	1.03 J Z	0.928 J Z	0.981 J Z	0.978 J Z	1.07 J Z	0.963 J Z	1.02 J Z
6010C	7440-42-8	Boron	mg/kg	4.06 J Z	1.51 J Z	7.84 J Z	6.24 J Z	2.08 J Z	11.6 U	2.78 J Z	1.79 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.479 J Z	0.368 J Z	0.231 J Z	1.12 U	0.382 J Z	0.137 J Z	0.446 J Z	0.346 J Z
6010C	7440-47-3	Chromium	mg/kg	32.8	39.0	39.1	40.5	36.5	38.1	34.9	38.4
6010C	7440-48-4	Cobalt	mg/kg	9.66	10.4	9.74	12.2	10.1	8.81	9.80	10.1
6010C	7440-50-8	Copper	mg/kg	22.4	20.8	25.7	22.1	21.3	19.3	23.4	21.4
6010C	7440-62-2	Vanadium	mg/kg	55.8	66.0	67.9	74.1	58.9	60.7	60.4	68.0
6010C	7440-66-6	Zinc	mg/kg	75.4	73.5	83.1	67.4	74.8	63.2	73.1	64.2
6010C	7440-67-7	Zirconium	mg/kg	3.58 J Z	4.28 J Z	3.73 J Z	3.38 J Z	3.55 J Z	3.16 J Z	4.45 J Z	4.34 J Z
6010C	7440-70-2	Calcium	mg/kg	16300	9480	7400	20300	11400	8790	7450	15600
6010C	7723-14-0	Phosphorus	mg/kg	549	316	512	302	381	220	468	339
6020A	7440-22-4	Silver	mg/kg	0.0386 J Z	0.0380 J Z	0.0384 J Z	0.0405 J Z	0.0489 J Z	0.0482 J Z	0.0410 J Z	0.0607 J Z
6020A	7440-24-6	Strontium	mg/kg	37.9	36.1	28.5	44.1	33.3	34.1	27.5	37.2
6020A	7440-28-0	Thallium	mg/kg	0.325	0.339	0.375	0.346	0.312	0.313	0.356	0.294
6020A	7782-49-2	Selenium	mg/kg	0.325 J Z	0.254 J Z	0.312 J Z	0.166 J Z	0.223 J Z	0.121 J Z	0.299 J Z	0.153 J Z

U-Compound not detected above reporting limit
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R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-529-SA8-SB-0.0-0.5	SL-529-SA8-SB-4.0-5.0	SL-530-SA8-SB-0.0-0.5	SL-530-SA8-SB-4.0-5.0	SL-830-SA8-SB-4.0-5.0	SL-531-SA8-SB-0.0-0.5	SL-531-SA8-SB-4.0-5.0	SL-532-SA8-SB-0.0-0.5	SL-532-SA8-SB-6.5-7.5
				Sample Type	N	N	N	N	FD	N	N	N	N
				Sample Date	07/29/2013	07/29/2013	08/09/2013	08/09/2013	08/09/2013	07/18/2013	07/18/2013	07/19/2013	07/19/2013
				SDG	PH078	PH078	PH088	PH088	PH088	PH070	PH070	PH071	PH071
				Start Depth	0	4	0	4	4	0	4	0	6.5
				End Depth	0.5	5	0.5	5	5	0.5	5	0.5	7.5
Analytic Method	CAS Number	Chemical Name	Unit										
6010C	7429-90-5	Aluminum	mg/kg	27900	29300	25800	19400	16900	24500	26400	30300	13900
6010C	7439-89-6	Iron	mg/kg	28000	28100	30800 J Q	25600 J Q	23300 J Q	24100	25400	30600 J A	25500 J A
6010C	7439-92-1	Lead	mg/kg	11.4	10.3	12.9	6.63	6.18	9.35	7.69	12.0	4.86
6010C	7439-93-2	Lithium	mg/kg	23.1	24.2	20.8	21.5	18.9	21.4	24.1	22.5 J A	25.3 J A
6010C	7439-95-4	Magnesium	mg/kg	7770	7310	6920	6470	5570	6540	5360	6390	6530
6010C	7439-96-5	Manganese	mg/kg	472	477	569	332	373	436	361	468	360
6010C	7439-98-7	Molybdenum	mg/kg	2.07 U F, B	2.30 U	2.04 U F, B	2.27 UJ F, FD, B	2.21 UJ FD	2.13 U F	2.15 U F	2.12 U	2.23 U
6010C	7440-02-0	Nickel	mg/kg	21.0	20.5	18.4	15.6	16.2	17.6	16.3	19.7	16.2
6010C	7440-09-7	Potassium	mg/kg	6490	4580	5640 J Q	1840 J Q	1440 J Q	5110	2520	4240	1960
6010C	7440-23-5	Sodium	mg/kg	94.0 J Z	107 J Z	107	631	538	94.6 J Z	98.4 J Z	86.0 J Z	87.5 J Z
6010C	7440-31-5	Tin	mg/kg	10.4 U B	11.5 U B	10.2 U B	11.4 U B	11.1 U B	10.6 U B	10.8 U B	10.6 U B	11.2 U B
6010C	7440-32-6	Titanium	mg/kg	1340	1110	1350	1440	1170	1070	1220	1340	1660
6010C	7440-36-0	Antimony	mg/kg	4.14 U	4.59 U	4.09 UJ Q	4.54 UJ Q	4.43 UJ Q	4.25 U	4.31 U	4.25 UJ Q	4.46 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	4.47	4.23 J Z	4.74	3.64 J Z	3.12 J Z	6.59	7.47	7.59	4.27 J Z
6010C	7440-39-3	Barium	mg/kg	110	131	111	97.6	93.4	99.4	120	119	84.8
6010C	7440-41-7	Beryllium	mg/kg	0.872 J Z	1.00 J Z	0.827 J Z	0.661 J Z	0.631 J Z	0.882 J Z	0.944 J Z	0.991 J Z	0.485 J Z
6010C	7440-42-8	Boron	mg/kg	8.74 J Z	4.91 J Z	10.9	5.86 J Z	4.11 J Z	8.08 J Z	10.8 U B	10.6 U	11.2 U
6010C	7440-43-9	Cadmium	mg/kg	0.194 J Z	0.144 J Z	1.36	1.09 J Z	0.964 J Z	0.673 J Z	0.505 J Z	1.06 U	0.142 J Z
6010C	7440-47-3	Chromium	mg/kg	40.3	38.6	35.2	27.9	23.7	30.9	29.8	35.2	26.1
6010C	7440-48-4	Cobalt	mg/kg	9.51	9.91	10.5 J A	7.07 J A	6.66 J A	8.21	7.75	9.68	7.25
6010C	7440-50-8	Copper	mg/kg	25.1	23.0	21.8	16.4	13.2	18.6	12.9	22.8	16.1
6010C	7440-62-2	Vanadium	mg/kg	67.2	64.3	63.8	51.2	43.5	54.7	56.8	62.5	46.2
6010C	7440-66-6	Zinc	mg/kg	79.2	72.0	71.6	54.9	46.7	65.1	51.9	64.5	60.1
6010C	7440-67-7	Zirconium	mg/kg	3.12 J Z	3.12 J Z	3.40 J Z	2.57 J Z	2.39 J Z	4.37 J Z	5.87	2.88 J Z	1.37 J Z
6010C	7440-70-2	Calcium	mg/kg	17700	7280	21900 J E	14200 J FD, E	7280 J FD, E	29600	14900	6740	4660
6010C	7723-14-0	Phosphorus	mg/kg	670	342	567	360	281	524	164	351	473
6020A	7440-22-4	Silver	mg/kg	0.0472 J Z	0.0430 J Z	0.0433 J Z	0.0556 J Z	0.0357 J Z	0.0320 J Z	0.0474 J Z	0.0448 J Z	0.223 U
6020A	7440-24-6	Strontium	mg/kg	43.0	32.7	48.5 J Q	32.1 J Q	25.1 J Q	52.0	31.9	27.6 J Q	22.2 J Q
6020A	7440-28-0	Thallium	mg/kg	0.333	0.339	0.326	0.245	0.212 J Z	0.319	0.290	0.340 J Q	0.306 J Q
6020A	7782-49-2	Selenium	mg/kg	0.291 J Z	0.185 J Z	0.288 J Z	0.454 U	0.443 U	0.225 J Z	0.431 U	0.217 J Z	0.446 U

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		Sample Name	SL-536-SA8-SB-0.0-0.5	SL-536-SA8-SB-0.0-0.5-DTSC	SL-536-SA8-SB-4.0-5.0	SL-537-SA8-SB-0.0-0.5	SL-537-SA8-SB-4.0-5.0	SL-538-SA8-SB-0.0-0.5	SL-538-SA8-SB-0.0-0.5-DTSC	SL-538-SA8-SB-4.0-5.0
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	07/31/2013	07/24/2013	07/31/2013	07/31/2013	07/31/2013	08/09/2013	07/24/2013	08/09/2013
		SDG	PH081	PH074	PH081	PH081	PH081	PH088	PH074	PH088
		Start Depth	0	0	4	0	4	0	0	4
		End Depth	0.5	0.5	5	0.5	5	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
6010C	7429-90-5	Aluminum	mg/kg	27000	27100	16700	22800	22100	27100	25800	28000
6010C	7439-89-6	Iron	mg/kg	33500	27000 J A	22200	32900	28800	33900 J Q	28300 J A	30700
6010C	7439-92-1	Lead	mg/kg	12.7	12.9	6.34	13.4	9.02	16.1	15.0	9.62
6010C	7439-93-2	Lithium	mg/kg	24.1	23.8	21.6	22.1	21.9	23.3	23.4	25.4
6010C	7439-95-4	Magnesium	mg/kg	7230	7050	5490	6970	6430	7350	7330	7020
6010C	7439-96-5	Manganese	mg/kg	470	477	327	441	410	443	429	409
6010C	7439-98-7	Molybdenum	mg/kg	2.03 U F	2.11 U	2.17 U	2.03 U F	2.17 U	2.08 U F, B	2.11 U	2.26 U F
6010C	7440-02-0	Nickel	mg/kg	18.3	19.9	12.8	17.8	15.1	19.7	19.0	17.8 J A
6010C	7440-09-7	Potassium	mg/kg	4660	4450 J Q	1880	5400	3870	5480 J Q	5650 J Q	3340 J Q
6010C	7440-23-5	Sodium	mg/kg	87.1 J Z	82.3 J Z	86.8 J Z	104	109	93.6 J Z	92.6 J Z	93.5 J Z
6010C	7440-31-5	Tin	mg/kg	10.1 U B	10.5 U B	10.8 U B	10.1 U B	10.9 U B	10.4 U B	10.6 U B	11.3 U B
6010C	7440-32-6	Titanium	mg/kg	1220	1000	1180	975	1260	1380	1120	1580
6010C	7440-36-0	Antimony	mg/kg	4.05 UJ Q	4.21 UJ Q	4.34 UJ Q	4.06 UJ Q	4.35 UJ Q	4.16 UJ Q	4.23 UJ Q	4.52 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	5.62	3.12 J Z	4.27 J Z	4.62	4.15 J Z	5.02	4.25	6.65
6010C	7440-39-3	Barium	mg/kg	119	118	65.9	108	87.0	105	108	96.2
6010C	7440-41-7	Beryllium	mg/kg	0.947 J Z	0.987 J Z	0.490 J Z	0.836 J Z	0.739 J Z	0.851 J Z	0.870 J Z	0.841 J Z
6010C	7440-42-8	Boron	mg/kg	19.1	1.99 J Z	10.7 J Z	17.5	15.6	10.6	3.86 J Z	8.87 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.172 J Z	0.456 J Z	0.174 J Z	0.245 J Z	0.139 J Z	1.36	0.464 J Z	1.13 U
6010C	7440-47-3	Chromium	mg/kg	37.7 J Q	34.4	23.8 J Q	33.2 J Q	30.0 J Q	37.3	33.8	34.1
6010C	7440-48-4	Cobalt	mg/kg	9.23	9.96	6.14	9.17	7.79	8.86 J A	9.13	8.54
6010C	7440-50-8	Copper	mg/kg	19.4	21.4	10.7	19.3	15.1	21.8	21.4	15.1
6010C	7440-62-2	Vanadium	mg/kg	64.7 J Q	58.5	43.6 J Q	57.7 J Q	55.0 J Q	68.5	60.7	62.0
6010C	7440-66-6	Zinc	mg/kg	70.9	69.1	51.0	78.6	63.9	74.0	75.3	61.3
6010C	7440-67-7	Zirconium	mg/kg	5.43	4.71 J Z	2.50 J Z	3.69 J Z	3.58 J Z	2.78 J Z	3.43 J Z	8.30
6010C	7440-70-2	Calcium	mg/kg	9200 J E	9260	55100 J E	18100 J E	16100 J E	21200 J E	18700	31300 J FD, E
6010C	7723-14-0	Phosphorus	mg/kg	436	410	371	570	428	537	548	347
6020A	7440-22-4	Silver	mg/kg	0.0551 J Z	0.0421 J Z	0.217 U	0.0371 J Z	0.0363 J Z	0.0589 J Z	0.0554 J Z	0.0323 J Q, E, Z
6020A	7440-24-6	Strontium	mg/kg	30.3	28.2	37.1	39.3	37.4	43.4 J Q	40.6	47.2 J E, A
6020A	7440-28-0	Thallium	mg/kg	0.316	0.314	0.237	0.327	0.302	0.345	0.325	0.411 J Q, E
6020A	7782-49-2	Selenium	mg/kg	0.239 J Z	0.205 J Z	0.434 U	0.272 J Z	0.191 J Z	0.255 J Z	0.301 J Z	0.190 J Z

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				Sample Name	SL-838-SA8-SB-4.0-5.0	SL-539B-SA8-SB-0.0-0.5	SL-539B-SA8-SB-2.0-3.0	SL-540-SA8-SB-0.0-0.5	SL-540-SA8-SB-4.0-5.0	SL-541-SA8-SB-0.0-0.5	SL-541-SA8-SB-4.0-5.0	SL-542-SA8-SB-0.0-0.5
				Sample Type	FD	N	N	N	N	N	N	N
				Sample Date	08/09/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	08/09/2013	08/09/2013	09/26/2013
				SDG	PH088	PH076	PH076	PH076	PH076	PH088	PH088	PH117
				Start Depth	4	0	2	0	4	0	4	0
				End Depth	5	0.5	3	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	28300	29700	29600	29800	29200	29300	32600	29000
6010C	7439-89-6	Iron	mg/kg	32500	34100 J A	32200 J A	34600 J A	37700 J A	30500	36500	36200
6010C	7439-92-1	Lead	mg/kg	10.3	10.8	9.89	10.3	10.7	15.8	10.9	10.6
6010C	7439-93-2	Lithium	mg/kg	25.5	23.1	24.1	26.0	24.6	25.6	28.0	26.7
6010C	7439-95-4	Magnesium	mg/kg	7330	7470	6610	7660	7770	8490	8990	8530
6010C	7439-96-5	Manganese	mg/kg	457	368	350	454	517	416	474	428
6010C	7439-98-7	Molybdenum	mg/kg	2.24 U F	2.23 U	2.26 U	2.16 U	2.14 U	2.07 U F	2.16 U F	2.12 U
6010C	7440-02-0	Nickel	mg/kg	19.3 J A	18.5	18.3	21.3	21.9	18.5 J A	21.0 J A	20.1
6010C	7440-09-7	Potassium	mg/kg	3440 J Q	4950 J Q	2950 J Q	5480 J Q	5320 J Q	6700 J Q	7080 J Q	7120
6010C	7440-23-5	Sodium	mg/kg	95.5 J Z	174	186	128	102 J Z	116	146	200
6010C	7440-31-5	Tin	mg/kg	11.2 U B	11.2 U B	11.3 U B	10.8 U B	10.7 U B	10.4 U B	10.8 U B	10.6 U B
6010C	7440-32-6	Titanium	mg/kg	1520	1100	1150	1190	1100	1430	1640	1310
6010C	7440-36-0	Antimony	mg/kg	4.48 UJ Q	4.46 UJ Q	4.53 UJ Q	4.32 UJ Q	4.27 UJ Q	4.15 UJ Q	4.33 UJ Q	4.24 U
6010C	7440-38-2	Arsenic	mg/kg	5.72	4.00 J Z	3.73 J Z	3.13 J Z	3.88 J Z	4.47	3.34 J Z	5.50
6010C	7440-39-3	Barium	mg/kg	98.0	117	127	132	127	104	117	113
6010C	7440-41-7	Beryllium	mg/kg	0.888 J Z	0.911 J Z	0.975 J Z	0.986 J Z	0.971 J Z	0.822 J Z	0.917 J Z	0.909 J Z
6010C	7440-42-8	Boron	mg/kg	8.43 J Z	3.27 J Z	1.96 J Z	2.51 J Z	2.75 J Z	14.1	13.6	11.2
6010C	7440-43-9	Cadmium	mg/kg	1.12 U	0.385 J Z	0.320 J Z	0.472 J Z	0.419 J Z	0.103 J Z	0.108 J Z	0.477 J Z
6010C	7440-47-3	Chromium	mg/kg	35.9	36.7	35.8	36.7	36.4	36.4	39.5	38.1
6010C	7440-48-4	Cobalt	mg/kg	9.43	8.95	7.99	10.6	11.7	9.19	9.88	9.92
6010C	7440-50-8	Copper	mg/kg	16.5	22.5	18.1	23.3	22.5	20.1	20.6	23.1
6010C	7440-62-2	Vanadium	mg/kg	65.5	63.4	61.1	65.3	64.4	67.6	73.6	70.0
6010C	7440-66-6	Zinc	mg/kg	63.5	71.0	60.8	76.1	76.4	78.5	82.8	83.1
6010C	7440-67-7	Zirconium	mg/kg	8.38	4.27 J Z	3.91 J Z	4.22 J Z	4.34 J Z	4.89 J Z	4.73 J Z	4.64 J Z
6010C	7440-70-2	Calcium	mg/kg	17800 J FD, E	15800	12800	20300	18200	50500 J E	35400 J E	32600
6010C	7723-14-0	Phosphorus	mg/kg	371	388	222	392	391	740	787	675
6020A	7440-22-4	Silver	mg/kg	0.0412 J Q, E, Z	0.0400 J Z	0.226 U	0.0460 J Z	0.0511 J Z	0.0560 J Q, E, Z	0.0413 J Q, E, Z	0.0336 J Z
6020A	7440-24-6	Strontium	mg/kg	52.8 J E, A	39.2	33.8	49.0	49.2	92.9 J E, A	74.0 J E, A	81.0
6020A	7440-28-0	Thallium	mg/kg	0.431 J Q, E	0.345	0.333	0.364	0.362	0.490 J Q, E	0.397 J Q, E	0.396
6020A	7782-49-2	Selenium	mg/kg	0.195 J Z	0.264 J Z	0.133 J Z	0.201 J Z	0.222 J Z	0.478	0.316 J Z	0.287 J Z

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				Sample Name	SL-542-SA8-SB-4.0-5.0	SL-542-SA8-SB-9.0-10.0	SL-542-SA8-SB-14.0-15.0	SL-542-SA8-SB-17.5-18.5	SL-543-SA8-SB-0.0-0.5	SL-543-SA8-SB-4.0-5.0	SL-843-SA8-SB-4.0-5.0	SL-549-SA8-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	FD	N
				Sample Date	09/26/2013	09/26/2013	09/26/2013	09/26/2013	08/13/2013	08/13/2013	08/13/2013	07/30/2013
				SDG	PH117	PH117	PH117	PH117	PH090	PH090	PH090	PH080
				Start Depth	4	9	14	17.5	0	4	4	0
				End Depth	5	10	15	18.5	0.5	5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	31500	22000	19400	16000	28500	36500	35700	26700	
6010C	7439-89-6	Iron	mg/kg	36700	27300	23500	21400	31700	36500	36100	28300	
6010C	7439-92-1	Lead	mg/kg	10.8	8.45	7.05	4.44	14.1	11.6	11.7	10.9	
6010C	7439-93-2	Lithium	mg/kg	31.3	26.0	21.8	26.0	24.2	27.9	27.8	22.0	
6010C	7439-95-4	Magnesium	mg/kg	8430	6890	6000	5770	7350	7890	7810	7450	
6010C	7439-96-5	Manganese	mg/kg	421	353	284	220	468	445	498	500	
6010C	7439-98-7	Molybdenum	mg/kg	2.29 U	2.31 U	2.32 U	2.24 U	2.04 U F	2.21 U F	2.25 U F	2.13 U F, B	
6010C	7440-02-0	Nickel	mg/kg	20.8	16.0	15.1	11.7	20.0	21.9	23.1	20.5	
6010C	7440-09-7	Potassium	mg/kg	5680	4080	3240	2660	6700	4910	5050	6610	
6010C	7440-23-5	Sodium	mg/kg	181	146	126	95.1 J Z	97.6 J Z	320	257	89.1 J Z	
6010C	7440-31-5	Tin	mg/kg	11.4 U B	11.5 U B	11.6 U B	11.2 U B	10.2 U B	11.1 U B	11.2 U B	10.6 U B	
6010C	7440-32-6	Titanium	mg/kg	1360	936	744	998	1570	1890	1830	1330	
6010C	7440-36-0	Antimony	mg/kg	4.58 U	4.62 U	4.65 U	4.47 U	4.07 UJ Q	4.43 UJ Q	4.50 UJ Q	4.25 U	
6010C	7440-38-2	Arsenic	mg/kg	6.26	5.52	5.32	6.60	3.35 J Z	2.60 J Z	3.25 J Z	3.65 J Z	
6010C	7440-39-3	Barium	mg/kg	138	106	106	76.7	120	160	159	118	
6010C	7440-41-7	Beryllium	mg/kg	0.991 J Z	0.710 J Z	0.629 J Z	0.527 J Z	0.906 J Z	1.08 J Z	1.07 J Z	0.895 J Z	
6010C	7440-42-8	Boron	mg/kg	10.3 J Z	8.19 J Z	6.62 J Z	2.26 J Z	9.80 J Z	7.60 J Z	7.10 J Z	7.02 J Z	
6010C	7440-43-9	Cadmium	mg/kg	0.477 J Z	0.501 J Z	0.574 J Z	0.295 J Z	0.123 J Z	1.11 U	1.12 U	0.222 J Z	
6010C	7440-47-3	Chromium	mg/kg	40.2	30.9	25.4	20.2	34.7	41.1	41.1	36.6	
6010C	7440-48-4	Cobalt	mg/kg	9.98	8.37	6.74	5.30	10.2	10.1	10.8	9.52	
6010C	7440-50-8	Copper	mg/kg	23.0	15.9	14.5	11.8	20.0	18.9	19.1	25.1	
6010C	7440-62-2	Vanadium	mg/kg	72.7	55.0	44.6	39.4	65.0	76.9	75.9	64.7	
6010C	7440-66-6	Zinc	mg/kg	80.5	64.5	51.4	49.1	81.7	74.6	75.2	79.5	
6010C	7440-67-7	Zirconium	mg/kg	5.11 J Z	4.28 J Z	4.33 J Z	2.88 J Z	5.95	8.30	8.28	3.43 J Z	
6010C	7440-70-2	Calcium	mg/kg	36700	86500	139000	88900	13600	8040	10700	6850	
6010C	7723-14-0	Phosphorus	mg/kg	456	470	343	317	591 J Q	261 J Q	287 J Q	477	
6020A	7440-22-4	Silver	mg/kg	0.0480 J Z	0.0338 J Z	0.0439 J Z	0.224 U	0.0469 J Z	0.0507 J Z	0.0616 J Z	0.0574 J Z	
6020A	7440-24-6	Strontium	mg/kg	84.9	146	205	167	57.0 J E	49.2 J E	59.0 J E	30.0	
6020A	7440-28-0	Thallium	mg/kg	0.459	0.338	0.291	0.289	0.463 J Q	0.401 J Q	0.445 J Q	0.355	
6020A	7782-49-2	Selenium	mg/kg	0.321 J Z	0.192 J Z	0.465 U	0.447 U	0.345 J Z	0.198 J Z	0.262 J Z	0.338 J Z	

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-549-SA8-SB-4.0-5.0	SL-550-SA8-SB-0.0-0.5	SL-550-SA8-SB-4.0-5.0	SL-550-SA8-SB-9.0-10.0	SL-550-SA8-SB-14.0-15.0	SL-550-SA8-SB-17.0-18.0	SL-551-SA8-SB-0.0-0.5	SL-551-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	07/30/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013	07/23/2013	07/23/2013
				SDG	PH080	PH072	PH072	PH072	PH072	PH072	PH073	PH073
				Start Depth	4	0	4	9	14	17	0	4
				End Depth	5	0.5	5	10	15	18	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	32200	32700	32200	17400	11900	11200	36700	33200
6010C	7439-89-6	Iron	mg/kg	29300	36100	35400	16300	13100	21800	36000	31200
6010C	7439-92-1	Lead	mg/kg	11.4	10.8	10.6	6.04	4.38	3.75	12.0	10.5
6010C	7439-93-2	Lithium	mg/kg	24.4	26.8	26.6	9.5	6.1	25.5	31.7	26.4
6010C	7439-95-4	Magnesium	mg/kg	6490	8260	7310	4310	3870	5030	8820	6690
6010C	7439-96-5	Manganese	mg/kg	579	456 J E	365 J E	213 J E	160 J E	267 J E	459 J E	445 J E
6010C	7439-98-7	Molybdenum	mg/kg	2.23 U	2.21 U F	2.18 U F	2.20 U	2.30 U	2.07 U	2.22 U F	2.01 U
6010C	7440-02-0	Nickel	mg/kg	22.3	22.4	19.5	11.7	6.87	8.28	23.3	18.2
6010C	7440-09-7	Potassium	mg/kg	3650	6640 J Q	3440 J Q	1580 J Q	1370 J Q	2450 J Q	5300 J Q	2310 J Q
6010C	7440-23-5	Sodium	mg/kg	103 J Z	131	213	211	205	118	139	139
6010C	7440-31-5	Tin	mg/kg	11.1 U B	11.0 U B	10.9 U B	11.0 U B	11.5 U B	10.4 U B	11.1 U B	10.1 U B
6010C	7440-32-6	Titanium	mg/kg	1390	1540	1230	754	759	1450	1740	1140
6010C	7440-36-0	Antimony	mg/kg	4.46 U	4.42 UJ Q	4.37 UJ Q	4.41 UJ Q	4.60 UJ Q	4.15 UJ Q	4.44 UJ Q	4.02 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	3.64 J Z	7.40	7.20	6.00	3.47 J Z	4.63	8.43	7.35
6010C	7440-39-3	Barium	mg/kg	148	132	147	74.6	70.9	76.5	149	125
6010C	7440-41-7	Beryllium	mg/kg	0.983 J Z	1.03 J Z	1.08 J Z	0.626 J Z	0.379 J Z	0.456 J Z	1.11	0.937 J Z
6010C	7440-42-8	Boron	mg/kg	5.30 J Z	6.34 J Z	2.05 J Z	3.06 J Z	2.68 J Z	10.4 U	4.75 J Z	2.35 J Z
6010C	7440-43-9	Cadmium	mg/kg	1.11 U	0.382 J Z	0.112 J Z	0.533 J Z	0.286 J Z	0.220 J Z	0.122 J Z	0.158 J FD, Z
6010C	7440-47-3	Chromium	mg/kg	37.2	39.9	37.2	19.1	13.9	15.0	42.3	34.9
6010C	7440-48-4	Cobalt	mg/kg	10.6	10.2 J E, A	9.35 J E, A	4.09 J E, A	2.84 J E, A	5.00 J E, A	11.1 J E, A	15.1 J FD, E, A
6010C	7440-50-8	Copper	mg/kg	20.6	21.7 J A	18.1 J A	6.60 J A	4.22 J A	7.45 J A	20.5 J A	16.4 J A
6010C	7440-62-2	Vanadium	mg/kg	69.5	74.9	68.5	36.2	25.3	34.4	80.7	67.7
6010C	7440-66-6	Zinc	mg/kg	64.7	81.1	70.4	33.9	34.3	57.7	84.0	55.5
6010C	7440-67-7	Zirconium	mg/kg	3.97 J Z	7.77	7.76	4.73 J Z	3.60 J Z	4.60 J Z	9.49	6.76
6010C	7440-70-2	Calcium	mg/kg	16800	17100 J E	15800 J E	209000 J E	210000 J E	5000 J E	23900 J E	43700 J FD, E
6010C	7723-14-0	Phosphorus	mg/kg	288	473	216	290	325	412	381	91.6
6020A	7440-22-4	Silver	mg/kg	0.0399 J Z	0.0747 J Z	0.0606 J Z	0.220 U	0.230 U	0.207 U	0.0554 J Z	0.0527 J Z
6020A	7440-24-6	Strontium	mg/kg	41.1	47.7 J E	64.6 J E	130 J E	151 J E	18.8 J E	68.2 J E	61.2 J E
6020A	7440-28-0	Thallium	mg/kg	0.367	0.346 J Q	0.358 J Q	0.156 J Q, Z	0.164 J Q, Z	0.268 J Q	0.463 J Q	0.278 J Q
6020A	7782-49-2	Selenium	mg/kg	0.139 J Z	0.315 J Z	0.437 U	0.441 U	0.460 U	0.415 U	0.274 J Z	0.402 UJ FD

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-851-SA8-SB-4.0-5.0	SL-551-SA8-SB-9.0-10.0	SL-551-SA8-SB-14.0-15.0	SL-551-SA8-SB-19.0-20.0	SL-552-SA8-SB-0.0-0.5	SL-552-SA8-SB-4.0-5.0	SL-552-SA8-SB-7.5-8.5	SL-553-SA8-SB-0.0-0.5
				Sample Type	FD	N	N	N	N	N	N	N
				Sample Date	07/23/2013	07/23/2013	07/23/2013	07/23/2013	08/02/2013	08/02/2013	08/02/2013	08/27/2013
				SDG	PH073	PH073	PH073	PH073	PH083	PH083	PH083	PH094
				Start Depth	4	9	14	19	0	4	7.5	0
				End Depth	5	10	15	20	0.5	5	8.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	32600	14500	24800	22100	19100	29700	21600	24700	
6010C	7439-89-6	Iron	mg/kg	30900	14000	27700	48400	29300	38100	22300	34100	
6010C	7439-92-1	Lead	mg/kg	9.41	9.21 J Z	8.92	11.7	21.2	10.8	8.12	12.9	
6010C	7439-93-2	Lithium	mg/kg	25.6	10.4 J Z	21.6	23.1	21.8	30.7	21.4	21.7	
6010C	7439-95-4	Magnesium	mg/kg	7130	4890	6910	6450	5330	8440	6140	7200	
6010C	7439-96-5	Manganese	mg/kg	288 J E	128 J E	331 J E	344 J E	372	434	301	432	
6010C	7439-98-7	Molybdenum	mg/kg	2.25 U	2.28 U	2.31 U F	2.26 U	2.04 U F	2.19 U	2.17 U	2.17 U F	
6010C	7440-02-0	Nickel	mg/kg	17.8	7.97	16.0	17.4	17.1	20.6	15.5	19.9	
6010C	7440-09-7	Potassium	mg/kg	2190 J Q	1480 J Q	3950 J Q	3420 J Q	4630	4320	1800	5640	
6010C	7440-23-5	Sodium	mg/kg	153	134	136	196	92.7 J Z	160	296	96.5 J Z	
6010C	7440-31-5	Tin	mg/kg	11.3 U B	11.4 U B	11.6 U B	11.3 U B	10.2 U B	10.9 U B	10.8 U B	10.9 U B	
6010C	7440-32-6	Titanium	mg/kg	1330	676	1150	1310	1080	1360	859	1000 J A	
6010C	7440-36-0	Antimony	mg/kg	4.50 UJ Q	4.55 UJ Q	4.62 UJ Q	4.52 UJ Q	4.07 UJ Q	4.38 UJ Q	4.33 UJ Q	4.35 UJ Q	
6010C	7440-38-2	Arsenic	mg/kg	7.88	3.52 J Z	5.89	8.03	3.58 J Z	5.15	4.96	6.87	
6010C	7440-39-3	Barium	mg/kg	107	86.2	116	114	99.5	141	101	125	
6010C	7440-41-7	Beryllium	mg/kg	0.994 J Z	0.467 J Z	0.793 J Z	0.876 J Z	0.603 J Z	0.905 J Z	0.649 J Z	0.938 J Z	
6010C	7440-42-8	Boron	mg/kg	3.64 J Z	4.04 J Z	5.28 J Z	11.3 U	14.7	18.8	12.8	7.27 J Z	
6010C	7440-43-9	Cadmium	mg/kg	0.278 J FD, Z	0.508 J Z	0.402 J Z	1.13 U	0.992 J Z	0.213 J Z	0.327 J Z	0.214 J Z	
6010C	7440-47-3	Chromium	mg/kg	35.1	17.3	29.3	29.3	29.8 J Q	39.7 J Q	26.0 J Q	33.8	
6010C	7440-48-4	Cobalt	mg/kg	7.43 J FD, E, A	2.88 J E, A	7.37 J E, A	7.63 J E, A	7.12	10.1	6.83	8.97	
6010C	7440-50-8	Copper	mg/kg	14.8 J A	5.06 J Z, A	15.4 J A	14.3 J A	28.1	19.4	10.3	20.8	
6010C	7440-62-2	Vanadium	mg/kg	68.9	31.6	56.9	79.7	47.3 J Q	73.4 J Q	46.3 J Q	61.5	
6010C	7440-66-6	Zinc	mg/kg	55.2	31.8	63.7	59.1	119	79.3	43.3	77.3	
6010C	7440-67-7	Zirconium	mg/kg	7.77	4.63 J Z	6.72	8.40	2.51 J Z	4.98 J Z	3.78 J Z	6.41	
6010C	7440-70-2	Calcium	mg/kg	85800 J FD, E	255000 J E	114000 J E	69500 J E	7790 J E	20700 J E	156000 J E	12200 J E	
6010C	7723-14-0	Phosphorus	mg/kg	127	266	347	347	458	364	241	407	
6020A	7440-22-4	Silver	mg/kg	0.0716 J Z	0.228 U	0.0493 J Z	0.0404 J Z	0.461	0.0508 J Z	0.0446 J Z	0.0559 J Q, E, Z	
6020A	7440-24-6	Strontium	mg/kg	98.3 J E	399 J E	197 J E	180 J E	33.0	60.9	223	48.2 J E	
6020A	7440-28-0	Thallium	mg/kg	0.351 J Q	0.196 J Q, Z	0.267 J Q	0.327 J Q	0.234	0.332	0.218	0.363 J Q	
6020A	7782-49-2	Selenium	mg/kg	0.120 J FD, Z	0.455 U	0.222 J Z	0.156 J Z	0.209 J Z	0.172 J Z	0.433 U	0.261 J Z	

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-553-SA8-SB-4.0-5.0	SL-853-SA8-SB-4.0-5.0	SL-553-SA8-SB-9.0-10.0	SL-553-SA8-SB-14.0-15.0	SL-553-SA8-SB-18.0-19.0	SL-554-SA8-SB-0.0-0.5	SL-554-SA8-SB-4.0-5.0	SL-555-SA8-SB-0.0-0.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	08/27/2013	08/27/2013	08/28/2013	08/28/2013	08/28/2013	07/22/2013	07/22/2013	07/23/2013
			SDG	PH094	PH094	PH096	PH096	PH096	PH072	PH072	PH073
			Start Depth	4	4	9	14	18	0	4	0
			End Depth	5	5	10	15	19	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	24300	25700	27500 J E	13600 J E	13400 J E	33300	32500	27200
6010C	7439-89-6	Iron	mg/kg	33400	33000	34400 J E	13000 J E	22400 J E	36800	35500	33800
6010C	7439-92-1	Lead	mg/kg	10.2	10.2	10.7	4.71	4.61	11.6	10.6	11.5
6010C	7439-93-2	Lithium	mg/kg	20.7	22.3	27.7	14.5	27.3	26.7	26.8	24.2
6010C	7439-95-4	Magnesium	mg/kg	6660	6890	7600	4710	5630	8100	7710	8080
6010C	7439-96-5	Manganese	mg/kg	488	428	455 J E	90.2 J E	290 J E	547 J E	402 J E	455 J E
6010C	7439-98-7	Molybdenum	mg/kg	2.23 U F	2.23 U F	2.34 U	2.26 U	2.12 U	2.29 U F	2.23 U	2.21 U
6010C	7440-02-0	Nickel	mg/kg	19.5	19.4	22.7	7.05	12.3	23.4	20.1	21.8
6010C	7440-09-7	Potassium	mg/kg	4800	4680	3160 J Q	1210 J Q	3140 J Q	5070 J Q	3320 J Q	5500 J Q
6010C	7440-23-5	Sodium	mg/kg	90.6 J Z	96.3 J Z	227	239	331	133	682	93.0 J Z
6010C	7440-31-5	Tin	mg/kg	11.2 U B	11.2 U B	11.7 U B	11.3 U B	10.6 U B	11.5 U B	11.1 U B	11.1 U B
6010C	7440-32-6	Titanium	mg/kg	822 J A	859 J A	884 J E, Q	643 J E, Q	1440 J E, Q	1430	1420	749
6010C	7440-36-0	Antimony	mg/kg	4.46 UJ Q	4.46 UJ Q	1.74 J Z	0.859 J Z	1.03 J Z	4.58 UJ Q	4.45 UJ Q	4.42 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	6.33	6.43	6.40	2.92 J Z	5.22	7.20	7.61	6.64
6010C	7440-39-3	Barium	mg/kg	137	134	142	105	90.3	162	133	134
6010C	7440-41-7	Beryllium	mg/kg	0.979 J Z	0.977 J Z	0.968 J Z	0.388 J Z	0.444 J Z	1.14 J Z	1.06 J Z	0.966 J Z
6010C	7440-42-8	Boron	mg/kg	7.73 J Z	5.70 J Z	11.2 J Z	6.86 J Z	5.89 J Z	5.89 J Z	4.27 J Z	1.72 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.221 J Z	0.184 J Z	0.494 J Z	0.618 J Z	0.498 J Z	0.417 J Z	0.201 J Z	0.311 J Z
6010C	7440-47-3	Chromium	mg/kg	32.2	32.8	36.6	16.6	20.5	41.4	37.1	33.9
6010C	7440-48-4	Cobalt	mg/kg	9.33	9.27	10.6	2.13	5.44	11.3 J E, A	9.87 J E, A	11.0 J E, A
6010C	7440-50-8	Copper	mg/kg	20.4	19.9	16.5	5.19	9.86	21.9 J A	18.1 J A	20.0 J A
6010C	7440-62-2	Vanadium	mg/kg	60.9	62.1	65.2 J E	28.2 J E	42.3 J E	77.4	72.0	57.2
6010C	7440-66-6	Zinc	mg/kg	71.2	70.8	69.0	29.2	59.8	77.9	67.9	77.3
6010C	7440-67-7	Zirconium	mg/kg	6.08	6.20	3.61 J Z	3.22 J Z	3.01 J Z	7.68	7.87	6.39
6010C	7440-70-2	Calcium	mg/kg	7840 J E	7530 J E	10300	233000	40200	8780 J E	22000 J E	15000 J E
6010C	7723-14-0	Phosphorus	mg/kg	307	288	235	291	636	348	249	399
6020A	7440-22-4	Silver	mg/kg	0.0515 J Q, E, Z	0.0663 J Q, E, Z	0.0526 J Z	0.0489 J Z	0.212 U	0.0542 J Z	0.0505 J Z	0.0303 J Z
6020A	7440-24-6	Strontium	mg/kg	44.7 J E	51.7 J E	55.4	395	90.3	57.8 J E	75.2 J E	54.7 J E
6020A	7440-28-0	Thallium	mg/kg	0.421 J Q	0.453 J Q	0.356	0.129 J Z	0.230	0.446 J Q	0.321 J Q	0.389 J Q
6020A	7782-49-2	Selenium	mg/kg	0.265 J Z	0.300 J Z	0.468 U	0.453 U	0.425 U	0.299 J Z	0.198 J Z	0.240 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-555-SA8-SB-4.0-5.0	SL-556-SA8-SB-0.0-0.5	SL-556-SA8-SB-4.0-5.0	SL-558-SA8-SB-0.0-0.5	SL-558-SA8-SB-4.0-5.0	SL-558-SA8-SB-9.0-10.0	SL-558-SA8-SB-12.5-13.5	SL-559-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	07/23/2013	07/22/2013	07/22/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013
		SDG	PH073	PH072	PH072	PH083	PH083	PH083	PH083	PH083
		Start Depth	4	0	4	0	4	9	12.5	0
		End Depth	5	0.5	5	0.5	5	10	13.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
6010C	7429-90-5	Aluminum	mg/kg	32900	35200	13500	25600	28400	31600	14800	22600
6010C	7439-89-6	Iron	mg/kg	35500	38100	12800	34400	38000	33800	22600	30300
6010C	7439-92-1	Lead	mg/kg	10.8	12.5	9.75 J Z	13.3	12.4	11.8	5.63	16.1
6010C	7439-93-2	Lithium	mg/kg	28.3	29.1	7.7 J Z	25.1	29.6	32.8	24.4	22.8
6010C	7439-95-4	Magnesium	mg/kg	8030	8740	3620	6750	8120	7280	5550	6490
6010C	7439-96-5	Manganese	mg/kg	427 J E	506 J E	99.1 J E	471	597	557	266	423
6010C	7439-98-7	Molybdenum	mg/kg	2.22 U	2.19 U F	2.12 U	2.03 U F	2.31 U	2.30 U	2.18 U	2.06 U F
6010C	7440-02-0	Nickel	mg/kg	21.9	24.5	7.56	18.5	24.2	23.2	11.7	18.0
6010C	7440-09-7	Potassium	mg/kg	4500 J Q	4210 J Q	1100 J Q	5890	4680	2000	2530	5950
6010C	7440-23-5	Sodium	mg/kg	163	320	182	89.0 J Z	205	377	246	92.8 J Z
6010C	7440-31-5	Tin	mg/kg	11.1 U B	10.9 U B	10.6 U B	10.2 U B	11.6 U B	11.5 U B	10.9 U B	10.3 U B
6010C	7440-32-6	Titanium	mg/kg	1420	1560	668	1260	1300	1180	1240	1120
6010C	7440-36-0	Antimony	mg/kg	4.43 UJ Q	4.38 UJ Q	4.25 UJ Q	4.07 UJ Q	4.63 UJ Q	4.61 UJ Q	4.36 UJ Q	4.13 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	7.70	8.16	3.98 J Z	4.01 J Z	5.14	6.38	4.92	3.69 J Z
6010C	7440-39-3	Barium	mg/kg	152	159	72.7	127	134	132	90.3	116
6010C	7440-41-7	Beryllium	mg/kg	1.03 J Z	1.13	0.473 J Z	0.831 J Z	0.885 J Z	0.926 J Z	0.563 J Z	0.762 J Z
6010C	7440-42-8	Boron	mg/kg	3.77 J Z	4.09 J Z	3.34 J Z	17.7	21.5	17.9	9.94 J Z	16.4
6010C	7440-43-9	Cadmium	mg/kg	0.249 J Z	0.168 J Z	0.501 J Z	0.255 J Z	0.256 J Z	0.227 J Z	0.121 J Z	0.414 J Z
6010C	7440-47-3	Chromium	mg/kg	38.3	42.5	14.7	34.1 J Q	37.6 J Q	34.6 J Q	22.2 J Q	31.3 J Q
6010C	7440-48-4	Cobalt	mg/kg	10.4 J E, A	13.2 J E, A	2.30 J E, A	9.39	11.6	11.8	5.95	8.65
6010C	7440-50-8	Copper	mg/kg	19.3 J A	19.7 J A	3.65 J Z, A	20.7	20.8	14.9	10.7	117
6010C	7440-62-2	Vanadium	mg/kg	73.1	79.2	29.2	63.4 J Q	71.9 J Q	68.7 J Q	40.8 J Q	57.2 J Q
6010C	7440-66-6	Zinc	mg/kg	75.4	77.8	67.2	76.9	80.5	53.3	58.8	78.6
6010C	7440-67-7	Zirconium	mg/kg	8.25	9.06	4.28 J Z	3.57 J Z	4.80 J Z	4.41 J Z	3.37 J Z	3.33 J Z
6010C	7440-70-2	Calcium	mg/kg	23300 J E	17100 J E	276000 J E	6700 J E	24600 J E	59500 J E	72400 J E	8840 J E
6010C	7723-14-0	Phosphorus	mg/kg	292	299	230	445	438	171	460	480
6020A	7440-22-4	Silver	mg/kg	0.0508 J Z	0.0593 J Z	0.212 U	0.0712 J Z	0.0486 J Z	0.0629 J Z	0.0639 J Z	0.0854 J Z
6020A	7440-24-6	Strontium	mg/kg	69.2 J E	59.5 J E	204 J E	33.7	67.2	89.4	116	34.6
6020A	7440-28-0	Thallium	mg/kg	0.364 J Q	0.348 J Q	0.114 J Q, Z	0.309	0.344	0.294	0.248	0.310
6020A	7782-49-2	Selenium	mg/kg	0.186 J Z	0.225 J Z	0.425 U	0.274 J Z	0.204 J Z	0.461 U	0.436 U	0.263 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-559-SA8-SB-4.0-5.0	SL-560-SA8-SB-0.0-0.5	SL-560-SA8-SB-4.0-5.0	SL-561-SA8-SB-0.0-0.5	SL-561-SA8-SB-4.0-5.0	SL-562-SA8-SB-0.0-0.5	SL-563-SA8-SB-0.0-0.5	SL-563-SA8-SB-2.0-3.0	SL-564-SA8-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	08/02/2013	07/30/2013	07/30/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	08/06/2013
				SDG	PH083	PH080	PH080	PH063	PH063	PH063	PH063	PH063	PH085
				Start Depth	4	0	4	0	4	0	0	2	0
				End Depth	5	0.5	5	0.5	5	0.5	0.5	3	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
6010C	7429-90-5	Aluminum	mg/kg	27700	24400	32600	18700	28200	17800	17200	23500	21000
6010C	7439-89-6	Iron	mg/kg	37100	27200	33400	20000	28300	19300	18600	23500	25400
6010C	7439-92-1	Lead	mg/kg	11.7	14.3	11.8	13.0	7.25	7.55	7.48	6.36	16.2 J Q
6010C	7439-93-2	Lithium	mg/kg	27.8	21.4	26.3	17.3	23.2	17.1	17.3	21.7	21.8 J A
6010C	7439-95-4	Magnesium	mg/kg	7880	7790	7840	4150	5840	3700	3650	4560	5110
6010C	7439-96-5	Manganese	mg/kg	443	486	487	423	327	360	329	385	356
6010C	7439-98-7	Molybdenum	mg/kg	2.21 U	2.12 U F, B	2.23 U	2.04 U F, B	2.15 U F, B	1.98 U F, B	2.01 U F, B	2.04 U F, B	2.02 U F, B
6010C	7440-02-0	Nickel	mg/kg	19.6	19.3	22.9	13.5	18.3	12.2	11.4	14.3	13.7
6010C	7440-09-7	Potassium	mg/kg	5160	5270	3230	4740 J E, Q	2910 J E, Q	3550 J E, Q	3510 J E, Q	3160 J E, Q	4100 J Q
6010C	7440-23-5	Sodium	mg/kg	124	125	296	76.3 J Z	178	80.1 J Z	73.0 J Z	100 J Z	62.8 J Z
6010C	7440-31-5	Tin	mg/kg	11.0 U B	10.6 U B	11.1 U B	10.2 U B	10.8 U B	9.91 U B	10.1 U B	10.2 U B	10.1 U B
6010C	7440-32-6	Titanium	mg/kg	1080	1250	1460	1100	1160	1030	1030	1120	1080
6010C	7440-36-0	Antimony	mg/kg	4.42 UJ Q	4.24 U	4.45 U	4.08 UJ Q	4.31 UJ Q	3.96 UJ Q	4.02 UJ Q	4.08 UJ Q	4.05 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	3.78 J Z	3.16 J Z	4.26 J Z	4.96	7.92	4.59	4.41	5.44	3.02 J Z
6010C	7440-39-3	Barium	mg/kg	139	130	162	114	145	110	105	115	108
6010C	7440-41-7	Beryllium	mg/kg	0.913 J Z	0.866 J Z	1.03 J Z	0.611 J Z	0.975 J Z	0.618 J Z	0.573 J Z	0.755 J Z	0.728 J Z
6010C	7440-42-8	Boron	mg/kg	18.7	7.31 J Z	6.70 J Z	4.63 J Z	3.82 J Z	2.75 J Z	2.72 J Z	2.67 J Z	14.5
6010C	7440-43-9	Cadmium	mg/kg	0.176 J Z	0.234 J Z	1.11 U	0.477 J Z	0.400 J Z	0.405 J Z	0.431 J Z	0.434 J Z	0.198 J Z
6010C	7440-47-3	Chromium	mg/kg	36.6 J Q	33.3	39.9	21.5	29.8	19.4	18.7	24.0	23.6
6010C	7440-48-4	Cobalt	mg/kg	10.5	8.83	11.2	6.49	7.00	6.18	5.45	7.08	7.12 J A
6010C	7440-50-8	Copper	mg/kg	20.1	24.6	23.9	13.4	15.0	11.3	11.1	12.5	17.2
6010C	7440-62-2	Vanadium	mg/kg	63.4 J Q	59.5	74.7	40.7	56.3	37.5	35.0	45.0	47.2
6010C	7440-66-6	Zinc	mg/kg	81.3	93.8	73.1	58.6 J E	62.1 J E	50.1 J E	52.8 J E	56.5 J E	62.3 J Q, E
6010C	7440-67-7	Zirconium	mg/kg	3.61 J Z	4.97 J Z	3.80 J Z	4.50 J Z	6.33	4.13 J Z	3.77 J Z	4.55 J Z	3.02 J Z
6010C	7440-70-2	Calcium	mg/kg	9240 J E	9240	10100	3500 J E	6820 J E	2520 J E	2780 J E	2940 J E	4550
6010C	7723-14-0	Phosphorus	mg/kg	418	403	278	398	261	264	295	266	398
6020A	7440-22-4	Silver	mg/kg	0.0459 J Z	0.0541 J Z	0.0503 J Z	0.204 U	0.0465 J Z	0.0399 J Z	0.0280 J Z	0.0400 J Z	0.0500 J Q, E, Z
6020A	7440-24-6	Strontium	mg/kg	45.9	34.1	50.3	24.6 J E	36.6 J E	22.7 J E	21.9 J E	25.0 J E	29.0 J E, Q
6020A	7440-28-0	Thallium	mg/kg	0.362	0.335	0.323	0.284	0.340	0.294	0.287	0.306	0.328 J Q, E
6020A	7782-49-2	Selenium	mg/kg	0.214 J Z	0.385 J Z	0.130 J Z	0.135 J Z	0.431 U	0.130 J Z	0.151 J Z	0.158 J Z	0.183 J Q, Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-565-SA8-SB-0.0-0.5	SL-565-SA8-SB-4.0-5.0	SL-566-SA8-SB-0.0-0.5	SL-566-SA8-SB-4.0-5.0	SL-567-SA8-SB-0.0-0.5	SL-567-SA8-SB-4.0-5.0	SL-567-SA8-SB-9.0-10.0	SL-568-SA8-SB-0.0-0.5	SL-568-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	08/08/2013	08/08/2013	08/07/2013	08/07/2013	08/08/2013	08/08/2013	08/08/2013	08/05/2013	08/05/2013
				SDG	PH087	PH087	PH086	PH086	PH087	PH087	PH087	PH084	PH084
				Start Depth	0	4	0	4	0	4	9	0	4
				End Depth	0.5	5	0.5	5	0.5	5	10	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit										
6010C	7429-90-5	Aluminum	mg/kg	28900	34300	31400	31200	34200	31000	35700	27100	20400	
6010C	7439-89-6	Iron	mg/kg	30800	35500	33600	30600	37800	33800	36100	29900	26500	
6010C	7439-92-1	Lead	mg/kg	11.5	11.7	12.2	9.45	11.4	9.93	10.3	8.86	6.95	
6010C	7439-93-2	Lithium	mg/kg	30.5	23.8	25.7	30.2	26.5	28.4	29.1	28.3	27.5	
6010C	7439-95-4	Magnesium	mg/kg	6000	7610	6680	6090	7910	8330	7200	6660	5440	
6010C	7439-96-5	Manganese	mg/kg	425	457	482	417	506	431	354	415	348	
6010C	7439-98-7	Molybdenum	mg/kg	2.03 U F, B	2.27 U	2.02 U	2.18 U	2.28 U F, B	2.34 U F, B	2.34 U	2.22 U F	2.19 U	
6010C	7440-02-0	Nickel	mg/kg	18.2	18.9	20.7	19.3	23.0	20.7	21.2	20.1	14.3	
6010C	7440-09-7	Potassium	mg/kg	4990 J Q	2670 J Q	5190	3070	5980 J Q	3800 J Q	2650 J Q	4170	3030	
6010C	7440-23-5	Sodium	mg/kg	100 J Z	667	85.2 J Z	546	88.0 J Z	137	247	94.3 J Z	91.9 J Z	
6010C	7440-31-5	Tin	mg/kg	10.1 U B	11.3 U B	10.1 U B	10.9 U B	11.4 U B	11.7 U B	11.7 U B	11.1 U B	10.9 U B	
6010C	7440-32-6	Titanium	mg/kg	1530	1270	1230	1260	1550	1550	1340	1180	1340	
6010C	7440-36-0	Antimony	mg/kg	4.06 UJ Q	4.53 UJ Q	4.03 U	4.35 U	4.55 UJ Q	4.69 UJ Q	4.68 UJ Q	4.45 UJ Q	4.37 UJ Q	
6010C	7440-38-2	Arsenic	mg/kg	4.15	4.30 J Z	3.69 J Z	4.11 J Z	4.21 J Z	4.84	4.77	5.39	5.56	
6010C	7440-39-3	Barium	mg/kg	127	164	144	135	137	122	120	115	82.8	
6010C	7440-41-7	Beryllium	mg/kg	0.910 J Z	0.992 J Z	1.02	1.01 J Z	1.07 J Z	0.794 J Z	1.14 J Z	0.889 J Z	0.800 J Z	
6010C	7440-42-8	Boron	mg/kg	8.92 J Z	8.72 J Z	16.9	16.3	9.45 J Z	12.4	6.76 J Z	13.1	7.93 J Z	
6010C	7440-43-9	Cadmium	mg/kg	1.28	1.11 J Z	0.268 J Z	0.104 J Z	1.43	1.32	1.28	0.347 J Z	0.192 J Z	
6010C	7440-47-3	Chromium	mg/kg	33.4	39.5	37.3	32.8	42.5	39.3	41.1	36.9 J Q	26.3 J Q	
6010C	7440-48-4	Cobalt	mg/kg	8.48 J A	11.9 J A	9.89	8.32	10.6 J A	10.1 J A	10.9 J A	8.56	5.85	
6010C	7440-50-8	Copper	mg/kg	21.3	19.0	22.8	17.1	24.4	22.4	19.1	16.6	13.5	
6010C	7440-62-2	Vanadium	mg/kg	64.3	71.9	69.2	60.5	79.0	74.6	73.1	62.5	50.3	
6010C	7440-66-6	Zinc	mg/kg	76.4	59.4	72.3	57.6	78.5	73.1	63.1	73.6 J E	61.1 J E	
6010C	7440-67-7	Zirconium	mg/kg	4.54 J Z	2.95 J Z	4.39 J Z	3.15 J Z	4.11 J Z	4.30 J Z	3.81 J Z	6.85	5.33 J Z	
6010C	7440-70-2	Calcium	mg/kg	6410 J E	13000 J E	6860	11100	7220 J E	55600 J E	13400 J E	15000 J E	6340 J E	
6010C	7723-14-0	Phosphorus	mg/kg	297	176	304	164	359	493	180	315 J Q	358 J Q	
6020A	7440-22-4	Silver	mg/kg	0.0483 J Z	0.0458 J Z	0.0772 J Z	0.0838 J Z	0.0553 J Z	0.0426 J Z	0.0677 J Z	0.0513 J Z	0.0595 J Z	
6020A	7440-24-6	Strontium	mg/kg	33.0 J Q	53.0 J Q	48.7	51.5	38.2 J Q	135 J Q	55.5 J Q	46.3 J A	35.7 J A	
6020A	7440-28-0	Thallium	mg/kg	0.356	0.325	0.445	0.374	0.389	0.339	0.320	0.366	0.426	
6020A	7782-49-2	Selenium	mg/kg	0.245 J Z	0.453 U	0.326 J Z	0.132 J Z	0.323 J Z	0.122 J Z	0.468 U	0.150 J Z	0.437 U	

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-569-SA8-SB-0.0-0.5	SL-569-SA8-SB-4.0-5.0	SL-569-SA8-SB-7.0-8.0	SL-570-SA8-SB-0.0-0.5	SL-570-SA8-SB-4.0-5.0	SL-571-SA8-SB-0.0-0.5	SL-571-SA8-SB-6.5-7.5	SL-571-SA8-SB-12.5-13.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	08/05/2013	08/05/2013	08/05/2013	07/11/2013	07/11/2013	07/10/2013	07/10/2013	07/10/2013
				SDG	PH084	PH084	PH084	PH065	PH065	PH064	PH064	PH064
				Start Depth	0	4	7	0	4	0	6.5	12.5
				End Depth	0.5	5	8	0.5	5	0.5	7.5	13.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	23700	20100	15600	12300	20700	17400	18000	15800	
6010C	7439-89-6	Iron	mg/kg	26600	27800	21600	14000 J A	25900 J A	19700	25300	24500	
6010C	7439-92-1	Lead	mg/kg	11.2	6.52	4.19	7.60	6.29	6.18	5.48	4.54	
6010C	7439-93-2	Lithium	mg/kg	22.7	19.1	19.4	8.9 J A	21.3 J A	18.2	23.2	25.2	
6010C	7439-95-4	Magnesium	mg/kg	5690	5190	4870	5360	5750	4290	5030	5210	
6010C	7439-96-5	Manganese	mg/kg	299	219	303	225 J E	188 J E	232	379	303	
6010C	7439-98-7	Molybdenum	mg/kg	2.14 U F	2.22 U	2.15 U	4.69	2.27 U	2.25 U F	2.16 U F	2.10 U F	
6010C	7440-02-0	Nickel	mg/kg	15.4	13.8	11.0	9.98	14.5	10.5	13.1	13.6	
6010C	7440-09-7	Potassium	mg/kg	3140	2380	2840	1910 J Q	2490 J Q	2800 J Q	3240 J Q	3560 J Q	
6010C	7440-23-5	Sodium	mg/kg	152	297	152	528	211	335	336	112	
6010C	7440-31-5	Tin	mg/kg	10.7 U B	11.1 U B	10.8 U B	10.6 U B	11.3 U B	11.2 U B	10.8 U B	10.5 U B	
6010C	7440-32-6	Titanium	mg/kg	1180	1180	1320	804	1290	917	1380	1520	
6010C	7440-36-0	Antimony	mg/kg	4.27 UJ Q	4.44 UJ Q	4.30 UJ Q	1.18 J Q, Z	4.53 UJ Q	4.49 UJ Q	4.31 UJ Q	4.20 UJ Q	
6010C	7440-38-2	Arsenic	mg/kg	5.45	4.57	4.65	4.82	4.85	7.02	5.87	5.28	
6010C	7440-39-3	Barium	mg/kg	107	76.9	71.5	117	86.8	116	54.0	69.6	
6010C	7440-41-7	Beryllium	mg/kg	0.810 J Z	0.769 J Z	0.581 J Z	0.140 J Z	0.714 J Z	0.524 J Z	0.590 J Z	0.525 J Z	
6010C	7440-42-8	Boron	mg/kg	9.97 J Z	9.02 J Z	6.95 J Z	9.64 J Z	8.50 J Z	5.51 J Z	4.64 J Z	3.81 J Z	
6010C	7440-43-9	Cadmium	mg/kg	0.427 J Z	0.132 J Z	0.183 J Z	0.548 J Z	0.497 J Z	0.407 J Z	0.288 J Z	0.314 J Z	
6010C	7440-47-3	Chromium	mg/kg	29.4 J Q	28.1 J Q	21.1 J Q	18.4 J Q	26.7 J Q	18.4	20.0	21.0	
6010C	7440-48-4	Cobalt	mg/kg	7.23	5.43	5.03	4.15	5.75	4.31	6.61	6.68	
6010C	7440-50-8	Copper	mg/kg	16.3	12.1	9.44	16.9	13.9	10.1	9.85	7.95	
6010C	7440-62-2	Vanadium	mg/kg	53.1	51.0	43.2	34.2	49.2	35.9	42.5	41.5	
6010C	7440-66-6	Zinc	mg/kg	200 J E	63.8 J E	60.2 J E	44.0 J Q	58.4 J Q	48.2	54.3	53.9	
6010C	7440-67-7	Zirconium	mg/kg	5.66	4.89 J Z	4.38 J Z	9.81	2.90 J Z	5.61	4.77 J Z	4.13 J Z	
6010C	7440-70-2	Calcium	mg/kg	8420 J E	7520 J E	4240 J E	69200 J E	7720 J E	29900	4470	4350	
6010C	7723-14-0	Phosphorus	mg/kg	232 J Q	296 J Q	424 J Q	516	368	361 J Q	383 J Q	447 J Q	
6020A	7440-22-4	Silver	mg/kg	0.0820 J Z	0.0326 J Z	0.0339 J Z	0.0560 J Z	0.0354 J Z	0.0750 J Z	0.216 U	0.210 U	
6020A	7440-24-6	Strontium	mg/kg	45.2 J A	43.2 J A	25.2 J A	114	39.7	62.8 J E	26.3 J E	31.4 J E	
6020A	7440-28-0	Thallium	mg/kg	0.346	0.357	0.279	0.110 J Z	0.335	0.206 J Z	0.281	0.220	
6020A	7782-49-2	Selenium	mg/kg	0.427 U	0.444 U	0.430 U	0.280 J Z	0.453 U	0.449 U	0.431 U	0.420 U	

U-Compound not detected above reporting limit
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		Sample Name	SL-572-SA8-SB-0.0-0.5	SL-572-SA8-SB-4.0-5.0	SL-572-SA8-SB-9.0-10.0	SL-572-SA8-SB-14.0-15.0	SL-572-SA8-SB-18.5-19.5	SL-573-SA8-SB-0.0-0.5	SL-573-SA8-SB-4.0-5.0	SL-573-SA8-SB-9.5-10.5
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013
		SDG	PH064	PH064	PH064	PH064	PH064	PH064	PH064	PH064
		Start Depth	0	4	9	14	18.5	0	4	9.5
		End Depth	0.5	5	10	15	19.5	0.5	5	10.5
Analytic Method	CAS Number	Chemical Name	Unit							
6010C	7429-90-5	Aluminum	mg/kg	35000	26600	17600	19500	17100	16200	25100	12000
6010C	7439-89-6	Iron	mg/kg	33300	28200	22700	27600	25300	32300	25900	18000
6010C	7439-92-1	Lead	mg/kg	9.69	8.06	6.35	6.00	5.41	8.10	6.63	3.70
6010C	7439-93-2	Lithium	mg/kg	29.1	23.3	20.0	25.6	23.4	20.6	26.5	18.3
6010C	7439-95-4	Magnesium	mg/kg	7070	6170	4780	5440	5220	8470	5190	3790
6010C	7439-96-5	Manganese	mg/kg	687	366	322	264	309	438	286	300
6010C	7439-98-7	Molybdenum	mg/kg	2.33 U F	2.20 U F	2.17 U F	2.18 U F	2.19 U	2.29 U F	2.19 U F	2.07 U F
6010C	7440-02-0	Nickel	mg/kg	22.1	16.6	13.0	14.1	11.4	14.4	13.9	10.2
6010C	7440-09-7	Potassium	mg/kg	4060 J Q	3660 J Q	2860 J Q	2980 J Q	3020 J Q	3270 J Q	3020 J Q	2700 J Q
6010C	7440-23-5	Sodium	mg/kg	481	581	295	249	258	472	554	125
6010C	7440-31-5	Tin	mg/kg	11.7 U B	11.0 U B	10.9 U B	10.9 U B	11.0 U B	11.4 U B	11.0 U B	10.3 U B
6010C	7440-32-6	Titanium	mg/kg	1340	1520	1260	1460	1420	1670	1170	1110
6010C	7440-36-0	Antimony	mg/kg	0.944 J Q, Z	4.41 UJ Q	4.35 UJ Q	4.37 UJ Q	4.38 UJ Q	1.27 J Q, Z	4.39 UJ Q	4.14 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	4.37 J Z	5.76	6.06	6.32	5.97	2.91 J Z	5.94	5.77
6010C	7440-39-3	Barium	mg/kg	138	87.3	109	88.1	72.6	116	65.8	48.1
6010C	7440-41-7	Beryllium	mg/kg	1.03 J Z	0.808 J Z	0.573 J Z	0.643 J Z	0.584 J Z	0.583 J Z	0.751 J Z	0.422 J Z
6010C	7440-42-8	Boron	mg/kg	9.52 J Z	7.40 J Z	5.77 J Z	5.60 J Z	5.18 J Z	5.75 J Z	6.38 J Z	3.25 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.422 J Z	0.358 J Z	0.408 J Z	0.400 J Z	0.289 J Z	0.688 J Z	0.368 J Z	0.256 J Z
6010C	7440-47-3	Chromium	mg/kg	37.9	29.2	20.6	23.4	23.5	21.4	24.6	14.0
6010C	7440-48-4	Cobalt	mg/kg	10.6	7.76	6.15	6.54	5.14	8.85	5.90	5.66
6010C	7440-50-8	Copper	mg/kg	16.6	13.3	9.98	11.0	9.67	16.5	10.9	6.77
6010C	7440-62-2	Vanadium	mg/kg	66.9	52.6	41.0	50.9	44.3	63.5	47.0	29.3
6010C	7440-66-6	Zinc	mg/kg	66.2	63.3	52.6	60.5	55.8	64.3	52.5	42.8
6010C	7440-67-7	Zirconium	mg/kg	7.31	6.38	5.18 J Z	5.43 J Z	4.53 J Z	7.57	5.49	3.15 J Z
6010C	7440-70-2	Calcium	mg/kg	12100	14700	20600	4930	5510	24700	39800	4590
6010C	7723-14-0	Phosphorus	mg/kg	213 J Q	330 J Q	356 J Q	401 J Q	387 J Q	767 J Q	238 J Q	332 J Q
6020A	7440-22-4	Silver	mg/kg	0.0410 J Z	0.0463 J Z	0.217 U	0.0331 J Z	0.0509 J Z	0.229 U	0.0576 J Z	0.207 U
6020A	7440-24-6	Strontium	mg/kg	47.1 J E	42.4 J E	34.7 J E	34.8 J E	33.2 J E	67.1 J E	53.3 J E	17.3 J E
6020A	7440-28-0	Thallium	mg/kg	0.346	0.288	0.218	0.265	0.255	0.181 J Z	0.239	0.223
6020A	7782-49-2	Selenium	mg/kg	0.466 U	0.441 U	0.435 U	0.437 U	0.438 U	0.458 U	0.175 J Z	0.414 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-574-SA8-SB-0.0-0.5	SL-574-SA8-SB-4.0-5.0	SL-574-SA8-SB-9.0-10.0	SL-574-SA8-SB-14.0-15.0	SL-874-SA8-SB-14.0-15.0	SL-575-SA8-SB-0.0-0.5	SL-575-SA8-SB-4.0-5.0	SL-575-SA8-SB-9.0-10.0
				Sample Type	N	N	N	N	FD	N	N	N
				Sample Date	07/11/2013	07/11/2013	07/11/2013	07/11/2013	07/11/2013	08/07/2013	08/07/2013	08/07/2013
				SDG	PH065	PH065	PH065	PH065	PH065	PH086	PH086	PH086
				Start Depth	0	4	9	14	14	0	4	9
				End Depth	0.5	5	10	15	15	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	14400	29700	20200	18200	13600	29500	21900	18800	
6010C	7439-89-6	Iron	mg/kg	26500 J A	27200 J A	20100 J A	27600 J A	21200 J A	32500	20000	24000	
6010C	7439-92-1	Lead	mg/kg	6.17	7.91	4.39	6.13	4.56	14.2	6.98	5.90	
6010C	7439-93-2	Lithium	mg/kg	12.2 J A	27.7 J A	19.9 J A	26.1 J A	19.6 J A	24.8	20.6	21.2	
6010C	7439-95-4	Magnesium	mg/kg	4430	7720	4610	6550	4510	6350	4500	4970	
6010C	7439-96-5	Manganese	mg/kg	251 J E	341 J E	145 J E	328 J E	267 J E	500	235	312	
6010C	7439-98-7	Molybdenum	mg/kg	14.6	2.06 U	2.22 U	2.19 U	2.08 U	2.17 U	2.29 U F	2.24 U	
6010C	7440-02-0	Nickel	mg/kg	12.0	19.7	11.1	16.5	10.2	21.1	11.8	13.2	
6010C	7440-09-7	Potassium	mg/kg	2210 J Q	4040 J Q	2710 J Q	2720 J Q	2590 J Q	4290	2120	2720	
6010C	7440-23-5	Sodium	mg/kg	304	573	479	448	300	75.5 J Z	106 J Z	106 J Z	
6010C	7440-31-5	Tin	mg/kg	11.3 U B	10.3 U B	11.1 U B	11.0 U B	10.4 U B	10.8 U B	11.4 U B	11.2 U B	
6010C	7440-32-6	Titanium	mg/kg	850	1230	1180	1670	1390	1160	802	1280	
6010C	7440-36-0	Antimony	mg/kg	4.51 UJ Q	4.11 UJ Q	4.45 UJ Q	4.38 UJ Q	4.17 UJ Q	4.33 U	6.48	4.48 U	
6010C	7440-38-2	Arsenic	mg/kg	4.61	4.95	4.95	6.86	5.89	2.89 J Z	4.38 J Z	2.29 J Z	
6010C	7440-39-3	Barium	mg/kg	110	159	66.9	89.1	65.5	130	87.3	82.9	
6010C	7440-41-7	Beryllium	mg/kg	0.368 J Z	0.854 J Z	0.652 J Z	0.681 J Z	0.493 J Z	0.931 J Z	0.312 J Z	0.709 J Z	
6010C	7440-42-8	Boron	mg/kg	9.30 J Z	11.1	5.92 J Z	5.22 J Z	4.00 J Z	16.6	13.5	12.1	
6010C	7440-43-9	Cadmium	mg/kg	0.764 J Z	0.439 J Z	0.345 J Z	0.508 J Z	0.447 J Z	0.337 J Z	0.136 J Z	0.115 J Z	
6010C	7440-47-3	Chromium	mg/kg	19.5 J Q	33.7 J Q	21.2 J Q	31.9 J Q	19.4 J Q	35.2	24.1	23.2	
6010C	7440-48-4	Cobalt	mg/kg	4.57	9.51	3.89	9.05	6.20	10.0	5.24	6.19	
6010C	7440-50-8	Copper	mg/kg	15.2	15.7	11.2	16.8	11.0	21.8	13.7	16.3	
6010C	7440-62-2	Vanadium	mg/kg	42.7	66.2	39.4	54.4	41.4	66.1	43.6	47.4	
6010C	7440-66-6	Zinc	mg/kg	77.7 J Q	62.4 J Q	45.7 J Q	75.1 J Q	52.6 J Q	88.4	40.2	49.4	
6010C	7440-67-7	Zirconium	mg/kg	4.46 J Z	4.00 J Z	1.89 J Z	5.48 UJ FD	1.50 J FD, Z	3.13 J Z	2.65 J Z	2.01 J Z	
6010C	7440-70-2	Calcium	mg/kg	27900 J E	7560 J E	11900 J E	9730 J FD, E	5690 J FD, E	6930	182000	8860	
6010C	7723-14-0	Phosphorus	mg/kg	512	303	196	683	417	280	184	436	
6020A	7440-22-4	Silver	mg/kg	0.0390 J Z	0.0400 J Z	0.222 U	0.219 U	0.208 U	0.0579 J Z	0.0864 J Z	0.0470 J Z	
6020A	7440-24-6	Strontium	mg/kg	68.5	45.8	31.1	38.7	24.5	48.2	78.8	43.4	
6020A	7440-28-0	Thallium	mg/kg	0.155 J Z	0.296	0.259	0.408	0.303	0.464	0.352	0.369	
6020A	7782-49-2	Selenium	mg/kg	0.657	0.411 U	0.445 U	0.438 U	0.417 U	0.262 J Z	0.457 U	0.448 U	

U-Compound not detected above reporting limit
J-Result is an estimated value
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		Sample Name	SL-578-SA8-SB-0.0-0.5	SL-578-SA8-SB-4.0-5.0	SL-878-SA8-SB-4.0-5.0	SL-578-SA8-SB-9.0-10.0	SL-580-SA8-SB-0.0-0.5	SL-580-SA8-SB-4.0-5.0	SL-580-SA8-SB-10.5-11.5	SL-581-SA8-SB-0.0-0.5
		Sample Type	N	N	FD	N	N	N	N	N
		Sample Date	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013
		SDG	PH066	PH066	PH066	PH066	PH066	PH066	PH066	PH066
		Start Depth	0	4	4	9	0	4	10.5	0
		End Depth	0.5	5	5	10	0.5	5	11.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
6010C	7429-90-5	Aluminum	mg/kg	20900	25300	31500	12300	21600	22500	14600	24200
6010C	7439-89-6	Iron	mg/kg	28000	27500	32600	23700	26200	25700	24900	26300
6010C	7439-92-1	Lead	mg/kg	7.44	8.58	8.91	3.31	6.65	7.36	4.88	9.00
6010C	7439-93-2	Lithium	mg/kg	26.4	20.5	24.3	29.0	24.0	20.5	18.9	20.4
6010C	7439-95-4	Magnesium	mg/kg	6070	5560	6350	6140	5360	5240	4010	5110
6010C	7439-96-5	Manganese	mg/kg	534 J E, A	373 J E, A	524 J E, A	419 J E, A	306 J E, A	435 J E, A	245 J E, A	438 J E, A
6010C	7439-98-7	Molybdenum	mg/kg	2.13 U F	2.22 U F	2.15 U F	2.09 U	2.19 U F	2.10 U F	2.09 U F	2.08 U F
6010C	7440-02-0	Nickel	mg/kg	18.1	17.9	20.8	12.5	14.9	16.2	12.1	17.1
6010C	7440-09-7	Potassium	mg/kg	3060	5200	5300	2630	2800	4540	1800	4870
6010C	7440-23-5	Sodium	mg/kg	187	214	207	116	99.2 J Z	148	117	77.6 J Z
6010C	7440-31-5	Tin	mg/kg	10.6 U B	11.1 U B	10.7 U B	10.5 U B	10.9 U B	10.5 U B	10.4 U B	10.4 U B
6010C	7440-32-6	Titanium	mg/kg	1350	1210	1340	1590	1200	1200	1120	1310
6010C	7440-36-0	Antimony	mg/kg	4.25 UJ Q, E	4.44 UJ Q, E	4.30 UJ Q, E	4.18 UJ Q, E	4.37 UJ Q, E	4.21 UJ Q, E	4.17 UJ Q, E	4.16 UJ Q, E
6010C	7440-38-2	Arsenic	mg/kg	5.80	5.71	6.49	5.05	5.86	4.99	8.23	5.41
6010C	7440-39-3	Barium	mg/kg	118 J A	116 J A	135 J A	87.1 J A	101 J A	125 J A	69.8 J A	119 J A
6010C	7440-41-7	Beryllium	mg/kg	0.735 J Z	0.830 J Z	1.02 J Z	0.440 J Z	0.754 J Z	0.769 J Z	0.609 J Z	0.810 J Z
6010C	7440-42-8	Boron	mg/kg	1.97 J Z	2.75 J Z	3.04 J Z	10.5 U	2.49 J Z	4.29 J Z	10.4 U	2.82 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.371 J Z	0.533 J Z	0.408 J Z	0.351 J Z	0.303 J Z	0.449 J Z	0.321 J Z	0.496 J Z
6010C	7440-47-3	Chromium	mg/kg	29.9 J Q	29.7 J Q	36.2 J Q	21.2 J Q	26.6 J Q	26.8 J Q	19.8 J Q	28.8 J Q
6010C	7440-48-4	Cobalt	mg/kg	11.4	8.52	10.1	5.81	6.70	8.00	4.53	8.01
6010C	7440-50-8	Copper	mg/kg	23.4 J A	16.9 J A	17.7 J A	7.74 J A	11.1 J A	15.3 J A	9.10 J A	16.1 J A
6010C	7440-62-2	Vanadium	mg/kg	52.2 J Q	55.0 J Q	66.8 J Q	44.2 J Q	49.6 J Q	50.0 J Q	42.4 J Q	54.2 J Q
6010C	7440-66-6	Zinc	mg/kg	70.4	65.4	70.2	58.6	57.1	63.6	52.5	63.2
6010C	7440-67-7	Zirconium	mg/kg	5.66	7.25	7.25	3.63 J Z	5.13 J Z	6.17	4.17 J Z	5.56
6010C	7440-70-2	Calcium	mg/kg	10300	5110	5050	5280	6900	6050	4860	4080
6010C	7723-14-0	Phosphorus	mg/kg	365 J Q	286 J Q	242 J Q	499 J Q	300 J Q	306 J Q	326 J Q	248 J Q
6020A	7440-22-4	Silver	mg/kg	0.0890 J Q, Z	0.0557 J Q, Z	0.0645 J Q, Z	0.209 U	0.219 U	0.0404 J Q, Z	0.209 U	0.0503 J Q, Z
6020A	7440-24-6	Strontium	mg/kg	31.5 J Q	33.4 J Q	34.1 J Q	20.8 J Q	29.5 J Q	32.9 J Q	20.4 J Q	28.7 J Q
6020A	7440-28-0	Thallium	mg/kg	0.368 J Q	0.402 J Q	0.588 J Q	0.415 J Q	0.364 J Q	0.441 J Q	0.320 J Q	0.457 J Q
6020A	7782-49-2	Selenium	mg/kg	0.425 UJ E	0.277 J Q, E, Z	0.326 J Q, E, Z	0.146 J Q, E, Z	0.123 J Q, E, Z	0.247 J Q, E, Z	0.105 J Q, E, Z	0.207 J Q, E, Z

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				Sample Name	SL-581-SA8-SB-4.5-5.5	SL-582-SA8-SB-0.0-0.5	SL-582-SA8-SB-2.5-3.5	SL-583-SA8-SB-0.0-0.5	SL-883-SA8-SB-0.0-0.5	SL-584-SA8-SB-0.0-0.5	SL-585-SA8-SB-0.0-0.5	SL-586-SA8-SB-0.0-0.5	SL-587-SA8-SB-0.0-0.5
				Sample Type	N	N	N	N	FD	N	N	N	N
				Sample Date	07/12/2013	08/06/2013	08/06/2013	08/06/2013	08/06/2013	08/06/2013	08/12/2013	07/08/2013	07/12/2013
				SDG	PH066	PH085	PH085	PH085	PH085	PH085	PH089	PH062	PH066
				Start Depth	4.5	0	2.5	0	0	0	0	0	0
				End Depth	5.5	0.5	3.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
6010C	7429-90-5	Aluminum	mg/kg	11200	19400	21900	18000	18800	21000	16800	16700	15200
6010C	7439-89-6	Iron	mg/kg	20900	22400	23900	20400	21000	20800	19500	19400	19000
6010C	7439-92-1	Lead	mg/kg	3.38	18.0 J Q	8.15 J Q	15.4 J FD, Q	27.3 J FD, Q	8.83 J Q	9.57	10.3	4.49
6010C	7439-93-2	Lithium	mg/kg	21.4	19.7 J A	20.1 J A	19.6 J A	20.4 J A	23.1 J A	20.1	23.2	20.1
6010C	7439-95-4	Magnesium	mg/kg	4800	5670	4620	4040	4130	3890	3380	3960	4090
6010C	7439-96-5	Manganese	mg/kg	251 J E, A	355	235	288	296	300	330	427	322 J E, A
6010C	7439-98-7	Molybdenum	mg/kg	1.96 U F	2.11 U F, B	2.10 U F, B	2.00 UJ F, FD, B	2.05 UJ F, FD, B	2.01 U F, B	1.99 U F	2.06 U F, B	1.94 U F
6010C	7440-02-0	Nickel	mg/kg	9.72	14.2	14.1	11.8	12.8	10.9	9.79	11.4	10.8
6010C	7440-09-7	Potassium	mg/kg	2460	3860 J Q	3770 J Q	3290 J Q	3440 J Q	3560 J Q	4170	3690 J E, Q	3950
6010C	7440-23-5	Sodium	mg/kg	86.7 J Z	65.6 J Z	69.8 J Z	64.5 J Z	66.7 J Z	64.0 J Z	71.9 J Z	84.2 J Z	67.7 J Z
6010C	7440-31-5	Tin	mg/kg	9.81 U B	10.5 U B	10.5 U B	9.99 U B	10.2 U B	10.0 U B	9.97 U B	10.3 U B	9.69 U B
6010C	7440-32-6	Titanium	mg/kg	1150	1030	1090	980	1050	1070	1130	1030	1220
6010C	7440-36-0	Antimony	mg/kg	3.92 UJ Q, E	2.05 J Q, Z	4.21 UJ Q	4.00 UJ FD, Q	8.98 J FD, Q	4.01 UJ Q	3.99 UJ Q	4.12 UJ Q	3.88 UJ Q, E
6010C	7440-38-2	Arsenic	mg/kg	5.45	2.89 J Z	2.37 J Z	1.72 J Z	2.32 J Z	2.82 J Z	4.73	5.79	3.51 J Z
6010C	7440-39-3	Barium	mg/kg	71.1 J A	111	118	92.1	93.7	111	115	101	112 J A
6010C	7440-41-7	Beryllium	mg/kg	0.418 J Z	0.680 J Z	0.784 J Z	0.621 J Z	0.614 J Z	0.674 J Z	0.598 J Z	0.548 J Z	0.542 J Z
6010C	7440-42-8	Boron	mg/kg	9.81 U	13.9	12.7	12.2	12.9	12.6	9.97 U F	4.37 J Z	0.814 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.294 J Z	0.594 J Z	0.253 J Z	0.584 J FD, Z	1.39 J FD	0.164 J Z	0.0927 J Z	0.535 J Z	0.360 J Z
6010C	7440-47-3	Chromium	mg/kg	18.1 J Q	23.6	23.9	20.0	22.6	18.1	14.7	17.8	18.3 J Q
6010C	7440-48-4	Cobalt	mg/kg	5.09	6.96 J A	6.78 J A	5.46 J A	5.76 J A	5.11 J A	4.74	5.50	4.75
6010C	7440-50-8	Copper	mg/kg	7.24 J A	20.4	17.3	14.8	17.2	13.0	9.31	11.2	9.63 J A
6010C	7440-62-2	Vanadium	mg/kg	37.4 J Q	43.9	44.5	37.0	39.0	35.1	27.5	33.8	31.7 J Q
6010C	7440-66-6	Zinc	mg/kg	58.5	179 J Q, E	59.7 J Q, E	106 J FD, Q, E	219 J FD, Q, E	117 J Q, E	67.9	101 J E	60.6
6010C	7440-67-7	Zirconium	mg/kg	3.05 J Z	2.32 J Z	1.86 J Z	2.53 J Z	1.94 J Z	0.847 J Z	2.73 J Z	3.99 J Z	3.20 J Z
6010C	7440-70-2	Calcium	mg/kg	3380	4520	2190	3380	3400	2260	2390	3660 J E	2060
6010C	7723-14-0	Phosphorus	mg/kg	384 J Q	311	346	416	443	359	503 J Q	452	574 J Q
6020A	7440-22-4	Silver	mg/kg	0.196 U	0.0849 J Q, E, Z	0.0375 J Q, E, Z	0.0432 J FD, Q, E, Z	0.101 J FD, Q, E, Z	0.0339 J Q, E, Z	0.0440 J Z	0.0427 J Z	0.194 U
6020A	7440-24-6	Strontium	mg/kg	15.6 J Q	29.8 J E, Q	38.2 J E, Q	23.4 J E, Q	34.7 J E, Q	31.0 J E, Q	30.2 J E	25.7 J E	17.8 J Q
6020A	7440-28-0	Thallium	mg/kg	0.298 J Q	0.399 J Q, E	0.443 J Q, E	0.262 J Q, E	0.381 J Q, E	0.338 J Q, E	0.321 J Q	0.252	0.285 J Q
6020A	7782-49-2	Selenium	mg/kg	0.392 UJ E	0.219 J Q, Z	0.275 J Q, Z	0.144 J Q, Z	0.215 J Q, Z	0.241 J Q, Z	0.191 J Z	0.139 J Z	0.107 J Q, E, Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-587-SA8-SB-6.5-7.5	SL-588-SA8-SB-0.0-0.5	SL-888-SA8-SB-0.0-0.5	SL-588-SA8-SB-2.0-3.0	SL-589-SA8-SB-0.0-0.5	SL-589-SA8-SB-2.5-3.5	SL-590-SA8-SB-4.0-5.0	SL-590-SA8-SB-7.0-8.0	SL-591-SA8-SB-0.0-0.5
				Sample Type	N	N	FD	N	N	N	N	N	N
				Sample Date	07/12/2013	07/08/2013	07/08/2013	07/08/2013	07/30/2013	07/30/2013	08/12/2013	08/12/2013	08/12/2013
				SDG	PH066	PH062	PH062	PH062	PH080	PH080	PH089	PH089	PH089
				Start Depth	6.5	0	0	2	0	2.5	4	7	0
				End Depth	7.5	0.5	0.5	3	0.5	3.5	5	8	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
6010C	7429-90-5	Aluminum	mg/kg	14800	16000	16600	18200	16200	16200	18000	16300	15200	
6010C	7439-89-6	Iron	mg/kg	15400	17100	18000	18500	20200	19400	21400	22500	19500	
6010C	7439-92-1	Lead	mg/kg	3.47	9.00	8.79	6.44	6.22	5.88	7.12	5.45	9.74	
6010C	7439-93-2	Lithium	mg/kg	20.4	20.1	21.1	22.0	21.0	20.6	23.4	18.6	23.9	
6010C	7439-95-4	Magnesium	mg/kg	3380	3500	3680	3710	4110	3920	4890	5430	4270	
6010C	7439-96-5	Manganese	mg/kg	144 J E, A	325	341	322	303	265	270	228	343	
6010C	7439-98-7	Molybdenum	mg/kg	1.99 U	1.98 U F, B	1.98 U F, B	2.04 U F, B	2.06 U F, B	2.03 U F, B	2.04 U F	2.04 U F	2.00 U F	
6010C	7440-02-0	Nickel	mg/kg	6.82	10.3	10.5	13.6	12.0	10.1	14.0	9.60	10.8	
6010C	7440-09-7	Potassium	mg/kg	1710	3690 J E, Q	3950 J E, Q	3500 J E, Q	2450	2180	3100	1960	3430	
6010C	7440-23-5	Sodium	mg/kg	111	66.5 J Z	67.3 J Z	74.3 J Z	85.8 J Z	87.2 J Z	102	147	79.3 J Z	
6010C	7440-31-5	Tin	mg/kg	9.94 U B	9.90 U B	9.90 U B	10.2 U B	10.3 U B	10.1 U B	10.2 U B	10.2 U B	10.0 U B	
6010C	7440-32-6	Titanium	mg/kg	1100	1020	1050	1030	1170	1110	1260	1500	1270	
6010C	7440-36-0	Antimony	mg/kg	3.98 UJ Q, E	3.96 UJ Q	3.96 UJ Q	4.08 UJ Q	4.11 U	4.06 U	4.09 UJ Q	4.08 UJ Q	4.01 UJ Q	
6010C	7440-38-2	Arsenic	mg/kg	3.25 J Z	4.15	4.22	4.33	2.41 J Z	2.72 J Z	5.52	5.31	4.91	
6010C	7440-39-3	Barium	mg/kg	66.0 J A	103	109	103	109	99.3	95.9	64.4	96.9	
6010C	7440-41-7	Beryllium	mg/kg	0.483 J Z	0.522 J Z	0.551 J Z	0.604 J Z	0.628 J Z	0.615 J Z	0.628 J Z	0.550 J Z	0.541 J Z	
6010C	7440-42-8	Boron	mg/kg	9.94 U	2.63 J Z	2.49 J Z	2.18 J Z	1.52 J Z	1.32 J Z	10.2 U F	10.2 U F	10.0 U F	
6010C	7440-43-9	Cadmium	mg/kg	0.203 J Z	0.423 J Z	0.441 J Z	0.393 J Z	0.147 J Z	0.0842 J Z	1.02 U	1.02 U	0.104 J Z	
6010C	7440-47-3	Chromium	mg/kg	14.7 J Q	16.0	16.5	22.7	20.2	18.1	25.0	21.8	18.1	
6010C	7440-48-4	Cobalt	mg/kg	2.72	4.35	4.55	4.66	5.30	4.78	5.35	5.23	4.95	
6010C	7440-50-8	Copper	mg/kg	5.33 J A	10.4	10.7	10.9	14.4	12.9	9.19	9.16	8.69	
6010C	7440-62-2	Vanadium	mg/kg	26.9 J Q	28.9	30.7	31.5	37.5	36.3	37.9	41.3	32.8	
6010C	7440-66-6	Zinc	mg/kg	37.0	62.4 J E	65.2 J E	61.9 J E	48.6	44.6	50.4	49.4	59.1	
6010C	7440-67-7	Zirconium	mg/kg	2.46 J Z	3.62 J Z	3.65 J Z	3.40 J Z	5.14 U	5.07 U	3.91 J Z	4.30 J Z	2.35 J Z	
6010C	7440-70-2	Calcium	mg/kg	1750	2210 J E	2320 J E	2060 J E	2910	2680	2670	3140	2890	
6010C	7723-14-0	Phosphorus	mg/kg	166 J Q	493	501	484	243	245	365 J Q	403 J Q	500 J Q	
6020A	7440-22-4	Silver	mg/kg	0.0650 J Q, Z	0.0326 J Z	0.0312 J Z	0.0476 J Z	0.0306 J Z	0.0302 J Z	0.0470 J Z	0.204 U	0.0407 J Z	
6020A	7440-24-6	Strontium	mg/kg	17.3 J Q	19.3 J E	20.8 J E	20.0 J E	21.8	21.2	28.8 J E	25.2 J E	23.4 J E	
6020A	7440-28-0	Thallium	mg/kg	0.269 J Q	0.240	0.249	0.254	0.282	0.237	0.338 J Q	0.273 J Q	0.241 J Q	
6020A	7782-49-2	Selenium	mg/kg	0.398 UJ E	0.102 J FD, Z	0.181 J FD, Z	0.408 U	0.163 J Z	0.128 J Z	0.165 J Z	0.116 J Z	0.142 J Z	

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-592-SA8-SB-0.0-0.5	SL-592-SA8-SB-3.5-4.5	SL-593-SA8-SB-0.0-0.5	SL-593-SA8-SB-4.0-5.0	SL-594-SA8-SB-0.0-0.5	SL-595-SA8-SB-0.0-0.5	SL-596-SA8-SB-0.0-0.5	SL-597-SA8-SB-0.0-0.5	SL-600-SA8-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/15/2013	08/15/2013	07/30/2013	08/15/2013	08/14/2013
				SDG	PH089	PH089	PH089	PH089	PH092	PH092	PH080	PH092	PH091
				Start Depth	0	3.5	0	4	0	0	0	0	0
				End Depth	0.5	4.5	0.5	5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
6010C	7429-90-5	Aluminum	mg/kg	17200	15200	14700	17500	14500	16000	14300	16300	20600	
6010C	7439-89-6	Iron	mg/kg	22000	22900	20100	22400	21100	22100	20100	24400	26500	
6010C	7439-92-1	Lead	mg/kg	9.10	6.02	15.3	7.45	8.75	11.6	5.40	9.25	14.1	
6010C	7439-93-2	Lithium	mg/kg	24.1	21.0	22.4	25.9	26.4	24.6	24.8	29.2	22.5	
6010C	7439-95-4	Magnesium	mg/kg	4360	4670	4080	4580	4570	4620	4680	5790	7160	
6010C	7439-96-5	Manganese	mg/kg	367	356	323	319	305	328	298	352	475	
6010C	7439-98-7	Molybdenum	mg/kg	2.01 U F	2.00 U F	2.01 U F	2.06 U F	1.95 U F	1.95 U F	1.98 U F, B	1.97 U F	1.99 U F	
6010C	7440-02-0	Nickel	mg/kg	12.6	9.42	11.3	11.6	10.3	11.2	9.78	13.4	17.8	
6010C	7440-09-7	Potassium	mg/kg	3820	2590	3550	3200	3170	3450	2920	4350	5690	
6010C	7440-23-5	Sodium	mg/kg	75.1 J Z	173	74.5 J Z	86.3 J Z	80.3 J Z	76.2 J Z	80.2 J Z	67.7 J Z	93.3 J Z	
6010C	7440-31-5	Tin	mg/kg	10.0 U B	10.0 U B	10.0 U B	10.3 U B	9.73 U B	9.76 U B	9.92 U B	9.85 U B	9.97 U B	
6010C	7440-32-6	Titanium	mg/kg	1360	1240	1170	1260	1130	1230	1160	1420	974	
6010C	7440-36-0	Antimony	mg/kg	4.01 UJ Q	4.00 UJ Q	4.02 UJ Q	4.13 UJ Q	3.89 UJ Q	3.90 UJ Q	3.97 U	3.94 UJ Q	3.99 UJ Q	
6010C	7440-38-2	Arsenic	mg/kg	5.16	4.98	5.02	5.44	4.64	4.67	2.63 J Z	4.55	5.47	
6010C	7440-39-3	Barium	mg/kg	103	63.3	92.8	86.8	89.7	94.1	74.6	107	89.1	
6010C	7440-41-7	Beryllium	mg/kg	0.646 J Z	0.630 J Z	0.539 J Z	0.642 J Z	0.486 J Z	0.549 J Z	0.534 J Z	0.557 J Z	0.692 J Z	
6010C	7440-42-8	Boron	mg/kg	10.0 U F	10.0 U F	10.0 U F	10.3 U F	9.73 U F	5.66 J Z	1.04 J Z	5.50 J Z	15.7	
6010C	7440-43-9	Cadmium	mg/kg	1.00 U	1.00 U	0.119 J Z	1.03 U	0.290 J Z	0.321 J Z	0.113 J Z	0.405 J Z	0.647 J Z	
6010C	7440-47-3	Chromium	mg/kg	20.2	21.1	18.0	19.8	19.4 J Q	20.0 J Q	17.7	22.6 J Q	29.9 J Q	
6010C	7440-48-4	Cobalt	mg/kg	5.71	5.99	4.96	5.54	5.23	6.12	4.92	6.29	8.81	
6010C	7440-50-8	Copper	mg/kg	9.63	7.22	9.67	8.68	8.48 J A	10.3 J A	12.4	10.6 J A	19.1 J A	
6010C	7440-62-2	Vanadium	mg/kg	37.4	38.3	33.0	38.3	32.7 J Q	36.1 J Q	35.9	44.2 J Q	49.1 J Q	
6010C	7440-66-6	Zinc	mg/kg	55.5	47.0	75.6	58.0	68.9	65.6	49.2	60.8	70.7	
6010C	7440-67-7	Zirconium	mg/kg	2.56 J Z	2.77 J Z	2.35 J Z	2.77 J Z	3.49 J Z	3.90 J Z	4.96 U	4.28 J Z	3.86 J Z	
6010C	7440-70-2	Calcium	mg/kg	2730	2290	2760	2440	4040	3230	2400	2980	62300	
6010C	7723-14-0	Phosphorus	mg/kg	407 J Q	258 J Q	477 J Q	558 J Q	337	370	372	578	707	
6020A	7440-22-4	Silver	mg/kg	0.0479 J Z	0.0378 J Z	0.0479 J Z	0.0448 J Z	0.195 U	0.195 U	0.0310 J Z	0.0577 J Z	0.0273 J Z	
6020A	7440-24-6	Strontium	mg/kg	29.5 J E	19.0 J E	22.4 J E	20.5 J E	17.6	16.2	14.3	18.6	80.9	
6020A	7440-28-0	Thallium	mg/kg	0.318 J Q	0.341 J Q	0.264 J Q	0.277 J Q	0.273	0.240	0.229	0.250	0.296	
6020A	7782-49-2	Selenium	mg/kg	0.172 J Z	0.364 J Z	0.166 J Z	0.212 J Z	0.140 J Z	0.126 J Z	0.201 J Z	0.152 J Z	0.416	

U-Compound not detected above reporting limit
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		Sample Name	SL-600-SA8-SB-4.0-5.0	SL-601-SA8-SB-0.0-0.5	SL-601-SA8-SB-4.0-5.0	SL-602-SA8-SB-0.0-0.5	SL-602-SA8-SB-4.0-5.0	SL-604-SA8-SB-0.0-0.5	SL-904-SA8-SB-0.0-0.5	SL-605-SA8-SB-0.0-0.5	SL-606-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	N	N	FD	N	N
		Sample Date	08/14/2013	07/18/2013	07/18/2013	08/14/2013	08/14/2013	08/29/2013	08/29/2013	08/29/2013	07/19/2013
		SDG	PH091	PH070	PH070	PH091	PH091	PH097	PH097	PH097	PH071
		Start Depth	4	0	4	0	4	0	0	0	0
		End Depth	5	0.5	5	0.5	5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	24100	19800	18300	19200	21400	1980 J E	3310 J E	2680 J E	29700
6010C	7439-89-6	Iron	mg/kg	28500	22800	20400	25500	25500	1750 J FD, E	3540 J FD, E	2840 J E	32500 J A
6010C	7439-92-1	Lead	mg/kg	11.1	8.58	6.36	16.7	11.6	3.47 J Z	2.97 J Z	4.73 J Z	22.4
6010C	7439-93-2	Lithium	mg/kg	25.3	24.5	26.3	18.5	22.5	3.8 J Z	5.5 J Z	4.3 J Z	24.1 J A
6010C	7439-95-4	Magnesium	mg/kg	7250	6340	4370	6780	7110	1930	2160	2460	7910
6010C	7439-96-5	Manganese	mg/kg	477	423	344	437	381	31.9 J FD, E	59.1 J FD, E	47.0 J E	497
6010C	7439-98-7	Molybdenum	mg/kg	2.13 U F	2.04 U F	2.04 U F	2.07 U F	2.12 U F	1.99 UJ F, FD	1.96 UJ FD	2.01 U	2.14 U
6010C	7440-02-0	Nickel	mg/kg	19.4	15.0	12.3	17.2	16.8	2.14 J FD	3.83 J FD	3.08	20.9
6010C	7440-09-7	Potassium	mg/kg	4490	4600	3970	6180	4650	325 J Q	480 J Q	621 J Q	6080
6010C	7440-23-5	Sodium	mg/kg	99.9 J Z	93.6 J Z	92.7 J Z	101 J Z	113	152	132	168	77.9 J Z
6010C	7440-31-5	Tin	mg/kg	10.7 U B	10.2 U B	10.2 U B	10.3 U B	10.6 U B	9.96 U B	9.78 U B	10.1 U B	10.7 U B
6010C	7440-32-6	Titanium	mg/kg	1070	909	1020	917	1020	73.0 J E, Q	120 J E, Q	126 J E, Q	1380
6010C	7440-36-0	Antimony	mg/kg	4.26 UJ Q	4.08 U	4.07 U	0.811 J Q, Z	4.24 UJ Q	3.98 U	3.91 U	4.03 U	4.28 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	5.85	8.07	7.14	5.96	6.20	3.98 U B	2.78 J Z	2.05 J Z	7.52
6010C	7440-39-3	Barium	mg/kg	102	77.4	88.3	86.6	83.2	59.4	58.6	69.2	109
6010C	7440-41-7	Beryllium	mg/kg	0.756 J Z	0.790 J Z	0.730 J Z	0.638 J Z	0.643 J Z	0.996 U	0.978 U	1.01 U	0.915 J Z
6010C	7440-42-8	Boron	mg/kg	14.3	9.22 J Z	10.2 U B	17.1	14.2	4.65 J Z	5.52 J Z	5.77 J Z	10.7 U
6010C	7440-43-9	Cadmium	mg/kg	0.633 J Z	0.599 J Z	0.412 J Z	0.697 J Z	0.625 J Z	0.110 J Z	0.174 J Z	0.211 J Z	1.07 U
6010C	7440-47-3	Chromium	mg/kg	33.0 J Q	26.4	19.4	27.4 J Q	29.1 J Q	2.89 J Z	4.73	4.11	38.7
6010C	7440-48-4	Cobalt	mg/kg	9.33	7.14	6.05	8.91	8.52	0.584 J FD, Z	1.43 J FD	0.961 J Z	9.71
6010C	7440-50-8	Copper	mg/kg	19.0 J A	15.4	10.0	20.1 J A	19.7 J A	2.11 J Z	3.39 J Z	4.91 J Z	25.7
6010C	7440-62-2	Vanadium	mg/kg	55.5 J Q	47.5	40.1	45.9 J Q	50.2 J Q	5.27 J FD, E	9.27 J FD, E	7.62 J E	67.1
6010C	7440-66-6	Zinc	mg/kg	68.3	66.1	56.3	73.6	65.9	6.43 J FD, Z	11.8 J FD, Z	19.5 J Z	79.0
6010C	7440-67-7	Zirconium	mg/kg	4.65 J Z	2.94 J Z	3.65 J Z	4.34 J Z	5.12 J Z	1.26 J Z	0.963 J Z	5.03 U	3.21 J Z
6010C	7440-70-2	Calcium	mg/kg	68100	39500	14000	75300	107000	358000	305000	323000	12400
6010C	7723-14-0	Phosphorus	mg/kg	589	671	300	730	599	146	140	186	591
6020A	7440-22-4	Silver	mg/kg	0.0339 J Z	0.0287 J Z	0.0299 J Z	0.0351 J Z	0.212 U	0.199 UJ FD	0.0382 J FD, Z	0.227	0.0589 J Z
6020A	7440-24-6	Strontium	mg/kg	79.6	59.1	23.2	98.6	136	189	185	209	38.4 J Q
6020A	7440-28-0	Thallium	mg/kg	0.309	0.347	0.359	0.240	0.258	0.199 UJ FD	0.0378 J FD, Z	0.0469 J Z	0.307 J Q
6020A	7782-49-2	Selenium	mg/kg	0.225 J Z	0.248 J Z	0.123 J Z	0.301 J Z	0.300 J Z	0.398 UJ FD	0.114 J FD, Z	0.124 J Z	0.239 J Z

U-Compound not detected above reporting limit
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R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-606-SA8-SB-4.0-5.0	SL-607-SA8-SB-0.0-0.5	SL-607-SA8-SB-5.0-6.0	SL-608-SA8-SB-0.0-0.5	SL-608-SA8-SB-4.0-5.0	SL-608-SA8-SB-7.0-8.0	SL-609-SA8-SB-0.0-0.5	SL-609-SA8-SB-4.0-5.0	SL-610-SA8-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	07/19/2013	08/09/2013	08/09/2013	08/01/2013	08/01/2013	08/01/2013	08/13/2013	08/13/2013	08/01/2013
				SDG	PH071	PH088	PH088	PH082	PH082	PH082	PH090	PH090	PH082
				Start Depth	4	0	5	0	4	7	0	4	0
				End Depth	5	0.5	6	0.5	5	8	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
6010C	7429-90-5	Aluminum	mg/kg	34100	25500	20800	24100	27800	28100	29700	30500	21300
6010C	7439-89-6	Iron	mg/kg	37200 J A	33500	19000	32900	37500	35500	35400	33800	30800
6010C	7439-92-1	Lead	mg/kg	13.3	27.4	7.40	11.2	11.4	10.4	15.8	14.0	13.1
6010C	7439-93-2	Lithium	mg/kg	28.8 J A	21.6	25.1	25.8	30.7	30.9	28.5	31.0	21.6
6010C	7439-95-4	Magnesium	mg/kg	8380	7850	5980	8070	8650	8680	9350	9020	6990
6010C	7439-96-5	Manganese	mg/kg	470	413	427	367	382	391	369	281	360
6010C	7439-98-7	Molybdenum	mg/kg	2.23 U	2.05 U F	2.14 U	1.98 U	2.17 U F	2.15 U	2.08 U F	2.20 U	2.06 U F
6010C	7440-02-0	Nickel	mg/kg	22.1	17.9 J A	12.9 J A	16.3	18.4	18.1	21.3	19.3	15.3
6010C	7440-09-7	Potassium	mg/kg	3470	6440 J Q	2010 J Q	6190	5580	5340	7800	4290	5990
6010C	7440-23-5	Sodium	mg/kg	108 J Z	107	103 J Z	136	226	238	119	169	113
6010C	7440-31-5	Tin	mg/kg	11.1 U B	10.3 U B	10.7 U B	9.89 U B	10.9 U B	10.7 U B	10.4 U B	11.0 U B	10.3 U B
6010C	7440-32-6	Titanium	mg/kg	1510	1290	794	1210	1250	1310	1570	1540	1060
6010C	7440-36-0	Antimony	mg/kg	4.46 UJ Q	0.791 J Q, Z	4.29 UJ Q	3.96 UJ Q	4.34 UJ Q	4.30 UJ Q	4.17 UJ Q	4.39 UJ Q	4.12 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	8.53	5.19	6.16	4.88	5.68	5.73	2.82 J Z	4.34 J Z	4.26
6010C	7440-39-3	Barium	mg/kg	121	96.1	85.7	100	115	112	124	123	88.1
6010C	7440-41-7	Beryllium	mg/kg	1.03 J Z	0.805 J Z	0.448 J Z	0.721 J Z	0.837 J Z	0.787 J Z	0.923 J Z	0.857 J Z	0.618 J Z
6010C	7440-42-8	Boron	mg/kg	11.1 U	13.5	8.28 J Z	21.1	20.5	20.6	18.6	13.1	21.2
6010C	7440-43-9	Cadmium	mg/kg	1.11 U	0.182 J Z	0.303 J Z	0.193 J Z	0.172 J Z	0.226 J Z	1.04 U	1.10 U	0.282 J Z
6010C	7440-47-3	Chromium	mg/kg	43.8	34.0	23.7	33.4 J Q	36.5 J Q	37.2 J Q	36.6	34.9	29.5 J Q
6010C	7440-48-4	Cobalt	mg/kg	10.6	8.79	5.86	9.01	9.78	9.37	10.7	10.2	7.90
6010C	7440-50-8	Copper	mg/kg	24.9	20.2	7.59	18.6	20.3	19.1	21.3	24.0	17.1
6010C	7440-62-2	Vanadium	mg/kg	76.7	62.0	44.7	65.2 J Q	70.7 J Q	70.0 J Q	72.2	78.2	57.4 J Q
6010C	7440-66-6	Zinc	mg/kg	72.6	82.4	44.7	78.6	81.0	78.6	89.9	91.3	75.4
6010C	7440-67-7	Zirconium	mg/kg	4.61 J Z	5.58	3.56 J Z	2.17 J Z	3.32 J Z	3.60 J Z	5.75	6.87	2.14 J Z
6010C	7440-70-2	Calcium	mg/kg	17600	47500 J E	206000 J E	58800 J E	48100 J E	66100 J E	39400	81700	75500 J E
6010C	7723-14-0	Phosphorus	mg/kg	357	728	391	673	640	645	766 J Q	568 J Q	673
6020A	7440-22-4	Silver	mg/kg	0.0341 J Z	0.0541 J Q, E, Z	0.0639 J Q, E, Z	0.0309 J Z	0.0454 J Z	0.0361 J Z	0.0368 J Z	0.0362 J Z	0.206 U
6020A	7440-24-6	Strontium	mg/kg	44.6 J Q	79.5 J E, A	154 J E, A	143	111	137	109 J E	187 J E	123
6020A	7440-28-0	Thallium	mg/kg	0.348 J Q	0.419 J Q, E	0.311 J Q, E	0.340	0.352	0.368	0.391 J Q	0.405 J Q	0.284
6020A	7782-49-2	Selenium	mg/kg	0.236 J Z	0.401 J Z	0.411 J Z	0.363 J Z	0.339 J Z	0.326 J Z	0.434	0.278 J Z	0.353 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-610-SA8-SB-4.0-5.0	SL-610-SA8-SB-6.8-7.8	SL-612-SA8-SB-0.0-0.5	SL-612-SA8-SB-4.0-5.0	SL-613-SA8-SB-0.0-0.5	SL-613-SA8-SB-4.0-5.0	SL-614-SA8-SB-0.0-0.5	SL-614-SA8-SB-4.0-5.0	SL-615-SA8-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	08/01/2013	08/01/2013	07/30/2013	07/30/2013	08/14/2013	08/14/2013	08/13/2013	08/13/2013	08/27/2013
				SDG	PH082	PH082	PH080	PH080	PH091	PH091	PH090	PH090	PH094
				Start Depth	4	6.8	0	4	0	4	0	4	0
				End Depth	5	7.8	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
6010C	7429-90-5	Aluminum	mg/kg	29800	25800	22200	20100	22400	24300	25600	25800	24500
6010C	7439-89-6	Iron	mg/kg	38000	32500	26700	25100	30400	29700	29200	32000	31200
6010C	7439-92-1	Lead	mg/kg	11.7	9.92	9.61	9.19	15.2	9.76	15.5	14.4	13.3
6010C	7439-93-2	Lithium	mg/kg	26.5	23.8	23.6	21.8	22.7	24.5	28.5	34.9	21.0
6010C	7439-95-4	Magnesium	mg/kg	8050	6950	7190	6760	7590	7670	8240	9030	6450
6010C	7439-96-5	Manganese	mg/kg	413	366	278	258	374	380	324	301	470
6010C	7439-98-7	Molybdenum	mg/kg	2.21 U F	2.19 U	2.63	2.50	2.05 U F	2.23 U F	2.10 U F	2.13 U	1.98 U F
6010C	7440-02-0	Nickel	mg/kg	19.4	16.2	16.3	15.0	19.4	19.3	18.4	20.2	19.2
6010C	7440-09-7	Potassium	mg/kg	5160	3020	2880	2820	6700	4760	5780	5010	4720
6010C	7440-23-5	Sodium	mg/kg	124	115	170	194	111	117	148	151	91.0 J Z
6010C	7440-31-5	Tin	mg/kg	11.1 U B	11.0 U B	10.9 U B	10.5 U B	10.2 U B	11.1 U B	10.5 U B	10.6 U B	9.92 U B
6010C	7440-32-6	Titanium	mg/kg	1330	1170	1240	1110	1150	1130	1430	1450	989 J A
6010C	7440-36-0	Antimony	mg/kg	4.42 UJ Q	4.38 UJ Q	5.52	5.53	4.10 UJ Q	4.46 UJ Q	4.20 UJ Q	4.25 UJ Q	3.97 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	6.53	4.99	4.92	5.02	4.93	5.92	5.11	4.71	6.46
6010C	7440-39-3	Barium	mg/kg	116	108	77.0	71.0	93.4	93.8	100	112	131
6010C	7440-41-7	Beryllium	mg/kg	0.875 J Z	0.689 J Z	0.364 J Z	0.337 J Z	0.652 J Z	0.657 J Z	0.692 J Z	0.713 J Z	0.937 J Z
6010C	7440-42-8	Boron	mg/kg	20.8	19.1	11.0	9.47 J Z	16.9	13.7	14.7	11.1	5.02 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.216 J Z	0.216 J Z	1.09 U	1.05 U	0.723 J Z	0.635 J Z	0.148 J Z	0.101 J Z	0.225 J Z
6010C	7440-47-3	Chromium	mg/kg	38.2 J Q	33.5 J Q	28.1	26.2	30.7 J Q	32.8 J Q	33.7	33.4	31.7
6010C	7440-48-4	Cobalt	mg/kg	10.3	8.62	8.48	7.99	9.50	9.32	9.17	11.3	9.14
6010C	7440-50-8	Copper	mg/kg	20.0	15.9	24.7	23.2	18.4 J A	17.6 J A	20.2	21.5	19.4
6010C	7440-62-2	Vanadium	mg/kg	76.0 J Q	64.9 J Q	65.2	59.5	56.5 J Q	59.5 J Q	65.0	65.2	61.8
6010C	7440-66-6	Zinc	mg/kg	78.5	64.2	71.3	66.2	76.8	71.1	81.2	88.1	84.7
6010C	7440-67-7	Zirconium	mg/kg	3.46 J Z	3.34 J Z	3.13 J Z	3.26 J Z	5.15	5.52 J Z	6.45	7.31	6.55
6010C	7440-70-2	Calcium	mg/kg	43100 J E	89600 J E	143000	137000	74900	84100	73500	68300	6610 J E
6010C	7723-14-0	Phosphorus	mg/kg	864	467	470	442	661	585	539 J Q	529 J Q	306
6020A	7440-22-4	Silver	mg/kg	0.0517 J Z	0.0475 J Z	0.219 U	0.210 U	0.0355 J Z	0.223 U	0.0465 J Z	0.0338 J Z	0.0567 J Q, E, Z
6020A	7440-24-6	Strontium	mg/kg	89.5	108	230	212	144	156	191 J E	186 J E	39.2 J E
6020A	7440-28-0	Thallium	mg/kg	0.364	0.255	0.289	0.273	0.275	0.309	0.349 J Q	0.368 J Q	0.377 J Q
6020A	7782-49-2	Selenium	mg/kg	0.280 J Z	0.238 J Z	0.329 J Z	0.283 J Z	0.360 J Z	0.241 J Z	0.344 J Z	0.218 J Z	0.231 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-501-SA8-SB-0.0-0.5	SL-801-SA8-SB-0.0-0.5	SL-501-SA8-SB-4.0-5.0	SL-501-SA8-SB-9.0-10.0	SL-501-SA8-SB-12.0-13.0	SL-502-SA8-SB-0.0-0.5	SL-502-SA8-SB-4.0-5.0	SL-502-SA8-SB-7.5-8.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013
			SDG	PH067	PH067	PH067	PH067	PH067	PH067	PH067	PH067
			Start Depth	0	0	4	9	12	0	4	7.5
			End Depth	0.5	0.5	5	10	13	0.5	5	8.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	4.6	4.4	6.4	7.6	6.1	4.9	7.4	7.1

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-503-SA8-SB-0.0-0.5	SL-503-SA8-SB-3.0-4.0	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-505-SA8-SB-0.0-0.5	SL-505-SA8-SB-4.0-5.0	SL-506-SA8-SB-0.0-0.5	SL-506-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	FD	N	N	N	N
			Sample Date	07/15/2013	07/15/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013
			SDG	PH067	PH067	PH068	PH068	PH068	PH068	PH068	PH070	PH070
			Start Depth	0	3	0	2.5	2.5	0	4	0	4
			End Depth	0.5	4	0.5	3.5	3.5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	7.0	6.3	4.4	3.9	4.0	7.6	9.7	6.7	5.1

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5	SL-509-SA8-SB-0.0-0.5	SL-509-SA8-SB-4.0-5.0	SL-510-SA8-SB-0.0-0.5	SL-511-SA8-SB-0.0-0.5	SL-511-SA8-SB-6.0-7.0	SL-512-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/15/2013	07/15/2013	07/17/2013
			SDG	PH068	PH068	PH068	PH070	PH070	PH068	PH067	PH067	PH069
			Start Depth	0	3	0	0	4	0	0	6	0
			End Depth	0.5	4	0.5	0.5	5	0.5	0.5	7	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	2.1	3.5	5.4	8.8	5.0	1.3	3.2	14.4	1.5

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-514-SA8-SB-0.0-0.5	SL-514-SA8-SB-4.0-5.0	SL-514-SA8-SB-7.5-8.5	SL-515-SA8-SB-0.0-0.5	SL-515-SA8-SB-4.0-5.0	SL-515-SA8-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013
			SDG	PH069	PH069	PH069	PH069	PH069	PH069	PH069	PH069	PH069
			Start Depth	0	4	8	0	4	7.5	0	4	9
			End Depth	0.5	5	9	0.5	5	8.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	8.4	10	2.5	5.3	15.6	15.9	12.1	12.1	16.8

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-515-SA8-SB-14.0-15.0	SL-516-SA8-SB-0.0-0.5	SL-517-SA8-SB-0.0-0.5	SL-517-SA8-SB-3.0-4.0	SL-518-SA8-SB-0.0-0.5	SL-518-SA8-SB-4.0-5.0	SL-519-SA8-SB-0.0-0.5	SL-519-SA8-SB-3.5-4.5	SL-520-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/17/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/18/2013	07/18/2013	07/18/2013
			SDG	PH069	PH071	PH071	PH071	PH071	PH071	PH070	PH070	PH070
			Start Depth	14	0	0	3	0	4	0	3.5	0
			End Depth	15	0.5	0.5	4	0.5	5	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	13.4	0.59	2.5	4.0	2.4	4.0	7.7	4.3	4.1

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-521-SA8-SB-0.0-0.5	SL-522-SA8-SB-0.0-0.5	SL-522-SA8-SB-0.0-0.5-DTSC	SL-522-SA8-SB-4.0-5.0	SL-523-SA8-SB-4.0-5.0	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0	SL-525-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	07/19/2013	07/26/2013	07/24/2013	07/26/2013	07/25/2013	07/25/2013	07/25/2013	07/25/2013
			SDG	PH071	PH076	PH074	PH076	PH075	PH075	PH075	PH075
			Start Depth	0	0	0	4	4	4	4	0
			End Depth	0.5	0.5	0.5	5	5	5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	1.1	8.7	3.6	10.5	12.9	12.3	13.3	6.5

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-525-SA8-SB-4.0-5.0	SL-526-SA8-SB-0.0-0.5	SL-526-SA8-SB-4.0-5.0	SL-527-SA8-SB-0.0-0.5	SL-527-SA8-SB-4.0-5.0	SL-528-SA8-SB-0.0-0.5-DTSC	SL-528-SA8-SB-4.0-5.0	SL-529-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/25/2013	07/29/2013	07/29/2013	07/24/2013	07/24/2013	07/24/2013	07/24/2013	07/29/2013
			SDG	PH075	PH078	PH078	PH074	PH074	PH074	PH074	PH078
			Start Depth	4	0	4	0	4	0	4	0
			End Depth	5	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	11.2	8.6	14.5	9.7	14.9	5.2	13.1	7.2

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-529-SA8-SB-4.0-5.0	SL-530-SA8-SB-0.0-0.5	SL-530-SA8-SB-4.0-5.0	SL-830-SA8-SB-4.0-5.0	SL-531-SA8-SB-0.0-0.5	SL-531-SA8-SB-4.0-5.0	SL-532-SA8-SB-0.0-0.5	SL-532-SA8-SB-6.5-7.5	SL-536-SA8-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N	N
			Sample Date	07/29/2013	08/09/2013	08/09/2013	08/09/2013	07/18/2013	07/18/2013	07/19/2013	07/19/2013	07/31/2013
			SDG	PH078	PH088	PH088	PH088	PH070	PH070	PH071	PH071	PH081
			Start Depth	4	0	4	4	0	4	0	6.5	0
			End Depth	5	0.5	5	5	0.5	5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	13.8	5.9	11.9	10.6	5.9	11.6	6.8	13.0	3.2

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-536-SA8-SB-0.0-0.5-DTSC	SL-536-SA8-SB-4.0-5.0	SL-537-SA8-SB-0.0-0.5	SL-537-SA8-SB-4.0-5.0	SL-538-SA8-SB-0.0-0.5	SL-538-SA8-SB-0.0-0.5-DTSC	SL-538-SA8-SB-4.0-5.0	SL-838-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	FD
			Sample Date	07/24/2013	07/31/2013	07/31/2013	07/31/2013	08/09/2013	07/24/2013	08/09/2013	08/09/2013
			SDG	PH074	PH081	PH081	PH081	PH088	PH074	PH088	PH088
			Start Depth	0	4	0	4	0	0	4	4
			End Depth	0.5	5	0.5	5	0.5	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	5.0	9.6	3.4	8.9	5.8	5.4	13.3	13.3

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-539A-SA8-SB-0.0-0.5	SL-539B-SA8-SB-0.0-0.5	SL-539B-SA8-SB-2.0-3.0	SL-539C-SA8-SB-0.0-0.5	SL-539D-SA8-SB-0.0-0.5	SL-540-SA8-SB-0.0-0.5	SL-540-SA8-SB-4.0-5.0	SL-541-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/26/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	08/09/2013
			SDG	PH076	PH076	PH076	PH076	PH076	PH076	PH076	PH088
			Start Depth	0	0	2	0	0	0	4	0
			End Depth	0.5	0.5	3	0.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	12.8	13.0	14.2	15.3	12.7	9.3	10.0	5.4

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-541-SA8-SB-4.0-5.0	SL-542-SA8-SB-0.0-0.5	SL-542-SA8-SB-4.0-5.0	SL-542-SA8-SB-9.0-10.0	SL-542-SA8-SB-14.0-15.0	SL-542-SA8-SB-17.5-18.5	SL-543-SA8-SB-0.0-0.5	SL-543-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/09/2013	09/26/2013	09/26/2013	09/26/2013	09/26/2013	09/26/2013	08/13/2013	08/13/2013
			SDG	PH088	PH117	PH117	PH117	PH117	PH117	PH090	PH090
			Start Depth	4	0	4	9	14	17.5	0	4
			End Depth	5	0.5	5	10	15	18.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	10.3	5.6	12.6	14.2	14.8	12.3	4.6	10.6

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-843-SA8-SB-4.0-5.0	SL-549-SA8-SB-0.0-0.5	SL-549-SA8-SB-4.0-5.0	SL-550-SA8-SB-0.0-0.5	SL-550-SA8-SB-4.0-5.0	SL-550-SA8-SB-9.0-10.0	SL-550-SA8-SB-14.0-15.0	SL-550-SA8-SB-17.0-18.0
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	08/13/2013	07/30/2013	07/30/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013
			SDG	PH090	PH080	PH080	PH072	PH072	PH072	PH072	PH072
			Start Depth	4	0	4	0	4	9	14	17
			End Depth	5	0.5	5	0.5	5	10	15	18
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	11.1	7.8	11.2	11.2	11.9	9.2	16.3	5.5

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-551-SA8-SB-0.0-0.5	SL-551-SA8-SB-4.0-5.0	SL-851-SA8-SB-4.0-5.0	SL-551-SA8-SB-9.0-10.0	SL-551-SA8-SB-14.0-15.0	SL-551-SA8-SB-19.0-20.0	SL-552-SA8-SB-0.0-0.5	SL-552-SA8-SB-4.0-5.0
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	07/23/2013	07/23/2013	07/23/2013	07/23/2013	07/23/2013	07/23/2013	08/02/2013	08/02/2013
			SDG	PH073	PH073	PH073	PH073	PH073	PH073	PH083	PH083
			Start Depth	0	4	4	9	14	19	0	4
			End Depth	0.5	5	5	10	15	20	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	11.7	4.4	12.9	14.7	14.3	15.0	4.6	12.1

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-552-SA8-SB-7.5-8.5	SL-553-SA8-SB-0.0-0.5	SL-553-SA8-SB-4.0-5.0	SL-853-SA8-SB-4.0-5.0	SL-553-SA8-SB-9.0-10.0	SL-553-SA8-SB-14.0-15.0	SL-553-SA8-SB-18.0-19.0	SL-554-SA8-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	08/02/2013	08/27/2013	08/27/2013	08/27/2013	08/28/2013	08/28/2013	08/28/2013	07/22/2013
			SDG	PH083	PH094	PH094	PH094	PH096	PH096	PH096	PH072
			Start Depth	7.5	0	4	4	9	14	18	0
			End Depth	8.5	0.5	5	5	10	15	19	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	11.2	9.8	11.3	11.3	14.5	14.2	7.7	12.7

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-554-SA8-SB-4.0-5.0	SL-555-SA8-SB-0.0-0.5	SL-555-SA8-SB-4.0-5.0	SL-556-SA8-SB-0.0-0.5	SL-556-SA8-SB-4.0-5.0	SL-557A-SA8-SB-0.0-0.5	SL-557B-SA8-SB-0.0-0.5	SL-557C-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/22/2013	07/23/2013	07/23/2013	07/22/2013	07/22/2013	07/23/2013	07/23/2013	07/23/2013
			SDG	PH072	PH073	PH073	PH072	PH072	PH073	PH073	PH073
			Start Depth	4	0	4	0	4	0	0	0
			End Depth	5	0.5	5	0.5	5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	11.9	13.0	11.5	12.1	8.6	7.6	6.3	6.8

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-557D-SA8-SB-0.0-0.5	SL-558-SA8-SB-0.0-0.5	SL-558-SA8-SB-4.0-5.0	SL-558-SA8-SB-9.0-10.0	SL-558-SA8-SB-12.5-13.5	SL-559-SA8-SB-0.0-0.5	SL-559-SA8-SB-4.0-5.0	SL-560-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/23/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013	07/30/2013
			SDG	PH073	PH083	PH083	PH083	PH083	PH083	PH083	PH080
			Start Depth	0	0	4	9	12.5	0	4	0
			End Depth	0.5	0.5	5	10	13.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	7.6	4.5	14.4	14.9	10.9	4.0	11.2	6.6

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-560-SA8-SB-4.0-5.0	SL-561-SA8-SB-0.0-0.5	SL-561-SA8-SB-4.0-5.0	SL-562-SA8-SB-0.0-0.5	SL-563-SA8-SB-0.0-0.5	SL-563-SA8-SB-2.0-3.0	SL-564-SA8-SB-0.0-0.5	SL-565-SA8-SB-0.0-0.5	SL-565-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/30/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	08/06/2013	08/08/2013	08/08/2013
			SDG	PH080	PH063	PH063	PH063	PH063	PH063	PH085	PH087	PH087
			Start Depth	4	0	4	0	0	2	0	0	4
			End Depth	5	0.5	5	0.5	0.5	3	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	10.2	3.0	8.1	2.0	1.5	5.8	5.0	5.2	15.1

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-566-SA8-SB-0.0-0.5	SL-566-SA8-SB-4.0-5.0	SL-567-SA8-SB-0.0-0.5	SL-567-SA8-SB-4.0-5.0	SL-567-SA8-SB-9.0-10.0	SL-568-SA8-SB-0.0-0.5	SL-568-SA8-SB-4.0-5.0	SL-569-SA8-SB-0.0-0.5	SL-569-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/07/2013	08/07/2013	08/08/2013	08/08/2013	08/08/2013	08/05/2013	08/05/2013	08/05/2013	08/05/2013
			SDG	PH086	PH086	PH087	PH087	PH087	PH084	PH084	PH084	PH084
			Start Depth	0	4	0	4	9	0	4	0	4
			End Depth	0.5	5	0.5	5	10	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	1.8	9.0	15.5	16.3	14.6	11.8	9.4	10	11.6

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-569-SA8-SB-7.0-8.0	SL-570-SA8-SB-0.0-0.5	SL-570-SA8-SB-4.0-5.0	SL-571-SA8-SB-0.0-0.5	SL-571-SA8-SB-6.5-7.5	SL-571-SA8-SB-12.5-13.5	SL-572-SA8-SB-0.0-0.5	SL-572-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/05/2013	07/11/2013	07/11/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013
			SDG	PH084	PH065	PH065	PH064	PH064	PH064	PH064	PH064
			Start Depth	7	0	4	0	6.5	12.5	0	4
			End Depth	8	0.5	5	0.5	7.5	13.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	8.0	8.7	12.6	11.8	9.9	8.5	15.9	11.9

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-572-SA8-SB-9.0-10.0	SL-572-SA8-SB-14.0-15.0	SL-572-SA8-SB-18.5-19.5	SL-573-SA8-SB-0.0-0.5	SL-573-SA8-SB-4.0-5.0	SL-573-SA8-SB-9.5-10.5	SL-574-SA8-SB-0.0-0.5	SL-574-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/11/2013	07/11/2013
			SDG	PH064	PH064	PH064	PH064	PH064	PH064	PH065	PH065
			Start Depth	9	14	18.5	0	4	9.5	0	4
			End Depth	10	15	19.5	0.5	5	10.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	9.8	9.3	10.5	16.0	11.5	6.1	14.8	3.7

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-574-SA8-SB-9.0-10.0	SL-574-SA8-SB-14.0-15.0	SL-874-SA8-SB-14.0-15.0	SL-575-SA8-SB-0.0-0.5	SL-575-SA8-SB-4.0-5.0	SL-575-SA8-SB-9.0-10.0	SL-578-SA8-SB-0.0-0.5	SL-578-SA8-SB-4.0-5.0
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	07/11/2013	07/11/2013	07/11/2013	08/07/2013	08/07/2013	08/07/2013	07/12/2013	07/12/2013
			SDG	PH065	PH065	PH065	PH086	PH086	PH086	PH066	PH066
			Start Depth	9	14	14	0	4	9	0	4
			End Depth	10	15	15	0.5	5	10	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	11.0	9.6	6.8	10.4	13.4	11.6	7.8	11.6

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-878-SA8-SB-4.0-5.0	SL-578-SA8-SB-9.0-10.0	SL-580-SA8-SB-0.0-0.5	SL-580-SA8-SB-4.0-5.0	SL-580-SA8-SB-10.5-11.5	SL-581-SA8-SB-0.0-0.5	SL-581-SA8-SB-4.5-5.5	SL-582-SA8-SB-0.0-0.5
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	08/06/2013
			SDG	PH066	PH066	PH066	PH066	PH066	PH066	PH066	PH085
			Start Depth	4	9	0	4	10.5	0	4.5	0
			End Depth	5	10	0.5	5	11.5	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	11.4	5.3	9.4	7.7	4.1	6.7	2.9	6.0

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-582-SA8-SB-2.5-3.5	SL-583-SA8-SB-0.0-0.5	SL-883-SA8-SB-0.0-0.5	SL-584-SA8-SB-0.0-0.5	SL-585-SA8-SB-0.0-0.5	SL-586-SA8-SB-0.0-0.5	SL-587-SA8-SB-0.0-0.5	SL-587-SA8-SB-6.5-7.5	SL-588-SA8-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N	N
			Sample Date	08/06/2013	08/06/2013	08/06/2013	08/06/2013	08/12/2013	07/08/2013	07/12/2013	07/12/2013	07/08/2013
			SDG	PH085	PH085	PH085	PH085	PH089	PH062	PH066	PH066	PH062
			Start Depth	2.5	0	0	0	0	0	0	6.5	0
			End Depth	3.5	0.5	0.5	0.5	0.5	0.5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	5.9	1.9	2.3	1.3	0.67	5.7	1.7	3.3	0.95

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-888-SA8-SB-0.0-0.5	SL-588-SA8-SB-2.0-3.0	SL-589-SA8-SB-0.0-0.5	SL-589-SA8-SB-2.5-3.5	SL-590-SA8-SB-0.0-0.5	SL-590-SA8-SB-4.0-5.0	SL-590-SA8-SB-7.0-8.0	SL-591-SA8-SB-0.0-0.5	SL-592-SA8-SB-0.0-0.5
			Sample Type	FD	N	N	N	N	N	N	N	N
			Sample Date	07/08/2013	07/08/2013	07/30/2013	07/30/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013
			SDG	PH062	PH062	PH080	PH080	PH089	PH089	PH089	PH089	PH089
			Start Depth	0	2	0	2.5	0	4	7	0	0
			End Depth	0.5	3	0.5	3.5	0.5	5	8	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	0.97	2.0	3.7	3.4	1.7	4.1	4.0	1.2	1.3

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-592-SA8-SB-3.5-4.5	SL-593-SA8-SB-0.0-0.5	SL-593-SA8-SB-4.0-5.0	SL-594-SA8-SB-0.0-0.5	SL-595-SA8-SB-0.0-0.5	SL-596-SA8-SB-0.0-0.5	SL-597-SA8-SB-0.0-0.5	SL-598-SA8-SB-0.0-0.5	SL-598-SA8-SB-4.5-5.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/12/2013	08/12/2013	08/12/2013	08/15/2013	08/15/2013	07/30/2013	08/15/2013	07/31/2013	07/31/2013
			SDG	PH089	PH089	PH089	PH092	PH092	PH080	PH092	PH081	PH081
			Start Depth	3.5	0	4	0	0	0	0	0	4.5
			End Depth	4.5	0.5	5	0.5	0.5	0.5	0.5	0.5	5.5
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	3.9	1.4	4.1	1.2	0.52	1.2	0.45	4.8	8.2

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-599-SA8-SB-0.0-0.5	SL-599-SA8-SB-3.0-4.0	SL-600-SA8-SB-0.0-0.5	SL-600-SA8-SB-4.0-5.0	SL-601-SA8-SB-0.0-0.5	SL-601-SA8-SB-4.0-5.0	SL-602-SA8-SB-0.0-0.5	SL-602-SA8-SB-4.0-5.0	SL-604-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/31/2013	07/31/2013	08/14/2013	08/14/2013	07/18/2013	07/18/2013	08/14/2013	08/14/2013	08/29/2013
			SDG	PH081	PH081	PH091	PH091	PH070	PH070	PH091	PH091	PH097
			Start Depth	0	3	0	4	0	4	0	4	0
			End Depth	0.5	4	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	3.4	5.7	2.6	8.9	6.6	5.5	3.2	7.6	0.60

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-904-SA8-SB-0.0-0.5	SL-605-SA8-SB-0.0-0.5	SL-606-SA8-SB-0.0-0.5	SL-606-SA8-SB-4.0-5.0	SL-607-SA8-SB-0.0-0.5	SL-607-SA8-SB-5.0-6.0	SL-608-SA8-SB-0.0-0.5	SL-608-SA8-SB-4.0-5.0	SL-608-SA8-SB-7.0-8.0
			Sample Type	FD	N	N	N	N	N	N	N	N
			Sample Date	08/29/2013	08/29/2013	07/19/2013	07/19/2013	08/09/2013	08/09/2013	08/01/2013	08/01/2013	08/01/2013
			SDG	PH097	PH097	PH071	PH071	PH088	PH088	PH082	PH082	PH082
			Start Depth	0	0	0	4	0	5	0	4	7
			End Depth	0.5	0.5	0.5	5	0.5	6	0.5	5	8
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	0.75	0.65	8.3	10.3	4.4	8.5	2.8	8.8	8.7

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-609-SA8-SB-0.0-0.5	SL-609-SA8-SB-4.0-5.0	SL-610-SA8-SB-0.0-0.5	SL-610-SA8-SB-4.0-5.0	SL-610-SA8-SB-6.8-7.8	SL-612-SA8-SB-0.0-0.5	SL-612-SA8-SB-4.0-5.0	SL-613-SA8-SB-0.0-0.5	SL-613-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/13/2013	08/13/2013	08/01/2013	08/01/2013	08/01/2013	07/30/2013	07/30/2013	08/14/2013	08/14/2013
			SDG	PH090	PH090	PH082	PH082	PH082	PH080	PH080	PH091	PH091
			Start Depth	0	4	0	4	6.8	0	4	0	4
			End Depth	0.5	5	0.5	5	7.8	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
160.3M	MOIST	Moisture	%	4.0	9.8	3.9	11.3	9.6	12.0	6.5	3.4	10.3

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-614-SA8-SB-0.0-0.5	SL-614-SA8-SB-4.0-5.0	SL-615-SA8-SB-0.0-0.5
			Sample Type	N	N	N
			Sample Date	08/13/2013	08/13/2013	08/27/2013
			SDG	PH090	PH090	PH094
			Start Depth	0	4	0
			End Depth	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit			
160.3M	MOIST	Moisture	%	5.6	7.8	2.1

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-604-SA8-SB-0.0-0.5	SL-904-SA8-SB-0.0-0.5	SL-605-SA8-SB-0.0-0.5
			Sample Type	N	FD	N
			Sample Date	08/29/2013	08/29/2013	08/29/2013
			SDG	PH097	PH097	PH097
			Start Depth	0	0	0
			End Depth	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit			
300.0	14797-65-0	Nitrite-NO2	mg/kg	1.0 U	1.0 U	1.0 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-501-SA8-SB-0.0-0.5	SL-801-SA8-SB-0.0-0.5	SL-501-SA8-SB-4.0-5.0	SL-501-SA8-SB-9.0-10.0	SL-501-SA8-SB-12.0-13.0	SL-502-SA8-SB-0.0-0.5	SL-502-SA8-SB-4.0-5.0	SL-502-SA8-SB-7.5-8.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013
			SDG	PH067	PH067	PH067	PH067	PH067	PH067	PH067	PH067
			Start Depth	0	0	4	9	12	0	4	7.5
			End Depth	0.5	0.5	5	10	13	0.5	5	8.5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	13 J Z	10 J Z	19 U	19 U	19 U	13 J Z	11 J Z	15 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 UJ FD	10 J FD, Z	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	0.49 J FD, Z	1.7 UJ FD	1.8 U	1.8 U	1.8 U	63	0.67 J Z	0.43 J Z
8270D SIM	129-00-0	Pyrene	µg/kg	6.9 J FD	2.1 J FD	1.8 U	1.8 U	1.8 U	500	2.3	1.4 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	3.7 J FD	0.94 J FD, Z	1.8 U	1.8 U	1.8 U	7.2	1.8 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	4.4 J FD, Z	18 UJ FD	18 U	18 U	18 U	25	18 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	3.4 J FD	0.70 J FD, Z	1.8 U	1.8 U	1.8 U	8.3	1.8 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	6.9 J FD	2.2 J FD	1.8 U	1.8 U	1.8 U	60	1.9	0.88 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	6.5 J FD	1.7 J FD	1.8 U	1.8 U	1.8 U	630	2.7	1.5 J Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	7.5	9.3	1.2 J Z	1.8 U	1.8 U	39	6.0	5.9
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	5.8	1.8 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	8.0 J FD	3.9 J FD	0.65 J Z	1.8 U	1.8 U	130	2.9	1.4 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	5.2 J FD	0.94 J FD, Z	1.8 U	1.8 U	1.8 U	32	1.8 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.2 J FD, Z	1.7 UJ FD	1.8 U	1.8 U	1.8 U	3.3	1.8 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	3.3 J FD	0.77 J FD, Z	1.8 U	1.8 U	1.8 U	120	0.82 J Z	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	4.8	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	8.2 J Z	19 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	3.2 J FD	1.4 J FD, Z	1.8 U	1.8 U	1.8 U	460	2.1	1.1 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	12	1.8 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 UJ FD	0.72 J FD, Z	1.8 U	1.8 U	1.8 U	23	1.8 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	2.3	2.4	1.5 J Z	1.8 U	1.8 U	150	2.5	1.7 J Z
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.3 J Z	1.0 J Z	1.8 U	1.8 U	1.8 U	87	1.2 J Z	1.8 U

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		Sample Name	SL-503-SA8-SB-0.0-0.5	SL-503-SA8-SB-3.0-4.0	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-505-SA8-SB-0.0-0.5	SL-505-SA8-SB-4.0-5.0	SL-506-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	FD	N	N	N
		Sample Date	07/15/2013	07/15/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/18/2013
		SDG	PH067	PH067	PH068	PH068	PH068	PH068	PH068	PH070
		Start Depth	0	3	0	2.5	2.5	0	4	0
		End Depth	0.5	4	0.5	3.5	3.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	11 J Z	19 U	19 U	19 U	19 U	19 U	20 U	6.6 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	20 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.2 J Z	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	20 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.4 J Z	1.8 U	0.87 J Z	1.7 U	1.7 U	0.73 J Z	1.8 U	1.8 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.4 J Z	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	2.4	1.8 U	1.1 J Z	1.7 U	1.7 U	1.0 J Z	1.8 U	1.7 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	0.50 J Z	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	3.3	1.8 U	0.90 J Z	1.7 U	1.7 U	1.1 J Z	1.8 U	1.1 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	20 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	20 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.0 J Z	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	20 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	2.4	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U F
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	0.84 J Z	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U

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		Sample Name	SL-506-SA8-SB-4.0-5.0	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5	SL-509-SA8-SB-0.0-0.5	SL-509-SA8-SB-4.0-5.0	SL-510-SA8-SB-0.0-0.5	SL-511-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	07/18/2013	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/15/2013
		SDG	PH070	PH068	PH068	PH068	PH070	PH070	PH068	PH067
		Start Depth	4	0	3	0	0	4	0	0
		End Depth	5	0.5	4	0.5	0.5	5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	7.2 J Z	19 U	11 J Z	20 U	19 U	14 J Z	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	19 U	18 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	1.3 J Z	1.7 U	1.7 U	1.8 U	1.7 U	0.84 J Z	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	19 U	18 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	17 U	18 U	18 U	18 U	18 U	17 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 U	1.1 J Z	1.7 U	1.7 U	0.78 J Z	1.7 U	0.71 J Z	1.7 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	0.93 J Z	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7	1.1 J Z	1.7 U	1.2 J Z	1.5 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7 U	4.0	1.7 U	0.82 J Z	1.1 J Z	1.7 U	1.1 J Z	0.58 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	19 U	18 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	19 U	18 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	1.1 J Z	1.7 U	0.86 J Z	1.8 U	1.7 U	0.70 J Z	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	19 U	18 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U F	1.7 U	1.7 U	1.7
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-511-SA8-SB-6.0-7.0	SL-512-SA8-SB-0.0-0.5	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-514-SA8-SB-0.0-0.5	SL-514-SA8-SB-4.0-5.0	SL-514-SA8-SB-7.5-8.5
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	07/15/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013
		SDG	PH067	PH069	PH069	PH069	PH069	PH069	PH069	PH069
		Start Depth	6	0	0	4	8	0	4	7.5
		End Depth	7	0.5	0.5	5	9	0.5	5	8.5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	180 U	190 U	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	180 U	180 U	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	4 J Z	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	180 U	180 U	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	8 J Z	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	7 J Z	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	5 J Z	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	9 J Z	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	5 J Z	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	180 U	180 U	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	180 U	180 U	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	15 J Z	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	180 U	180 U	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	4 J Z	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	21 U	11 J Z	--	--	18 U	11 J Z	21 U	21 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	21 U	18 U	--	--	18 U	19 U	21 U	21 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	1.7 U	18 U	18 U	1.7 U	1.7 U	1.9 U	1.9 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.9 U	1.1 J Z	23	--	1.7 U	2.9	1.9 U	1.9 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	21 U	18 U	--	--	18 U	19 U	21 U	21 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	1.7 U	--	18 U	1.7 U	0.92 J Z	1.9 U	1.9 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	20 U	17 U	180 U	190 U	17 U	18 U	20 U	20 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	1.7 U	18 U	18 U	1.7 U	1.7 U	1.9 U	1.9 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.9 U	1.1 J Z	13 J Z	--	1.7 U	2.2	1.9 U	1.9 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9 U	1.4 J Z	21	18 U	1.7 U	3.5	1.9 U	1.9 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.9 U	2.9	--	18 U	1.7 U	2.9	1.9 U	1.9 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	1.7 U	18 U	18 U	1.7 U	1.7 U	1.9 U	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.9 U	1.7	29	11 J Z	1.7 U	3.0	1.9 U	1.9 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.9 U	1.7 U	--	18 U	1.7 U	0.92 J Z	1.9 U	1.9 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	1.7 U	18 U	18 U	1.7 U	1.7 U	1.9 U	1.9 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9 U	1.7 U	--	18 U	1.7 U	0.90 J Z	1.9 U	1.9 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	1.7 U	18 U	18 U	1.7 U	1.7 U	1.9 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	1.7 U	18 U	18 U	1.7 U	1.7 U	1.9 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	21 U	18 U	--	--	18 U	19 U	21 U	21 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	21 U	6.9 J Z	--	--	18 U	19 U	21 U	21 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	0.82 J Z	--	18 U	1.7 U	1.5 J Z	1.9 U	1.9 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	21 U	18 U	--	--	18 U	19 U	21 U	21 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	1.7 U	18 U	18 U	1.7 U	1.7 U	1.9 U	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.9 U	1.7 U	18 U	18 U	1.7 U	1.7 U	1.9 U	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.9 U	1.7 U F	--	18 U	1.7 U	1.7 U F	1.9 U	0.91 J Z
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.9 U	1.7 U	18 U	18 U	1.7 U	1.7 U	1.9 U	1.9 U

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J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-515-SA8-SB-0.0-0.5	SL-515-SA8-SB-4.0-5.0	SL-515-SA8-SB-9.0-10.0	SL-515-SA8-SB-14.0-15.0	SL-516-SA8-SB-0.0-0.5	SL-517-SA8-SB-0.0-0.5	SL-517-SA8-SB-3.0-4.0	SL-518-SA8-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013
				SDG	PH069	PH069	PH069	PH069	PH071	PH071	PH071	PH071
				Start Depth	0	4	9	14	0	0	3	0
				End Depth	0.5	5	10	15	0.5	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	200 U	20 U	21 U	20 U	10 J Z	15 J Z	19 U	18 U	
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	200 U	20 U	21 U	20 U	18 U	18 U	19 U	18 U	
8270D SIM	120-12-7	Anthracene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	
8270D SIM	129-00-0	Pyrene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	0.89 J Z	1.7 U	1.7 U	
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	200 U	20 U	21 U	20 U	18 U	18 U	19 U	18 U	
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	190 U	19 U	20 U	19 U	17 U	17 U	18 U	17 U	
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	0.73 J Z	1.7 U	1.7 U	
8270D SIM	206-44-0	Fluoranthene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	0.75 J Z	1.7 U	1.7 U	
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.5 J Z	1.9	1.7 U	1.7 U	
8270D SIM	208-96-8	Acenaphthylene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	
8270D SIM	218-01-9	Chrysene	µg/kg	5.1 J Z	1.9 U	2.0 U	1.9 U	0.68 J Z	2.2	1.7 U	1.7 U	
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	
8270D SIM	83-32-9	Acenaphthene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	
8270D SIM	84-66-2	Diethylphthalate	µg/kg	200 U	20 U	21 U	20 U	18 U	18 U	19 U	18 U	
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	200 U	20 U	21 U	20 U	18 U	18 U	19 U	18 U	
8270D SIM	85-01-8	Phenanthrene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	0.88 J Z	1.7 U	1.7 U	
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	200 U	20 U	21 U	20 U	18 U	18 U	19 U	18 U	
8270D SIM	86-73-7	Fluorene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	
8270D SIM	91-20-3	Naphthalene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U F	1.7 U	1.7 U	
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	19 U	1.9 U	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-518-SA8-SB-4.0-5.0	SL-519-SA8-SB-0.0-0.5	SL-519-SA8-SB-3.5-4.5	SL-520-SA8-SB-0.0-0.5	SL-521-SA8-SB-0.0-0.5	SL-522-SA8-SB-0.0-0.5	SL-522-SA8-SB-4.0-5.0	SL-523-SA8-SB-4.0-5.0
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	07/19/2013	07/18/2013	07/18/2013	07/18/2013	07/19/2013	07/26/2013	07/26/2013	07/25/2013
		SDG	PH071	PH070	PH070	PH070	PH071	PH076	PH076	PH075
		Start Depth	4	0	3.5	0	0	0	4	4
		End Depth	5	0.5	4.5	0.5	0.5	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	8.9 J Z	19 U	19 U	10 J Z	20 U	20 U	21 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	19 U	19 U	19 U	18 U	20 U	20 U	21 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	0.38 J Z	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	2.9	1.7 U	1.7 U	0.76 J Z	1.8 U	1.9 U	1.9 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	19 U	19 U	18 U	20 U	20 U	21 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	2.6	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	4.0 J Z	18 U	18 U	17 U	19 U	19 U	20 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 J Z	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 U	5.0	1.7 U	1.7 U	0.88 J Z	1.8 U	0.79 J Z	1.9 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	2.2	1.7 U	1.7 U	0.95 J Z	1.8 U	1.9 U	1.9 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	6.3	1.7 U	0.92 J Z	2.5	1.8 U	1.9 U	1.9 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7 U	9.8	1.7 U	0.43 J Z	1.1 J Z	0.62 J Z	1.9 U	1.9 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.4 J Z	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	2.0	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	0.96 J Z	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	19 U	19 U	18 U	20 U	20 U	21 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	21	19 U	19 U	18 U	20 U	20 U	21 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	2.8	1.7 U	1.7 U	0.78 J Z	1.8 U	1.9 U	1.9 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	19 U	19 U	18 U	20 U	20 U	21 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.1 J Z	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	3.6	1.7 U	1.7 U	1.7 U	1.8 U	0.93 J Z	1.9 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	2.2	1.7 U	1.7 U	1.7 U	1.8 U	1.9 U	1.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0	SL-525-SA8-SB-0.0-0.5	SL-525-SA8-SB-4.0-5.0	SL-526-SA8-SB-0.0-0.5	SL-526-SA8-SB-4.0-5.0	SL-527-SA8-SB-0.0-0.5	SL-527-SA8-SB-4.0-5.0
		Sample Type	FD	N	N	N	N	N	N	N
		Sample Date	07/25/2013	07/25/2013	07/25/2013	07/25/2013	07/29/2013	07/29/2013	07/24/2013	07/24/2013
		SDG	PH075	PH075	PH075	PH075	PH078	PH078	PH074	PH074
		Start Depth	4	4	0	4	0	4	0	4
		End Depth	5	5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	21 U	21 U	10 J Z	20 U	7.2 J Z	21 U	20 U	21 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	21 U	21 U	19 U	20 U	20 U	21 U	20 U	21 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	1.9 U	1.8 U	0.67 J Z	2.2	1.9 U	1.8 U	2.0 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.9 U	1.9 U	1.8	11	9.4	1.9 U	1.3 J Z	2.0 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	21 U	21 U	19 U	20 U	20 U	21 U	20 U	21 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	1.9 U	1.8 U	4.0	1.3 J Z	1.9 U	0.77 J Z	2.0 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	20 U	18 U	6.5 J Z	19 U	20 U	19 U	20 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	1.9 U	1.8 U	4.0	1.4 J Z	1.9 U	1.8 U	2.0 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.9 U	1.9 U	1.5 J Z	13	8.5	1.9 U	1.5 J Z	2.0 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9 U	1.9 U	1.2 J Z	14	13	1.9 U	1.5 J Z	2.0 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.9 U	1.9 U	1.9	5.6	2.4	1.9 U	1.8 U	2.0 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	1.9 U	1.8 U	1.9 U	0.55 J Z	1.9 U	1.8 U	2.0 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.9 U	1.9 U	10	12	15	0.46 J Z	1.6 J Z	2.0 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.9 U	1.9 U	1.8 U	6.2	1.6 J Z	1.9 U	1.8 U	2.0 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	1.9 U	1.8 U	1.6 J Z	1.8 U	1.9 U	1.8 U	2.0 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9 U	1.9 U	1.8 U	5.3	2.5	1.9 U	0.77 J Z	2.0 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	2.0 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	2.0 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	21 U	21 U	19 U	20 U	20 U	21 U	20 U	21 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	21 U	21 U	19 U	20 U	20 U	21 U	20 U	21 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	1.9 U	0.96 J Z	5.8	5.9	1.9 U	0.97 J Z	2.0 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	21 U	21 U	19 U	20 U	20 U	21 U	20 U	21 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	2.0 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	2.0 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.9 U	1.9 U	0.93 J Z	1.9 U	2.2	1.9 U	1.8 U	2.0 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.9 U	1.9 U	1.8 U	1.9 U	1.6 J Z	1.9 U	0.82 J Z	2.0 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-528-SA8-SB-4.0-5.0	SL-529-SA8-SB-0.0-0.5	SL-529-SA8-SB-4.0-5.0	SL-530-SA8-SB-0.0-0.5	SL-530-SA8-SB-4.0-5.0	SL-830-SA8-SB-4.0-5.0	SL-531-SA8-SB-0.0-0.5	SL-531-SA8-SB-4.0-5.0
		Sample Type	N	N	N	N	N	FD	N	N
		Sample Date	07/24/2013	07/29/2013	07/29/2013	08/09/2013	08/09/2013	08/09/2013	07/18/2013	07/18/2013
		SDG	PH074	PH078	PH078	PH088	PH088	PH088	PH070	PH070
		Start Depth	4	0	4	0	4	4	0	4
		End Depth	5	0.5	5	0.5	5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	21 U	19 U	21 U	19 U	20 UJ FD	7.2 J FD, Z	40	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	21 U	19 U	21 U	19 U	20 U	20 U	19 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	0.38 J Z	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	129-00-0	Pyrene	µg/kg	2.1	4.3	1.9 U	2.9	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	21 U	19 U	21 U	19 U	20 U	20 U	19 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	1.4 J Z	1.9 U	1.2 J Z	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	20 U	18 U	20 U	18 U	19 U	19 U	18 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	1.3 J Z	1.9 U	0.97 J Z	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 J Z	4.2	1.9 U	3.0	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9	4.7	1.9 U	3.4	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	0.79 J Z	1.2 J Z	1.9 U	1.2 J Z	1.9 U	1.9 U	1.5 J Z	1.9 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.6 J Z	9.1	1.9 U	6.4	0.48 J FD, Z	1.9 UJ FD	1.0 J Z	1.9 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.1 J Z	1.8	1.9 U	1.4 J Z	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.4 J Z	1.9	1.9 U	1.3 J Z	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	21 U	19 U	21 U	19 U	20 U	20 U	19 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	21 U	19 U	21 U	19 U	20 U	20 U	19 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	3.7	1.9 U	2.6	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	21 U	19 U	21 U	19 U	20 U	20 U	19 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.9 U	1.4 J Z	1.9 U	2.6	1.9 U	1.9 U	1.8 U F	1.9 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.9 U	0.83 J Z	1.9 U	2.0	1.9 U	1.9 U	1.8 U	1.9 U

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J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-532-SA8-SB-0.0-0.5	SL-532-SA8-SB-6.5-7.5	SL-536-SA8-SB-0.0-0.5	SL-536-SA8-SB-4.0-5.0	SL-537-SA8-SB-0.0-0.5	SL-537-SA8-SB-4.0-5.0	SL-538-SA8-SB-0.0-0.5	SL-538-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	07/19/2013	07/19/2013	07/31/2013	07/31/2013	07/31/2013	07/31/2013	08/09/2013	08/09/2013
				SDG	PH071	PH071	PH081	PH081	PH081	PH081	PH088	PH088
				Start Depth	0	6.5	0	4	0	4	0	4
				End Depth	0.5	7.5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	21 U	270	20 U	7.2 J Z	14 J Z	6.6 J Z	7.3 J FD, Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	21 U	19 U	20 U	19 U	20 U	19 U	21 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.9 U	1.7 U	1.8 U	0.34 J Z	1.8 U	1.8 U	1.9 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	1.9 U	1.2 J Z	1.8 U	3.7	1.8 U	2.4	1.9 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	21 U	19 U	20 U	19 U	20 U	19 U	21 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	0.74 J Z	1.9 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	19 U	18 U	19 U	17 U	18 U	18 U	20 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	1.9 U	1.3 J Z	1.8 U	2.1	1.8 U	2.0	1.9 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.9 U	1.3 J Z	1.8 U	5.1	1.8 U	2.7	1.9 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	0.75 J Z	1.9 U	1.7 U	1.8 U	0.75 J Z	1.8 U	0.76 J Z	1.9 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	0.42 J Z	1.9 U	1.5 J Z	1.8 U	3.0	0.87 J Z	2.6	1.9 UJ FD
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.9 U	1.7 U	1.8 U	0.72 J Z	1.8 U	0.86 J Z	1.9 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	0.80 J Z	1.9 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	21 U	19 U	20 U	19 U	20 U	19 U	21 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	21 U	19 U	20 U	19 U	20 U	19 U	21 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.9 U	0.96 J Z	1.8 U	3.1	1.8 U	1.3 J Z	1.9 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	21 U	19 U	20 U	19 U	20 U	19 U	21 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.9 U	1.4 J Z	1.8 U	0.95 J Z	1.8 U	1.8 U F	1.9 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	1.9 U	1.2 J Z	1.8 U	0.80 J Z	1.8 U	1.8 U	1.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-838-SA8-SB-4.0-5.0	SL-539B-SA8-SB-0.0-0.5	SL-539B-SA8-SB-2.0-3.0	SL-540-SA8-SB-0.0-0.5	SL-540-SA8-SB-4.0-5.0	SL-541-SA8-SB-0.0-0.5	SL-541-SA8-SB-4.0-5.0	SL-542-SA8-SB-0.0-0.5
				Sample Type	FD	N	N	N	N	N	N	N
				Sample Date	08/09/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	08/09/2013	08/09/2013	09/26/2013
				SDG	PH088	PH076	PH076	PH076	PH076	PH088	PH088	PH117
				Start Depth	4	0	2	0	4	0	4	0
				End Depth	5	0.5	3	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	21 UJ FD	21 U	21 U	20 U	20 U	19 U	20 U	19 U	
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	21 U	21 U	21 U	20 U	20 U	19 U	20 U	19 U	
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	1.1 J Z	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	
8270D SIM	129-00-0	Pyrene	µg/kg	1.9 U	18	1.9 U	1.8 U	1.9 U	3.4	1.9 U	1.8 U	
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	21 U	21 U	21 U	20 U	20 U	19 U	20 U	19 U	
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	6.3	1.9 U	1.8 U	1.9 U	0.94 J Z	1.9 U	1.8 U	
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	20 U	10 J Z	20 U	19 U	19 U	18 U	19 U	18 U	
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	6.4	1.9 U	1.8 U	1.9 U	0.97 J Z	1.9 U	1.8 U	
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.9 U	20	1.9 U	1.8 U	1.9 U	4.2	0.95 J Z	0.81 J Z	
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9 U	24	1.9 U	1.8 U	0.84 J Z	3.8	1.9 U	1.8 U	
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.9 U	8.8	1.9 U	1.8 U	0.90 J Z	1.4 J Z	1.9 U	1.8 U	
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	
8270D SIM	218-01-9	Chrysene	µg/kg	0.47 J FD, Z	20	1.9 U	1.8 U	0.67 J Z	3.4	0.48 J Z	0.57 J Z	
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.9 U	10	1.9 U	1.8 U	1.9 U	1.8	1.9 U	1.8 U	
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	2.4	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9 U	8.3	1.9 U	1.8 U	1.9 U	2.1	1.9 U	1.8 U	
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	
8270D SIM	84-66-2	Diethylphthalate	µg/kg	21 U	21 U	21 U	20 U	20 U	19 U	20 U	19 U	
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	21 U	21 U	21 U	20 U	20 U	19 U	20 U	19 U	
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	10	1.9 U	1.8 U	1.9 U	1.8	1.9 U	1.8 U	
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	21 U	21 U	21 U	20 U	20 U	19 U	20 U	19 U	
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.8 U	
8270D SIM	91-20-3	Naphthalene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.2 J Z	
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U	1.0 J Z	

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			Sample Name	SL-542-SA8-SB-4.0-5.0	SL-542-SA8-SB-9.0-10.0	SL-542-SA8-SB-14.0-15.0	SL-542-SA8-SB-17.5-18.5	SL-543-SA8-SB-0.0-0.5	SL-543-SA8-SB-4.0-5.0	SL-843-SA8-SB-4.0-5.0	SL-549-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	09/26/2013	09/26/2013	09/26/2013	09/26/2013	08/13/2013	08/13/2013	08/13/2013	07/30/2013
			SDG	PH117	PH117	PH117	PH117	PH090	PH090	PH090	PH080
			Start Depth	4	9	14	17.5	0	4	4	0
			End Depth	5	10	15	18.5	0.5	5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	15 J Z	13 J Z	20 U	19 U	20 UJ FD	7.5 J FD, Z	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	21 U	21 U	20 U	19 U	20 U	20 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	2.9	1.9 U	1.9 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	70	1.9 U	1.9 U	1.1 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	21 U	21 U	20 U	19 U	20 U	20 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	19	1.9 U	1.9 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	20 U	20 U	19 U	46	19 U	19 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	24	1.9 U	1.9 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	120	1.9 U	1.9 U	1.8
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	57	1.9 U	1.9 U	1.6 J Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	48	1.9 U	1.9 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.0 J Z	1.9 U	1.9 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.9 U	0.39 J Z	1.9 U	1.9 U	89	1.9 UJ FD	0.48 J FD, Z	2.9
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	70	1.9 U	1.9 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	8.7	1.9 U	1.9 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	71	1.9 U	1.9 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	21 U	21 U	20 U	19 U	20 U	20 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	21 U	21 U	20 U	19 U	20 U	20 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	2.7	1.9 U	1.9 U	1.2 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	21 U	21 U	20 U	19 U	20 U	20 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.7 U	1.9 U	1.9 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.4 J Z	1.9 U	1.9 U	1.9 U	0.76 J Z	1.9 UJ FD	0.94 J FD, Z	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	3.1	0.90 J Z	1.9 U	1.9 U	2.3	1.1 J Z	1.6 J Z	0.95 J Z
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	2.1	0.97 J Z	1.9 U	1.9 U	1.5 J Z	1.9 UJ FD	1.1 J FD, Z	1.8 U

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		Sample Name	SL-549-SA8-SB-4.0-5.0	SL-550-SA8-SB-0.0-0.5	SL-550-SA8-SB-4.0-5.0	SL-550-SA8-SB-9.0-10.0	SL-550-SA8-SB-14.0-15.0	SL-550-SA8-SB-17.0-18.0	SL-551-SA8-SB-0.0-0.5	SL-551-SA8-SB-4.0-5.0
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	07/30/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013	07/23/2013	07/23/2013
		SDG	PH080	PH072	PH072	PH072	PH072	PH072	PH073	PH073
		Start Depth	4	0	4	9	14	17	0	4
		End Depth	5	0.5	5	10	15	18	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	20 U	20 U	20 U	22 U	19 U	8.1 J Z	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	20 U	20 U	20 U	22 U	19 U	20 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	20 U	20 U	20 U	22 U	19 U	20 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	19 U	19 U	18 U	20 U	18 U	19 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.9 U	0.87 J Z	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.9 U	0.53 J Z	1.9 U	1.8 U	2.0 U	1.8 U	0.59 J Z	1.7 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	20 U	20 U	20 U	22 U	19 U	20 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	20 U	20 U	20 U	22 U	19 U	20 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	0.97 J Z	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	20 U	20 U	20 U	22 U	19 U	20 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	0.97 J Z	1.8 U	1.9 U	1.7 UJ FD
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U	1.8 U	1.9 U	1.7 UJ FD

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J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-851-SA8-SB-4.0-5.0	SL-551-SA8-SB-9.0-10.0	SL-551-SA8-SB-14.0-15.0	SL-551-SA8-SB-19.0-20.0	SL-552-SA8-SB-0.0-0.5	SL-552-SA8-SB-4.0-5.0	SL-552-SA8-SB-7.5-8.5	SL-553-SA8-SB-0.0-0.5
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	07/23/2013	07/23/2013	07/23/2013	07/23/2013	08/02/2013	08/02/2013	08/02/2013	08/27/2013
			SDG	PH073	PH073	PH073	PH073	PH083	PH083	PH083	PH094
			Start Depth	4	9	14	19	0	4	7.5	0
			End Depth	5	10	15	20	0.5	5	8.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	21 U	21 U	21 U	21 U	73 J L, Z	30 J L	8.3 J L, Z	7.1 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	21 U	21 U	21 U	21 U	190 U	20 U	20 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	17 U	1.9 U	1.9 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	7.9 J Z	1.9 U	1.9 U	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	21 U	21 U	21 U	21 U	190 U	20 U	20 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	17	1.9 U	0.93 J Z	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	20 U	20 U	20 U	180 U	19 U	19 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	16 J Z	1.9 U	0.77 J Z	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	15 J Z	1.9 U	1.9 U	1.2 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	9.1 J Z	1.9 U	1.9 U	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	17 U	1.9 U	1.9 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	17 U	1.9 U	1.9 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.9 U	2.0 U	0.63 J Z	2.0 U	13 J Z	1.9 U	1.9 U F	1.0 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	7.6 J Z	1.9 U	1.9 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	17 U	1.9 U	1.9 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	17 U	1.9 U	1.9 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	17 U	1.9 U	1.9 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	17 U	1.9 U	1.9 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	21 U	21 U	21 U	21 U	190 U	20 U	20 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	21 U	21 U	21 U	21 U	190 U	20 U	20 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	9.0 J Z	1.9 U	1.9 U	0.87 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	21 U	21 U	21 U	21 U	190 U	20 U	20 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	17 U	1.9 U	1.9 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.9 U	2.0 U	1.9 U	2.0 U	17 U	1.9 U	1.9 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	2.9 J FD	2.0 U	1.9 U F	2.0 U	17 U	1.9 U	1.9 U	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.1 J FD, Z	2.0 U	1.9 U	2.0 U	17 U	1.9 U	1.9 U	1.8 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-553-SA8-SB-4.0-5.0	SL-853-SA8-SB-4.0-5.0	SL-553-SA8-SB-9.0-10.0	SL-553-SA8-SB-14.0-15.0	SL-553-SA8-SB-18.0-19.0	SL-554-SA8-SB-0.0-0.5	SL-554-SA8-SB-4.0-5.0	SL-555-SA8-SB-0.0-0.5
		Sample Type	N	FD	N	N	N	N	N	N
		Sample Date	08/27/2013	08/27/2013	08/28/2013	08/28/2013	08/28/2013	07/22/2013	07/22/2013	07/23/2013
		SDG	PH094	PH094	PH096	PH096	PH096	PH072	PH072	PH073
		Start Depth	4	4	9	14	18	0	4	0
		End Depth	5	5	10	15	19	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	20 U	7.7 J Z	21 U	20 U	20 U	20 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	20 U	21 U	21 U	20 U	20 U	20 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	0.77 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	20 U	21 U	21 U	20 U	20 U	20 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	19 U	20 U	20 U	18 U	19 U	19 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.9 UJ FD	0.93 J FD, Z	1.9 U	1.9 U	1.8 U	1.1 J Z	1.9 U	1.8 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	0.76 J Z	1.9 U	1.1 J Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	0.78 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	0.84 J Z	1.2 J Z	1.9 U	1.9 U	1.8 U	1.5 J Z	0.40 J Z	2.0
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	20 U	21 U	21 U	20 U	20 U	20 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	20 U	21 U	21 U	20 U	20 U	20 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	0.80 J Z	1.9 U	1.1 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	20 U	21 U	21 U	20 U	20 U	20 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.2 J FD, Z	1.9 UJ FD	1.9 U	1.9 U	1.8 U	0.86 J Z	1.9 U	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.2 J Z	1.9 U	1.9 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.9 U	1.9 U	0.96 J Z	1.9 U	1.8 U	1.1 J Z	1.9 U	1.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-555-SA8-SB-4.0-5.0	SL-556-SA8-SB-0.0-0.5	SL-556-SA8-SB-4.0-5.0	SL-558-SA8-SB-0.0-0.5	SL-558-SA8-SB-4.0-5.0	SL-558-SA8-SB-9.0-10.0	SL-558-SA8-SB-12.5-13.5	SL-559-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/23/2013	07/22/2013	07/22/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013
			SDG	PH073	PH072	PH072	PH083	PH083	PH083	PH083	PH083
			Start Depth	4	0	4	0	4	9	12.5	0
			End Depth	5	0.5	5	0.5	5	10	13.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	20 U	20 U	12 J L, Z	19 J L, Z	21 U	11 J L, Z	15 J L, Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	20 U	20 U	19 U	21 U	21 U	20 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	1.9 U	1.8 U	1.7 U	1.9 U	2.0 U	1.9 U	0.70 J Z
8270D SIM	129-00-0	Pyrene	µg/kg	1.9 U	1.9 U	1.8 U	1.8	1.9 U	2.0 U	1.9 U	3.3
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	20 U	20 U	19 U	21 U	21 U	20 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	1.9 U	1.8 U	1.7 U	1.9 U	2.0 U	1.9 U	0.81 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	19 U	18 U	18 U	20 U	20 U	19 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	1.9 U	1.8 U	1.7 U	1.9 U	2.0 U	1.9 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.9 U	1.9 U	1.8 U	1.8	1.9 U	2.0 U	1.9 U	2.8
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9 U	1.9 U	1.8 U	2.3	1.9 U	2.0 U	1.9 U	4.0
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.9 U	1.9 U	1.8 U	1.7 U	1.9 U	2.0 U	1.9 U	0.86 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	1.9 U	1.8 U	1.7 U	1.9 U	2.0 U	1.9 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.9 U	1.9 U	1.8 U	2.7	1.9 U	2.0 U	1.9 U F	5.3
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.9 U	1.9 U	1.8 U	0.70 J Z	1.9 U	2.0 U	1.9 U	1.1 J Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	1.9 U	1.8 U	1.7 U	1.9 U	2.0 U	1.9 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9 U	1.9 U	1.8 U	0.72 J Z	1.9 U	2.0 U	1.9 U	0.93 J Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	1.9 U	1.8 U	1.7 U	1.9 U	2.0 U	1.9 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	1.9 U	1.8 U	1.7 U	1.9 U	2.0 U	1.9 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	20 U	20 U	19 U	21 U	21 U	20 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	20 U	20 U	19 U	21 U	21 U	20 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	1.9 U	1.8 U	2.0	0.95 J Z	2.0 U	1.9 U	4.1
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	20 U	20 U	19 U	21 U	21 U	20 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	1.9 U	1.8 U	1.7 U	1.9 U	2.0 U	1.9 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.9 U	1.9 U	1.8 U	0.72 J Z	1.4 J Z	2.0 U	1.9 U	1.0 J Z
8270D SIM	91-20-3	Naphthalene	µg/kg	1.9 U	1.9 U	1.8 U	1.7	2.8	2.0 U	1.9 U	2.2
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.9 U	1.9 U	1.8 U	2.0	2.2	2.0 U	1.9 U	2.0

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-559-SA8-SB-4.0-5.0	SL-560-SA8-SB-0.0-0.5	SL-560-SA8-SB-4.0-5.0	SL-561-SA8-SB-0.0-0.5	SL-561-SA8-SB-4.0-5.0	SL-562-SA8-SB-0.0-0.5	SL-563-SA8-SB-0.0-0.5	SL-563-SA8-SB-2.0-3.0
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	08/02/2013	07/30/2013	07/30/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013
		SDG	PH083	PH080	PH080	PH063	PH063	PH063	PH063	PH063
		Start Depth	4	0	4	0	4	0	0	2
		End Depth	5	0.5	5	0.5	5	0.5	0.5	3
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	44 J L	19 U	20 U	8.8 J Z	20 U	18 U	18 U	39
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	19 U	20 U	18 U	20 U	18 U	18 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	0.56 J Z	1.9 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	3.4	6.4	2.1	2.3	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	19 U	20 U	18 U	20 U	18 U	18 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	0.99 J Z	3.4	1.9 U	0.82 J Z	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	6.9 J Z	19 U	17 U	19 U	17 U	17 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.1 J Z	2.3	1.9 U	0.71 J Z	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	4.0	11	1.8 J Z	1.7	1.8 U	0.70 J Z	1.7 U	1.8 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	5.0	8.0	2.7	3.0	1.8 U	1.7 U	0.76 J Z	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.6 J Z	3.7	1.9 U	10	1.8 U	2.6	3.9	0.88 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	4.6	9.0	1.6 J Z	3.1	1.8 U	0.80 J Z	0.81 J Z	0.37 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 J Z	4.3	1.9 U	0.94 J Z	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	1.3 J Z	1.9 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9	3.1	0.80 J Z	0.79 J Z	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	19 U	20 U	18 U	20 U	18 U	18 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	19 U	20 U	18 U	20 U	18 U	18 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	3.1	3.3	0.75 J Z	1.9	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	19 U	20 U	18 U	20 U	18 U	18 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	1.8 U	1.9 U	0.87 J Z	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.2 J Z	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	2.6	1.8 U F	1.9 U	1.3 J Z	1.8 U	1.7 U	1.7 U	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	2.8	1.8 U	1.9 U	1.2 J Z	1.8 U	1.7 U	1.7 U	1.8 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-564-SA8-SB-0.0-0.5	SL-565-SA8-SB-0.0-0.5	SL-565-SA8-SB-4.0-5.0	SL-566-SA8-SB-0.0-0.5	SL-566-SA8-SB-4.0-5.0	SL-567-SA8-SB-0.0-0.5	SL-567-SA8-SB-4.0-5.0	SL-567-SA8-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/06/2013	08/08/2013	08/08/2013	08/07/2013	08/07/2013	08/08/2013	08/08/2013	08/08/2013
			SDG	PH085	PH087	PH087	PH086	PH086	PH087	PH087	PH087
			Start Depth	0	0	4	0	4	0	4	9
			End Depth	0.5	0.5	5	0.5	5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	8.2 J Z	19 U	13 J Z	18 U	20 U	210 U	21 U	21 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	19 U	21 U	18 U	20 U	210 U	21 U	21 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	0.50 J Z	2.0 U	1.7 U	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.9	3.3	2.0 U	1.1 J Z	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	21 U	18 U	20 U	210 U	21 U	21 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	0.86 J Z	2.0 U	1.7 U	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	18 U	20 U	17 U	19 U	200 U	20 U	20 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	0.71 J Z	2.0 U	1.7 U	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8	4.0	2.0 U	1.2 J Z	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	2.2	4.7	2.0 U	1.4 J Z	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.2 J Z	2.0 U	1.7 U	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.8 U	2.0 U	1.7 U	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	2.4	3.9	2.0 U	1.4 J Z	0.49 J Z	5.5 J Z	2.0 U	1.9 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.1 J Z	2.0 U	1.7 U	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.8 U	2.0 U	1.7 U	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	0.75 J Z	1.1 J Z	2.0 U	1.7 U	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	2.0 U	1.7 U	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.8 U	2.0 U	1.7 U	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	21 U	18 U	20 U	210 U	21 U	21 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	21 U	18 U	20 U	210 U	21 U	21 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	2.2	2.4	2.0 U	1.2 J Z	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	21 U	18 U	20 U	210 U	21 U	21 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.8 U	2.0 U	1.7 U	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.8 U	1.6 J Z	1.6 J Z	1.8 U	20 U	2.0 U	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7	1.3 J Z	2.0 U	0.95 J Z	1.8 U F	20 U	2.0 U	1.9 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	2.4	1.0 J Z	1.0 J Z	0.76 J Z	1.8 U	20 U	2.0 U	1.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-568-SA8-SB-0.0-0.5	SL-568-SA8-SB-4.0-5.0	SL-569-SA8-SB-0.0-0.5	SL-569-SA8-SB-4.0-5.0	SL-569-SA8-SB-7.0-8.0	SL-570-SA8-SB-0.0-0.5	SL-570-SA8-SB-4.0-5.0	SL-571-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	08/05/2013	08/05/2013	08/05/2013	08/05/2013	08/05/2013	07/11/2013	07/11/2013	07/10/2013
		SDG	PH084	PH084	PH084	PH084	PH084	PH065	PH065	PH064
		Start Depth	0	4	0	4	7	0	4	0
		End Depth	0.5	5	0.5	5	8	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	200 U	15 J L, Z	7.9 J L, Z	200 U	16 J Z	11 J Z	200 U	200 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	200 U	20 U	20 U	200 U	20 U	20 U	200 U	200 U
8270D SIM	120-12-7	Anthracene	µg/kg	19 U	1.8 U	1.9 U	19 U	1.8 U	1.8 U	19 U	19 U
8270D SIM	129-00-0	Pyrene	µg/kg	19 U	1.8 U	2.1	19 U	0.89 J Z	0.76 J Z	19 U	8.8 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	200 U	20 U	20 U	200 U	20 U	20 U	200 U	200 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	19 U	1.8 U	1.2 J Z	19 U	1.2 J Z	0.94 J Z	19 U	19 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	190 U	19 U	19 U	190 U	18 U	19 U	190 U	190 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	19 U	1.8 U	1.9 U	19 U	1.8 U	1.8 U	19 U	19 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	19 U	1.8 U	2.2	12 J Z	2.1	0.99 J Z	19 U	13 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	19 U	1.8 U	1.9	19 U	0.89 J Z	1.8 U	19 U	19 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	19 U	1.8 U	1.1 J Z	19 U	1.8 U	1.8 U	19 U	19 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	19 U	1.8 U	1.9 U	19 U	1.8 U	1.8 U	19 U	19 U
8270D SIM	218-01-9	Chrysene	µg/kg	5.8 J Z	0.41 J Z	1.4 J Z	9.4 J Z	1.4 J Z	0.59 J Z	6.0 J Z	13 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	19 U	1.8 U	1.3 J Z	9.0 J Z	1.8 U	1.8 U	19 U	19 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	19 U	1.8 U	1.9 U	19 U	1.8 U	1.8 U	19 U	19 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	19 U	1.8 U	0.85 J Z	19 U	1.8 U	1.8 U	19 U	19 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	19 U	1.8 U	1.9 U	19 U	1.8 U	1.8 U	19 U	19 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	19 U	1.8 U	1.9 U	19 U	1.8 U	1.8 U	19 U	19 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	200 U	20 U	20 U	200 U	20 U	20 U	200 U	200 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	200 U	20 U	20 U	200 U	20 U	20 U	200 U	200 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	19 U	1.8 U	0.79 J Z	19 U	1.8 U	1.8 U	19 U	7.8 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	200 U	20 U	20 U	200 U	20 U	20 U	200 U	200 U
8270D SIM	86-73-7	Fluorene	µg/kg	19 U	1.8 U	1.9 U	19 U	1.8 U	1.8 U	19 U	19 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	19 U	1.8 U	1.9 U	19 U	1.8 U	1.8 U	19 U	19 U
8270D SIM	91-20-3	Naphthalene	µg/kg	19 U	1.8 U	1.9 U	19 U	1.8 U	1.8 U	19 U	19 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	19 U	1.8 U	1.9 U	19 U	1.8 U	1.8 U	19 U	19 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-571-SA8-SB-6.5-7.5	SL-571-SA8-SB-12.5-13.5	SL-572-SA8-SB-0.0-0.5	SL-572-SA8-SB-4.0-5.0	SL-572-SA8-SB-9.0-10.0	SL-572-SA8-SB-14.0-15.0	SL-572-SA8-SB-18.5-19.5	SL-573-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013
		SDG	PH064	PH064	PH064	PH064	PH064	PH064	PH064	PH064
		Start Depth	6.5	12.5	0	4	9	14	18.5	0
		End Depth	7.5	13.5	0.5	5	10	15	19.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	20 U	17 J Z	200 U	20 U	20 U	20 U	210 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	20 U	12 J Z	200 U	20 U	20 U	20 U	210 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.8 U	0.87 J Z	19 U	0.39 J Z	1.8 U	1.9 U	20 U
8270D SIM	129-00-0	Pyrene	µg/kg	0.85 J Z	1.8 U	13	13 J Z	6.5	1.8 U	1.9 U	29
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	20 U	21 U	200 U	20 U	20 U	20 U	210 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.8 U	2.8	19 U	1.9	1.8 U	1.9 U	11 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	19 U	5.2 J Z	190 U	19 U	19 U	19 U	200 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.8 U	2.4	19 U	1.3 J Z	1.8 U	1.9 U	20 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.1 J Z	1.8 U	10	16 J Z	7.5	1.8 U	1.9 U	46
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.8 U	13	11 J Z	5.8	1.8 U	1.9 U	22
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.8 U	3.8	19 U	2.5	1.8 U	1.9 U	11 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.8 U	2.0 U	19 U	1.8 U	1.8 U	1.9 U	20 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.1 J Z	0.70 J Z	9.2	16 J Z	6.0	1.8 U	1.9 U	44
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.8 U	6.3	19 U	2.9	1.8 U	1.9 U	16 J Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.8 U	1.0 J Z	19 U	1.8 U	1.8 U	1.9 U	20 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.8 U	5.6	19 U	2.9	1.8 U	1.9 U	13 J Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.8 U	2.0 U	19 U	1.8 U	1.8 U	1.9 U	20 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.8 U	2.0 U	19 U	1.8 U	1.8 U	1.9 U	20 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	20 U	21 U	200 U	20 U	20 U	20 U	210 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	20 U	21 U	200 U	20 U	20 U	20 U	210 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.4 J Z	1.8 U	9.7	14 J Z	5.3	1.8 U	1.9 U	19 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	20 U	21 U	200 U	20 U	20 U	20 U	590
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.8 U	2.0 U	19 U	1.8 U	1.8 U	1.9 U	20 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.4 J Z	1.8 U	2.0 U	19 U	1.8 U	1.8 U	1.9 U	20 U
8270D SIM	91-20-3	Naphthalene	µg/kg	0.93 J Z	1.8 U	2.0 U	19 U	1.8 U	1.8 U	1.9 U	20 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.3 J Z	1.8 U	0.80 J Z	19 U	1.8 U	1.8 U	1.9 U	20 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-573-SA8-SB-4.0-5.0	SL-573-SA8-SB-9.5-10.5	SL-574-SA8-SB-0.0-0.5	SL-574-SA8-SB-4.0-5.0	SL-574-SA8-SB-9.0-10.0	SL-574-SA8-SB-14.0-15.0	SL-874-SA8-SB-14.0-15.0	SL-575-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	N	N	FD	N
		Sample Date	07/10/2013	07/10/2013	07/11/2013	07/11/2013	07/11/2013	07/11/2013	07/11/2013	08/07/2013
		SDG	PH064	PH064	PH065	PH065	PH065	PH065	PH065	PH086
		Start Depth	4	9.5	0	4	9	14	14	0
		End Depth	5	10.5	0.5	5	10	15	15	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	200 U	19 U	210 U	190 U	200 U	20 U	19 U	200 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	200 U	19 U	210 U	190 U	200 U	20 U	19 U	200 U
8270D SIM	120-12-7	Anthracene	µg/kg	19 U	1.8 U	19 U	17 U	19 U	1.8 U	1.8 U	21
8270D SIM	129-00-0	Pyrene	µg/kg	8.8 J Z	2.4	19 U	17 U	19 U	1.8 U	1.8 U	550
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	200 U	19 U	210 U	190 U	200 U	20 U	19 U	200 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	19 U	1.0 J Z	19 U	17 U	19 U	1.8 U	1.8 U	130
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	190 U	18 U	200 U	170 U	190 U	19 U	18 U	500
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	19 U	1.8 U	19 U	17 U	19 U	1.8 U	1.8 U	150
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	16 J Z	2.8	19 U	17 U	19 U	1.8 U	1.8 U	1300
8270D SIM	206-44-0	Fluoranthene	µg/kg	19 U	1.8	19 U	17 U	19 U	1.8 U	1.8 U	350
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	19 U	0.92 J Z	19 U	17 U	19 U	1.8 U	1.8 U	580
8270D SIM	208-96-8	Acenaphthylene	µg/kg	19 U	1.8 U	19 U	17 U	19 U	1.8 U	1.8 U	19 U
8270D SIM	218-01-9	Chrysene	µg/kg	15 J Z	3.4	19 U	4.7 J Z	6.4 J Z	1.8 U	1.8 U	1200
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	19 U	2.0	19 U	17 U	19 U	1.8 U	1.8 U	810
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	19 U	1.8 U	19 U	17 U	19 U	1.8 U	1.8 U	67
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	19 U	1.0 J Z	19 U	17 U	19 U	1.8 U	1.8 U	980
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	19 U	1.8 U	19 U	17 U	19 U	1.8 U	1.8 U	19 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	19 U	1.8 U	19 U	17 U	19 U	1.8 U	1.8 U	19 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	200 U	19 U	210 U	190 U	200 U	20 U	19 U	200 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	200 U	19 U	210 U	190 U	200 U	20 U	19 U	200 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	9.8 J Z	3.3	19 U	17 U	19 U	1.8 U	1.8 U	28
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	200 U	19 U	210 U	190 U	200 U	20 U	19 U	200 U
8270D SIM	86-73-7	Fluorene	µg/kg	19 U	1.8 U	19 U	17 U	19 U	1.8 U	1.8 U	19 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	19 U	1.8 U	19 U	17 U	19 U	1.8 U	1.8 U	19 U
8270D SIM	91-20-3	Naphthalene	µg/kg	19 U	1.8 U	19 U	17 U	19 U	1.8 U	1.8 U	19 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	19 U	1.8 U	19 U	17 U	19 U	1.8 U	1.8 U	19 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-575-SA8-SB-4.0-5.0	SL-575-SA8-SB-9.0-10.0	SL-578-SA8-SB-0.0-0.5	SL-578-SA8-SB-4.0-5.0	SL-878-SA8-SB-4.0-5.0	SL-578-SA8-SB-9.0-10.0	SL-580-SA8-SB-0.0-0.5	SL-580-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	FD	N	N	N
				Sample Date	08/07/2013	08/07/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013
				SDG	PH086	PH086	PH066	PH066	PH066	PH066	PH066	PH066
				Start Depth	4	9	0	4	4	9	0	4
				End Depth	5	10	0.5	5	5	10	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	11 J Z	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	8 J Z	--	--	--	--	7 J Z
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	9 J Z	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	8 J Z	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	5 J Z	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	210 U	200 U	9.3 J Z	7.8 J Z	20 U	9.7 J Z	20 U	7.8 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	210 U	200 U	21	20 U	20 U	19 U	14 J Z	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	19 U	19 U	1.8 U	0.77 J Z	1.9 U	1.8 U	1.8 U	0.46 J Z
8270D SIM	129-00-0	Pyrene	µg/kg	19 U	19 U	1.8 U	--	1.6 J Z	1.9	2.3	6.5
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	210 U	200 U	20 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	19 U	19 U	1.8 U	3.1	1.9 U	0.82 J Z	1.5 J Z	2.7
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	190 U	190 U	18 U	5.0 J Z	19 U	18 U	19 U	4.7 J Z
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	19 U	19 U	1.8 U	2.2	1.9 U	1.8 U	1.0 J Z	2.1
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	19 U	19 U	0.79 J Z	9.9	2.4	2.3	3.8	11
8270D SIM	206-44-0	Fluoranthene	µg/kg	19 U	19 U	1.8 U	--	1.8 J Z	1.8	2.2	--
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	19 U	19 U	1.8 U	4.6	1.1 J Z	1.0 J Z	1.9	5.7
8270D SIM	208-96-8	Acenaphthylene	µg/kg	19 U	19 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	5.6 J Z	19 U	0.71 J Z	--	2.4	1.9	2.6	7.0
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	19 U	19 U	1.8 U	6.3	1.1 J Z	1.7 J Z	2.6	6.6
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	19 U	19 U	1.8 U	1.2 J Z	1.9 U	1.8 U	1.8 U	1.0 J Z
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	19 U	19 U	1.8 U	--	0.88 J Z	1.3 J Z	1.8	4.8
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	19 U	19 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	19 U	19 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	210 U	200 U	20 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	210 U	200 U	20 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	19 U	19 U	1.8 U	--	1.5 J Z	1.4 J Z	1.8 U	2.6
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	210 U	200 U	20 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	19 U	19 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	19 U	19 U	1.8 U	0.89 J Z	1.9 U	1.8 U	1.8 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	19 U	19 U	1.8 U	1.9 U F	1.9 U F	1.8 U	1.8 U	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	19 U	19 U	1.8 U	0.92 J Z	1.9 U	1.8 U	1.8 U	1.8 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-580-SA8-SB-10.5-11.5	SL-581-SA8-SB-0.0-0.5	SL-581-SA8-SB-4.5-5.5	SL-582-SA8-SB-0.0-0.5	SL-582-SA8-SB-2.5-3.5	SL-583-SA8-SB-0.0-0.5	SL-883-SA8-SB-0.0-0.5	SL-584-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	N	N	FD	N
		Sample Date	07/12/2013	07/12/2013	07/12/2013	08/06/2013	08/06/2013	08/06/2013	08/06/2013	08/06/2013
		SDG	PH066	PH066	PH066	PH085	PH085	PH085	PH085	PH085
		Start Depth	10.5	0	4.5	0	2.5	0	0	0
		End Depth	11.5	0.5	5.5	0.5	3.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	3 J Z	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	8 J Z	10 J Z	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	6 J Z	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	5 J Z	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	8 J Z	9 J Z	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	4 J FD, Z	8 J FD, Z	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	8 J FD, Z	4 J FD, Z	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	7 J Z	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	8 J Z	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	7 J Z	5 J Z	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	5 J Z	6 J Z	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	9.6 J Z	7.3 J Z	19 U	48	19 U	11 J FD, Z	29 J FD	18 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	13 J Z	19 U	19 U	19 U	18 U	18 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	0.59 J Z	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	--	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	9.9	1.8 U	0.78 J Z	2.2	1.8 U	--	--	0.93 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	18 U	18 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	3.1	1.8 U	1.7 U	1.8 U	1.8 U	0.71 J Z	--	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	5.3 J Z	18 U	18 U	18 U	18 U	17 UJ FD	4.5 J FD, Z	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	2.5	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	--	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	12	0.84 J Z	1.7 U	2.2	1.8 U	--	--	1.0 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	6.6	0.85 J Z	0.83 J Z	2.4	1.8 U	--	--	1.1 J Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	4.9	0.96 J Z	1.7 U	0.73 J Z	1.8 U	--	--	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	8.5	1.3 J Z	0.44 J Z	3.1	1.8 U	--	11	1.1 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	8.0	1.8 U	1.7 U	0.93 J Z	1.8 U	1.1 J Z	--	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.1 J Z	1.8 U	1.7 U	1.8 U	1.8 U	1.7 UJ FD	0.69 J FD, Z	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	6.7	1.8 U	1.7 U	0.85 J Z	1.8 U	--	--	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	18 U	18 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	19 U	19 U	19 U	18 U	18 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.5 J Z	1.8 U	0.80 J Z	2.3	1.8 U	--	--	0.78 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	19 U	9.7 J Z	19 U	18 UJ FD	27 J FD	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.8 U	1.7 U	1.3 J Z	1.8 U	1.7 UJ FD	0.79 J FD, Z	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.8 U	1.7 U	2.2	1.8 U	1.2 J FD, Z	2.3 J FD	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.8 U	1.7 U	2.8	1.8 U	1.0 J FD, Z	2.2 J FD	1.7 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-585-SA8-SB-0.0-0.5	SL-586-SA8-SB-0.0-0.5	SL-587-SA8-SB-0.0-0.5	SL-587-SA8-SB-6.5-7.5	SL-588-SA8-SB-0.0-0.5	SL-888-SA8-SB-0.0-0.5	SL-588-SA8-SB-2.0-3.0	SL-589-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	08/12/2013	07/08/2013	07/12/2013	07/12/2013	07/08/2013	07/08/2013	07/08/2013	07/30/2013
			SDG	PH089	PH062	PH066	PH066	PH062	PH062	PH062	PH080
			Start Depth	0	0	0	6.5	0	0	2	0
			End Depth	0.5	0.5	0.5	7.5	0.5	0.5	3	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	8.2 J Z	55	18 U	19 U	10 J FD, Z	18 UJ FD	18 U	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	18 U	7.8 J Z	110	19 U	18 U	18 U	18 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	0.77 J Z	2.2	1.7 U	1.7 U	0.73 J Z	0.67 J Z	1.7 U	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	19 U	18 U	19 U	18 U	18 U	18 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	0.73 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	18 U	17 U	18 U	17 U	17 U	17 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	0.87 J Z	2.2	1.7 U	1.7 U	0.82 J Z	0.71 J Z	2.2	1.7 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	0.90 J Z	2.4	1.7 U	1.7 U	0.87 J Z	0.90 J Z	1.7 U	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	18	1.7 U	1.7 U	4.1	4.9	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	0.87 J Z	2.7	1.7 U	1.7 U	1.1 J Z	0.94 J Z	0.41 J Z	1.7 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.3 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 U	19 U	18 U	19 U	18 U	18 U	18 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	9.3 J Z	18 U	19 U	18 U	18 U	18 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	2.3	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 U	19 U	18 U	19 U	18 U	18 U	18 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	11	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.2 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	2.8	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	2.0	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U

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		Sample Name	SL-589-SA8-SB-2.5-3.5	SL-590-SA8-SB-0.0-0.5	SL-590-SA8-SB-4.0-5.0	SL-590-SA8-SB-7.0-8.0	SL-591-SA8-SB-0.0-0.5	SL-592-SA8-SB-0.0-0.5	SL-592-SA8-SB-3.5-4.5	SL-593-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	07/30/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013
		SDG	PH080	PH089	PH089	PH089	PH089	PH089	PH089	PH089
		Start Depth	2.5	0	4	7	0	0	3.5	0
		End Depth	3.5	0.5	5	8	0.5	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	8.6 J Z	19 U	19 U	9.1 J Z	10 J Z	19 U	16 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	18 U	19 U	19 U	18 U	18 U	19 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	0.40 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	1.6 J Z	1.7 U	1.7 U	1.3 J Z	0.74 J Z	1.7 U	3.8
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	18 U	19 U	19 U	18 U	18 U	19 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.1 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	17 U	18 U	18 U	17 U	17 U	18 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.98 J Z
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 U	1.4 J Z	1.7 U	1.7 U	1.4 J Z	0.83 J Z	1.7 U	3.7
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	1.9	1.7 U	1.7 U	1.5 J Z	0.85 J Z	1.7 U	4.4
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7 U	1.9	0.39 J Z	1.7 U	1.3 J Z	0.79 J Z	1.7 U	4.0
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	0.68 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	18 U	19 U	19 U	18 U	18 U	19 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	18 U	19 U	19 U	18 U	18 U	19 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	4.0	1.7 U	1.7 U	0.98 J Z	1.7 U	1.7 U	2.1
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	18 U	19 U	19 U	18 U	18 U	19 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.4 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.99 J Z
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.4 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	5.6	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.9	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U

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R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-593-SA8-SB-4.0-5.0	SL-594-SA8-SB-0.0-0.5	SL-595-SA8-SB-0.0-0.5	SL-596-SA8-SB-0.0-0.5	SL-597-SA8-SB-0.0-0.5	SL-598-SA8-SB-0.0-0.5	SL-598-SA8-SB-4.5-5.5	SL-600-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/12/2013	08/15/2013	08/15/2013	07/30/2013	08/15/2013	07/31/2013	07/31/2013	08/14/2013
			SDG	PH089	PH092	PH092	PH080	PH092	PH081	PH081	PH091
			Start Depth	4	0	0	0	0	0	4.5	0
			End Depth	5	0.5	0.5	0.5	0.5	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	18 U	13 J Z	18 U	18 U	16 J Z	20 U	6.5 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	18 U	18 U	18 U	18 U	19 U	20 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	1.2 J Z	2.8	1.7 U	0.82 J Z	1.6 J Z	1.8 U	0.93 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	18 U	18 U	18 U	18 U	19 UJ Q	20 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.7 U	0.82 J Z	1.7 U	1.7 U	0.99 J Z	1.8 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 U	0.81 J Z	1.7 U	1.7 U	0.82 J Z	1.8 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 U	1.3 J Z	3.3	1.7 U	0.87 J Z	2.1	1.8 U	1.3 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	1.6 J Z	3.5	1.7 U	1.1 J Z	2.4	1.8 U	0.94 J Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.7 U	1.1 J Z	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 UJ Q	1.8 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7 U	1.1 J Z	2.6	1.7 U	0.76 J Z	3.0	1.8 U	1.0 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.7 U	1.4 J Z	1.7 U	1.7 U	0.89 J Z	1.8 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.2 J Z	1.8 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	0.68 J Z	1.0 J Z	1.7 U	1.7 U	1.0 J Z	1.8 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	18 U	18 U	18 U	18 U	19 U	20 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	18 U	18 U	18 U	18 U	7.0 J Z	20 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	1.2 J Z	1.5 J Z	1.7 U	1.7 U	1.6 J Z	1.8 U	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	18 U	18 U	18 U	18 U	49 J Q	20 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	2.2	1.8 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.0 J Z	1.4 J Z	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	2.0	2.0	1.7 U	1.7 U F	1.3 J Z	1.8 U	1.1 J Z
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	0.86 J Z	0.94 J Z	1.7 U	1.7 U	1.4 J Z	1.8 U	1.7 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-600-SA8-SB-4.0-5.0	SL-601-SA8-SB-0.0-0.5	SL-601-SA8-SB-4.0-5.0	SL-602-SA8-SB-0.0-0.5	SL-602-SA8-SB-4.0-5.0	SL-606-SA8-SB-0.0-0.5	SL-606-SA8-SB-4.0-5.0	SL-607-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	08/14/2013	07/18/2013	07/18/2013	08/14/2013	08/14/2013	07/19/2013	07/19/2013	08/09/2013
		SDG	PH091	PH070	PH070	PH091	PH091	PH071	PH071	PH088
		Start Depth	4	0	4	0	4	0	4	0
		End Depth	5	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	7.3 J Z	19 U	19 U	9.2 J Z	19 U	12 J Z	7.6 J Z	16 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	20 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.8 U	1.8 U	0.42 J Z	1.8 U	1.8 U	1.9 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	1.8 U	1.8 U	3.1	1.8 U	2.6	1.9 U	1.8
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	20 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.8 U	1.8 U	1.3 J Z	1.8 U	1.2 J Z	1.9 U	0.84 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.2 J Z	1.8 U	1.1 J Z	1.9 U	0.97 J Z
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	1.8 U	1.8 U	4.4	1.0 J Z	2.9	1.9 U	2.8
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.8 U	1.8 U	3.8	0.88 J Z	2.8	1.9 U	1.8
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	3.4	1.8 U	1.3 J Z	1.8 U	12	1.9 U	0.71 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	0.44 J Z	0.73 J Z	1.8 U	3.6	1.2 J Z	4.4	1.9 U	3.4
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.8	1.8 U	1.1 J Z	1.9 U	0.83 J Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.2 J Z	1.9 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.9	1.8 U	1.0 J Z	1.9 U	1.1 J Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	20 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	19 U	19 U	19 U	19 U	20 U	20 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.8 U	1.8 U	3.8	1.9	3.1	1.9 U	1.5 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	19 U	19 U	16 J Z	19 U	20 U	20 U	29
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	0.89 J Z	1.8 U	1.8 U	1.9	1.8	0.93 J Z	1.9 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 J Z	0.93 J Z	1.8 U	5.2	3.2	2.4	1.9 U	1.1 J Z
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	0.83 J Z	1.8 U	1.8 U	2.5	1.5 J Z	2.6	1.9 U	0.88 J Z

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-607-SA8-SB-5.0-6.0	SL-608-SA8-SB-0.0-0.5	SL-608-SA8-SB-4.0-5.0	SL-608-SA8-SB-7.0-8.0	SL-609-SA8-SB-0.0-0.5	SL-609-SA8-SB-4.0-5.0	SL-610-SA8-SB-0.0-0.5	SL-610-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/09/2013	08/01/2013	08/01/2013	08/01/2013	08/13/2013	08/13/2013	08/01/2013	08/01/2013
			SDG	PH088	PH082	PH082	PH082	PH090	PH090	PH082	PH082
			Start Depth	5	0	4	7	0	4	0	4
			End Depth	6	0.5	5	8	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	8.0 J Z	24	10 J Z	19 U	20 U	8.3 J Z	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	19 U	19 U	20 U	19 U	20 U	18 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	0.70 J Z	1.9 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	0.74 J Z	1.8 U	1.8 U	1.7 U	1.8 U	2.0	1.9 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	19 U	19 U	20 U	19 U	20 U	18 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	17 U	18 U	18 U	18 U	19 U	17 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	0.86 J Z	1.8 U	1.8 U	1.3 J Z	1.8 U	2.6	1.2 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	0.82 J Z	1.8 U	0.75 J Z	1.7 U	1.8 U	2.2	1.9 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.1 J Z	1.9 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	0.35 J Z	1.9 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	0.99 J Z	0.55 J Z	0.61 J Z	0.97 J Z	1.8 U	2.2	0.99 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	0.91 J Z	1.9 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.0 J Z	1.9 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U	1.9 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	19 U	19 U	20 U	19 U	20 U	18 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	19 U	19 U	20 U	19 U	20 U	16 J Z	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	0.86 J Z	1.8 U	1.8 U	1.7 U	1.8 U	6.6	1.9 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	19 U	19 U	20 U	6.9 J Z	20 U	18 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.2 J Z	1.8 U	1.8 U	1.7 U	1.8 U	2.4	1.9 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	0.80 J Z	1.9 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.7 U F	0.92 J Z	1.8 U F	1.5 J Z	1.3 J Z	1.4 J Z	1.9 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	0.69 J Z	1.8 U	1.8 U	0.73 J Z	1.8 U	1.1 J Z	1.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-610-SA8-SB-6.8-7.8	SL-612-SA8-SB-0.0-0.5	SL-612-SA8-SB-4.0-5.0	SL-613-SA8-SB-0.0-0.5	SL-613-SA8-SB-4.0-5.0	SL-614-SA8-SB-0.0-0.5	SL-614-SA8-SB-4.0-5.0	SL-615-SA8-SB-0.0-0.5
		Sample Type	N	N	N	N	N	N	N	N
		Sample Date	08/01/2013	07/30/2013	07/30/2013	08/14/2013	08/14/2013	08/13/2013	08/13/2013	08/27/2013
		SDG	PH082	PH080	PH080	PH091	PH091	PH090	PH090	PH094
		Start Depth	6.8	0	4	0	4	0	4	0
		End Depth	7.8	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	20 U	19 U	11 J Z	20 U	19 U	20 U	6.5 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	20 U	19 U	19 U	20 U	19 U	20 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	1.9 U	2.3	2.0	1.9 U	0.97 J Z	1.1 J Z	2.1
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	20 U	19 U	19 U	20 U	19 U	20 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.9 U	1.8 U	0.95 J Z	1.9 U	0.87 J Z	1.8 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	19 U	18 U	18 U	19 U	18 U	18 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.9 U	1.8 U	0.77 J Z	1.9 U	0.77 J Z	1.8 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	1.9 U	1.7 J Z	2.4	1.9 U	1.9	0.86 J Z	2.4
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.9 U	2.7	2.1	1.9 U	0.90 J Z	0.97 J Z	2.4
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.9 U	1.8 U	0.88 J Z	1.9 U	1.1 J Z	1.8 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	1.9 U	1.5 J Z	1.9	1.9 U	1.0 J Z	1.1 J Z	2.3
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.9 U	0.93 J Z	0.92 J Z	1.9 U	0.76 J Z	1.8 U	0.76 J Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.9 U	1.2 J Z	0.96 J Z	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	20 U	19 U	19 U	20 U	19 U	20 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	20 U	19 U	19 U	20 U	19 U	20 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.9 U	1.3 J Z	1.4 J Z	1.9 U	1.8 U	2.0	1.3 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	20 U	19 U	6.3 J Z	20 U	19 U	20 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.9 U	1.8 U	1.7 U	1.9 U	1.8 U	1.8 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	1.9 U	1.8 U	0.74 J Z	1.3 J Z	0.97 J Z	2.2	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.9 U	1.8 U	1.4 J Z	2.4	2.1	4.9	1.7 U F
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	1.9 U	1.8 U	0.77 J Z	1.2 J Z	1.0 J Z	2.9	0.78 J Z

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				Sample Name	SL-501-SA8-SB-0.0-0.5	SL-801-SA8-SB-0.0-0.5	SL-501-SA8-SB-4.0-5.0	SL-501-SA8-SB-9.0-10.0	SL-501-SA8-SB-12.0-13.0	SL-502-SA8-SB-0.0-0.5	SL-502-SA8-SB-4.0-5.0	SL-502-SA8-SB-7.5-8.5
				Sample Type	N	FD	N	N	N	N	N	N
				Sample Date	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013
				SDG	PH067	PH067	PH067	PH067	PH067	PH067	PH067	PH067
				Start Depth	0	0	4	9	12	0	4	7.5
				End Depth	0.5	0.5	5	10	13	0.5	5	8.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	8.1 J Z	13 J Z	18 U	18 U	18 U	29	6.8 J Z	18 U	
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	35 U	35 U	36 U	35 U	140	44	17 J Z	
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	35 U	35 U	36 U	35 U	35 U	36 U	36 U	
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U	
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	35 U	35 U	36 U	35 U	35 U	36 U	36 U	

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				Sample Name	SL-503-SA8-SB-0.0-0.5	SL-503-SA8-SB-3.0-4.0	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-505-SA8-SB-0.0-0.5	SL-505-SA8-SB-4.0-5.0	SL-506-SA8-SB-0.0-0.5	SL-506-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	FD	N	N	N	N
				Sample Date	07/15/2013	07/15/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013
				SDG	PH067	PH067	PH068	PH068	PH068	PH068	PH068	PH070	PH070
				Start Depth	0	3	0	2.5	2.5	0	4	0	4
				End Depth	0.5	4	0.5	3.5	3.5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit										
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19	18 U	9.6 J Z	18 U	18 U	16 J Z	19 U	5.0 J Z	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	35 U	34 U	34 U	34 U	35 U	36 U	84 U	35 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	35 U	34 U	34 U	34 U	35 U	36 U	84 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	35 U	34 U	34 U	34 U	35 U	36 U	84 U	35 U

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				Sample Name	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5	SL-509-SA8-SB-0.0-0.5	SL-509-SA8-SB-4.0-5.0	SL-510-SA8-SB-0.0-0.5	SL-511-SA8-SB-0.0-0.5	SL-511-SA8-SB-6.0-7.0	SL-512-SA8-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/15/2013	07/15/2013	07/17/2013
				SDG	PH068	PH068	PH068	PH070	PH070	PH068	PH067	PH067	PH069
				Start Depth	0	3	0	0	4	0	0	6	0
				End Depth	0.5	4	0.5	0.5	5	0.5	0.5	7	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
8082A	11096-82-5	Aroclor 1260	µg/kg	17 U	17 U	18 U	18 U	18 U	18 U	17 U	18 U	20 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	25	17 U	96	18 U	18 U	17 U	18 U	20 U	8.2 J Z, *#	
8082A	11100-14-4	Aroclor 1268	µg/kg	17 U	17 U	18 U	18 U	18 U	17 U	18 U	20 U	17 U	
8082A	11104-28-2	Aroclor 1221	µg/kg	17 U	17 U	18 U	18 U	18 U	17 U	18 U	20 U	17 U	
8082A	11126-42-4	Aroclor 5460	µg/kg	33 U	34 U	35 U	36 U	35 U	33 U	34 U	39 U	33 U	
8082A	11141-16-5	Aroclor 1232	µg/kg	17 U	17 U	18 U	18 U	18 U	17 U	18 U	20 U	17 U	
8082A	12642-23-8	Aroclor 5442	µg/kg	33 U	34 U	35 U	36 U	35 U	33 U	34 U	39 U	33 U	
8082A	12672-29-6	Aroclor 1248	µg/kg	17 U	17 U	18 U	18 U	18 U	17 U	18 U	20 U	17 U	
8082A	12674-11-2	Aroclor 1016	µg/kg	17 U	17 U	18 U	18 U	18 U	17 U	18 U	20 U	17 U	
8082A	37324-23-5	Aroclor 1262	µg/kg	17 U	17 U	18 U	18 U	18 U	17 U	18 U	20 U	17 U	
8082A	53469-21-9	Aroclor 1242	µg/kg	17 U	17 U	18 U	18 U	18 U	17 U	18 U	20 U	17 U	
8082A	63496-31-1	Aroclor 5432	µg/kg	33 U	34 U	35 U	36 U	35 U	33 U	34 U	39 U	33 U	

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			Sample Name	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-515-SA8-SB-0.0-0.5	SL-515-SA8-SB-4.0-5.0	SL-515-SA8-SB-9.0-10.0	SL-515-SA8-SB-14.0-15.0	SL-516-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/19/2013
			SDG	PH069	PH069	PH069	PH069	PH069	PH069	PH069	PH071
			Start Depth	0	4	8	0	4	9	14	0
			End Depth	0.5	5	9	0.5	5	10	15	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	19 U	17 U	19 U	19 U	20 U	19 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	38	19 U	17 U	20	19 U	20 U	19 U	17 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	19 U	17 U	19 U	19 U	20 U	19 U	17 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	19 U	17 U	19 U	19 U	20 U	19 U	17 U
8082A	11126-42-4	Aroclor 5460	µg/kg	36 U	36 U	33 U	38 U	38 U	40 U	38 U	33 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	19 U	17 U	19 U	19 U	20 U	19 U	17 U
8082A	12642-23-8	Aroclor 5442	µg/kg	36 U	36 U	33 U	38 U	38 U	40 U	38 U	33 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	19 U	17 U	19 U	19 U	20 U	19 U	17 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	19 U	17 U	19 U	19 U	20 U	19 U	17 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	19 U	17 U	19 U	19 U	20 U	19 U	17 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	19 U	17 U	19 U	19 U	20 U	19 U	17 U
8082A	63496-31-1	Aroclor 5432	µg/kg	36 U	36 U	33 U	38 U	38 U	40 U	38 U	33 U

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				Sample Name	SL-517-SA8-SB-0.0-0.5	SL-517-SA8-SB-3.0-4.0	SL-518-SA8-SB-0.0-0.5	SL-518-SA8-SB-4.0-5.0	SL-519-SA8-SB-0.0-0.5	SL-519-SA8-SB-3.5-4.5	SL-520-SA8-SB-0.0-0.5	SL-521-SA8-SB-0.0-0.5	SL-522-SA8-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/18/2013	07/18/2013	07/18/2013	07/19/2013	07/26/2013
				SDG	PH071	PH071	PH071	PH071	PH070	PH070	PH070	PH071	PH076
				Start Depth	0	3	0	4	0	3.5	0	0	0
				End Depth	0.5	4	0.5	5	0.5	4.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
8082A	11096-82-5	Aroclor 1260	µg/kg	17 U	18 U	17 U	18 U	18 U	18 U	18 U	18 U	17 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	34	18 U	17 U	18 U	53	18 U	110	17 U	19 U	
8082A	11100-14-4	Aroclor 1268	µg/kg	17 U	18 U	17 U	18 U	18 U	18 U	18 U	17 U	19 U	
8082A	11104-28-2	Aroclor 1221	µg/kg	17 U	18 U	17 U	18 U	18 U	18 U	18 U	17 U	19 U	
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	34 U	34 U	34 U	35 U	34 U	34 U	33 U	36 U	
8082A	11141-16-5	Aroclor 1232	µg/kg	17 U	18 U	17 U	18 U	18 U	18 U	18 U	17 U	19 U	
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	34 U	34 U	34 U	35 U	34 U	34 U	33 U	36 U	
8082A	12672-29-6	Aroclor 1248	µg/kg	17 U	18 U	17 U	18 U	18 U	18 U	18 U	17 U	19 U	
8082A	12674-11-2	Aroclor 1016	µg/kg	17 U	18 U	17 U	18 U	18 U	18 U	18 U	17 U	19 U	
8082A	37324-23-5	Aroclor 1262	µg/kg	17 U	18 U	17 U	18 U	18 U	18 U	18 U	17 U	19 U	
8082A	53469-21-9	Aroclor 1242	µg/kg	17 U	18 U	17 U	18 U	18 U	18 U	18 U	17 U	19 U	
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	34 U	34 U	34 U	35 U	34 U	34 U	33 U	36 U	

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				Sample Name	SL-522-SA8-SB-4.0-5.0	SL-523-SA8-SB-4.0-5.0	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0	SL-525-SA8-SB-0.0-0.5	SL-525-SA8-SB-4.0-5.0	SL-526-SA8-SB-0.0-0.5	SL-526-SA8-SB-4.0-5.0	SL-527-SA8-SB-0.0-0.5
				Sample Type	N	N	FD	N	N	N	N	N	N
				Sample Date	07/26/2013	07/25/2013	07/25/2013	07/25/2013	07/25/2013	07/25/2013	07/29/2013	07/29/2013	07/24/2013
				SDG	PH076	PH075	PH075	PH075	PH075	PH075	PH078	PH078	PH074
				Start Depth	4	4	4	4	0	4	0	4	0
				End Depth	5	5	5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	19 U	19 U	19 U	19 U	18 U	19 U	18 U	20 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	19 U	19 U	19 U	19 U	19 U	15 J Z	20 U	19 U	
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	19 U	19 U	19 U	18 U	19 U	18 U	20 U	19 U	
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	19 U	19 U	19 U	18 U	19 U	18 U	20 U	19 U	
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	37 U	37 U	37 U	35 U	37 U	36 U	38 U	36 U	
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	19 U	19 U	19 U	18 U	19 U	18 U	20 U	19 U	
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	37 U	37 U	37 U	35 U	37 U	36 U	38 U	36 U	
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	19 U	19 U	19 U	18 U	19 U	18 U	20 U	19 U	
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	19 U	19 U	19 U	18 U	19 U	18 U	20 U	19 U	
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	19 U	19 U	19 U	18 U	19 U	18 U	20 U	19 U	
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	19 U	19 U	19 U	18 U	19 U	18 U	20 U	19 U	
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	37 U	37 U	37 U	35 U	37 U	36 U	38 U	36 U	

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				Sample Name	SL-527-SA8-SB-4.0-5.0	SL-528-SA8-SB-4.0-5.0	SL-529-SA8-SB-0.0-0.5	SL-529-SA8-SB-4.0-5.0	SL-530-SA8-SB-0.0-0.5	SL-530-SA8-SB-4.0-5.0	SL-830-SA8-SB-4.0-5.0	SL-531-SA8-SB-0.0-0.5	SL-531-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	FD	N	N
				Sample Date	07/24/2013	07/24/2013	07/29/2013	07/29/2013	08/09/2013	08/09/2013	08/09/2013	07/18/2013	07/18/2013
				SDG	PH074	PH074	PH078	PH078	PH088	PH088	PH088	PH070	PH070
				Start Depth	4	4	0	4	0	4	4	0	4
				End Depth	5	5	0.5	5	0.5	5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit										
8082A	11096-82-5	Aroclor 1260	µg/kg	20 U	19 U	18 U	19 U	18 U	19 U	19 U	19 U	18 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	20 U	19 U	7.3 J Z	19 U	18	19 U	19 U	5.5 J Z	19 U	
8082A	11100-14-4	Aroclor 1268	µg/kg	20 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U	19 U	
8082A	11104-28-2	Aroclor 1221	µg/kg	20 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U	19 U	
8082A	11126-42-4	Aroclor 5460	µg/kg	38 U	37 U	35 U	38 U	35 U	37 U	37 U	35 U	37 U	
8082A	11141-16-5	Aroclor 1232	µg/kg	20 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U	19 U	
8082A	12642-23-8	Aroclor 5442	µg/kg	38 U	37 U	35 U	38 U	35 U	37 U	37 U	35 U	37 U	
8082A	12672-29-6	Aroclor 1248	µg/kg	20 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U	19 U	
8082A	12674-11-2	Aroclor 1016	µg/kg	20 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U	19 U	
8082A	37324-23-5	Aroclor 1262	µg/kg	20 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U	19 U	
8082A	53469-21-9	Aroclor 1242	µg/kg	20 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U	19 U	
8082A	63496-31-1	Aroclor 5432	µg/kg	38 U	37 U	35 U	38 U	35 U	37 U	37 U	35 U	37 U	

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-532-SA8-SB-0.0-0.5	SL-532-SA8-SB-6.5-7.5	SL-536-SA8-SB-0.0-0.5	SL-536-SA8-SB-4.0-5.0	SL-537-SA8-SB-0.0-0.5	SL-537-SA8-SB-4.0-5.0	SL-538-SA8-SB-0.0-0.5	SL-538-SA8-SB-4.0-5.0	SL-838-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N	FD
				Sample Date	07/19/2013	07/19/2013	07/31/2013	07/31/2013	07/31/2013	07/31/2013	08/09/2013	08/09/2013	08/09/2013
				SDG	PH071	PH071	PH081	PH081	PH081	PH081	PH088	PH088	PH088
				Start Depth	0	6.5	0	4	0	4	0	4	4
				End Depth	0.5	7.5	0.5	5	0.5	5	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit										
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	20 U	17 U	18 U	17 U	18 U	18 U	20 U	20 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	20 U	17 U	18 U	17 U	18 U	18 U	20 U	20 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	20 U	17 U	18 U	17 U	18 U	18 U	20 U	20 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	20 U	17 U	18 U	17 U	18 U	18 U	20 U	20 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	38 U	34 U	36 U	34 U	36 U	35 U	38 U	38 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	20 U	17 U	18 U	17 U	18 U	18 U	20 U	20 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	38 U	34 U	36 U	34 U	36 U	35 U	38 U	38 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	20 U	17 U	18 U	17 U	18 U	18 U	20 U	20 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	20 U	17 U	18 U	17 U	18 U	18 U	20 U	20 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	20 U	17 U	18 U	17 U	18 U	18 U	20 U	20 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	20 U	17 U	18 U	17 U	18 U	18 U	20 U	20 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	38 U	34 U	36 U	34 U	36 U	35 U	38 U	38 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-539A-SA8-SB-0.0-0.5	SL-539B-SA8-SB-0.0-0.5	SL-539B-SA8-SB-2.0-3.0	SL-539C-SA8-SB-0.0-0.5	SL-539D-SA8-SB-0.0-0.5	SL-540-SA8-SB-0.0-0.5	SL-540-SA8-SB-4.0-5.0	SL-541-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/26/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	08/09/2013
			SDG	PH076	PH076	PH076	PH076	PH076	PH076	PH076	PH088
			Start Depth	0	0	2	0	0	0	4	0
			End Depth	0.5	0.5	3	0.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	20 U	20 U	20 U	19 U	19 U	19 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	20 U	20 U	20 U	19 U	19 U	19 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	20 U	20 U	11 J Z	19 U	19 U	19 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	20 U	20 U	20 U	19 U	19 U	19 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	38 U	38 U	38 U	39 U	38 U	36 U	37 U	25 J Z
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	20 U	20 U	20 U	19 U	19 U	19 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	38 U	38 U	38 U	39 U	38 U	36 U	37 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	20 U	20 U	20 U	19 U	19 U	19 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	20 U	20 U	20 U	19 U	19 U	19 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	20 U	20 U	20 U	19 U	19 U	19 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	20 U	20 U	20 U	19 U	19 U	19 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	38 U	38 U	38 U	39 U	38 U	36 U	37 U	35 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-541-SA8-SB-4.0-5.0	SL-542-SA8-SB-0.0-0.5	SL-542-SA8-SB-4.0-5.0	SL-542-SA8-SB-9.0-10.0	SL-542-SA8-SB-14.0-15.0	SL-542-SA8-SB-17.5-18.5	SL-543-SA8-SB-0.0-0.5	SL-543-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/09/2013	09/26/2013	09/26/2013	09/26/2013	09/26/2013	09/26/2013	08/13/2013	08/13/2013
			SDG	PH088	PH117	PH117	PH117	PH117	PH117	PH090	PH090
			Start Depth	4	0	4	9	14	17.5	0	4
			End Depth	5	0.5	5	10	15	18.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	18 U	19 U	20 U	20 U	19 U	18 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	8.5 J Z	18 U	19 U	20 U	20 U	19 U	17 J Z	19 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	18 U	19 U	20 U	20 U	19 U	18 U	19 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	18 U	19 U	20 U	20 U	19 U	18 U	19 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	35 U	38 U	38 U	39 U	38 U	35 U	37 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	18 U	19 U	20 U	20 U	19 U	18 U	19 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	35 U	38 U	38 U	39 U	38 U	35 U	37 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	18 U	19 U	20 U	20 U	19 U	18 U	19 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	18 U	19 U	20 U	20 U	19 U	18 U	19 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	18 U	19 U	20 U	20 U	19 U	18 U	19 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	18 U	19 U	20 U	20 U	19 U	18 U	19 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	35 U	38 U	38 U	39 U	38 U	35 U	37 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-843-SA8-SB-4.0-5.0	SL-549-SA8-SB-0.0-0.5	SL-549-SA8-SB-4.0-5.0	SL-550-SA8-SB-0.0-0.5	SL-550-SA8-SB-4.0-5.0	SL-550-SA8-SB-9.0-10.0	SL-550-SA8-SB-14.0-15.0	SL-550-SA8-SB-17.0-18.0
				Sample Type	FD	N	N	N	N	N	N	N
				Sample Date	08/13/2013	07/30/2013	07/30/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013
				SDG	PH090	PH080	PH080	PH072	PH072	PH072	PH072	PH072
				Start Depth	4	0	4	0	4	9	14	17
				End Depth	5	0.5	5	0.5	5	10	15	18
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	35 U	37 U	37 U	37 U	36 U	39 U	35 U	
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	35 U	37 U	37 U	37 U	36 U	39 U	35 U	
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	18 U	19 U	19 U	19 U	19 U	19 U	20 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	35 U	37 U	37 U	37 U	36 U	39 U	35 U	

U-Compound not detected above reporting limit
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			Sample Name	SL-551-SA8-SB-0.0-0.5	SL-551-SA8-SB-4.0-5.0	SL-851-SA8-SB-4.0-5.0	SL-551-SA8-SB-9.0-10.0	SL-551-SA8-SB-14.0-15.0	SL-551-SA8-SB-19.0-20.0	SL-552-SA8-SB-0.0-0.5	SL-552-SA8-SB-4.0-5.0
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	07/23/2013	07/23/2013	07/23/2013	07/23/2013	07/23/2013	07/23/2013	08/02/2013	08/02/2013
			SDG	PH073	PH073	PH073	PH073	PH073	PH073	PH083	PH083
			Start Depth	0	4	4	9	14	19	0	4
			End Depth	0.5	5	5	10	15	20	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	8.6 J Z	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	18 U	19 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	18 U	19 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	18 U	19 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	35 U	38 U	39 U	39 U	39 U	34 U	37 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	18 U	19 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	35 U	38 U	39 U	39 U	39 U	34 U	37 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	18 U	19 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	18 U	19 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	18 U	19 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	18 U	20 U	20 U	20 U	20 U	18 U	19 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	35 U	38 U	39 U	39 U	39 U	34 U	37 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-552-SA8-SB-7.5-8.5	SL-553-SA8-SB-0.0-0.5	SL-553-SA8-SB-4.0-5.0	SL-853-SA8-SB-4.0-5.0	SL-553-SA8-SB-9.0-10.0	SL-553-SA8-SB-14.0-15.0	SL-553-SA8-SB-18.0-19.0	SL-554-SA8-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	08/02/2013	08/27/2013	08/27/2013	08/27/2013	08/28/2013	08/28/2013	08/28/2013	07/22/2013
				SDG	PH083	PH094	PH094	PH094	PH096	PH096	PH096	PH072
				Start Depth	7.5	0	4	4	9	14	18	0
				End Depth	8.5	0.5	5	5	10	15	19	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	19 U	19 U	19 U	19 U	20 U	20 U	18 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	19 U	19 U	19 U	20 U	20 U	18 U	19 U	
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	19 U	19 U	19 U	20 U	20 U	18 U	19 U	
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	19 U	19 U	19 U	20 U	20 U	18 U	19 U	
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	36 U	37 U	37 U	38 U	38 U	35 U	38 U	
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	19 U	19 U	19 U	20 U	20 U	18 U	19 U	
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	36 U	37 U	37 U	38 U	38 U	35 U	38 U	
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	19 U	19 U	19 U	20 U	20 U	18 U	19 U	
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	19 U	19 U	19 U	20 U	20 U	18 U	19 U	
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	19 U	19 U	19 U	20 U	20 U	18 U	19 U	
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	19 U	19 U	19 U	20 U	20 U	18 U	19 U	
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	36 U	37 U	37 U	38 U	38 U	35 U	38 U	

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-554-SA8-SB-4.0-5.0	SL-555-SA8-SB-0.0-0.5	SL-555-SA8-SB-4.0-5.0	SL-556-SA8-SB-0.0-0.5	SL-556-SA8-SB-4.0-5.0	SL-557A-SA8-SB-0.0-0.5	SL-557B-SA8-SB-0.0-0.5	SL-557C-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/22/2013	07/23/2013	07/23/2013	07/22/2013	07/22/2013	07/23/2013	07/23/2013	07/23/2013
			SDG	PH072	PH073	PH073	PH072	PH072	PH073	PH073	PH073
			Start Depth	4	0	4	0	4	0	0	0
			End Depth	5	0.5	5	0.5	5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	20 U	19 U	19 U	19 U	18 U	56	31
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	38 U	37 U	38 U	36 U	36 U	35 U	35 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	38 U	37 U	38 U	36 U	36 U	35 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	20 U	19 U	19 U	19 U	18 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	38 U	37 U	38 U	36 U	36 U	35 U	35 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-557D-SA8-SB-0.0-0.5	SL-558-SA8-SB-0.0-0.5	SL-558-SA8-SB-4.0-5.0	SL-558-SA8-SB-9.0-10.0	SL-558-SA8-SB-12.5-13.5	SL-559-SA8-SB-0.0-0.5	SL-559-SA8-SB-4.0-5.0	SL-560-SA8-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	07/23/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013	07/30/2013
				SDG	PH073	PH083	PH083	PH083	PH083	PH083	PH083	PH080
				Start Depth	0	0	4	9	12.5	0	4	0
				End Depth	0.5	0.5	5	10	13.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	20 U	20 U	19 U	31 J *#	14 J Z	9.4 J Z
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	82	9.6 J Z	20 U	7.1 J Z	190 J *#	85	14 J Z
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	20 U	20 U	19 U	17 U	19 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	20 U	20 U	19 U	17 U	19 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	36 U	34 U	38 U	38 U	36 U	13 J Z	37 U	35 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	20 U	20 U	19 U	17 U	19 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	36 U	34 U	38 U	38 U	36 U	34 U	37 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	20 U	20 U	19 U	240	19 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	20 U	20 U	19 U	17 U	19 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	20 U	20 U	19 U	17 U	19 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	20 U	20 U	19 U	17 U	19 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	36 U	34 U	38 U	38 U	36 U	34 U	37 U	35 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-560-SA8-SB-4.0-5.0	SL-561-SA8-SB-0.0-0.5	SL-561-SA8-SB-4.0-5.0	SL-562-SA8-SB-0.0-0.5	SL-563-SA8-SB-0.0-0.5	SL-563-SA8-SB-2.0-3.0	SL-564-SA8-SB-0.0-0.5	SL-565-SA8-SB-0.0-0.5	SL-565-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	07/30/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	08/06/2013	08/08/2013	08/08/2013
				SDG	PH080	PH063	PH063	PH063	PH063	PH063	PH085	PH087	PH087
				Start Depth	4	0	4	0	0	2	0	0	4
				End Depth	5	0.5	5	0.5	0.5	3	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit										
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	17 U	18 U	17 U	17 U	18 U	18 U	6.2 J Z	20 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	17 U	18 U	17 U	17 U	18 U	18 U	18 U	20 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	17 U	18 U	17 U	17 U	18 U	18 U	18 U	20 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	17 U	18 U	17 U	17 U	18 U	18 U	18 U	20 U
8082A	11126-42-4	Aroclor 5460	µg/kg	36 U	33 U	35 U	33 U	33 U	34 U	35 U	35 U	39 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	17 U	18 U	17 U	17 U	18 U	18 U	18 U	20 U
8082A	12642-23-8	Aroclor 5442	µg/kg	36 U	33 U	35 U	33 U	33 U	34 U	35 U	35 U	39 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	17 U	18 U	17 U	17 U	18 U	18 U	18 U	20 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	17 U	18 U	17 U	17 U	18 U	18 U	18 U	20 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	17 U	18 U	17 U	17 U	18 U	18 U	18 U	20 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	17 U	18 U	17 U	17 U	18 U	18 U	18 U	20 U
8082A	63496-31-1	Aroclor 5432	µg/kg	36 U	33 U	35 U	33 U	33 U	34 U	35 U	35 U	39 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-566-SA8-SB-0.0-0.5	SL-566-SA8-SB-4.0-5.0	SL-567-SA8-SB-0.0-0.5	SL-567-SA8-SB-4.0-5.0	SL-567-SA8-SB-9.0-10.0	SL-568-SA8-SB-0.0-0.5	SL-568-SA8-SB-4.0-5.0	SL-569-SA8-SB-0.0-0.5	SL-569-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	08/07/2013	08/07/2013	08/08/2013	08/08/2013	08/08/2013	08/05/2013	08/05/2013	08/05/2013	08/05/2013
				SDG	PH086	PH086	PH087	PH087	PH087	PH084	PH084	PH084	PH084
				Start Depth	0	4	0	4	9	0	4	0	4
				End Depth	0.5	5	0.5	5	10	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit										
8082A	11096-82-5	Aroclor 1260	µg/kg	17 U	19 U	20 U	20 U	20 U	19 U	18 U	19 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	17 U	19 U	20 U	20 U	20 U	19 U	18 U	19 U	19 U
8082A	11100-14-4	Aroclor 1268	µg/kg	17 U	19 U	20 U	20 U	20 U	19 U	18 U	19 U	19 U
8082A	11104-28-2	Aroclor 1221	µg/kg	17 U	19 U	20 U	20 U	20 U	19 U	18 U	19 U	19 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	36 U	39 U	39 U	39 U	37 U	36 U	15 J Z	37 U
8082A	11141-16-5	Aroclor 1232	µg/kg	17 U	19 U	20 U	20 U	20 U	19 U	18 U	19 U	19 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	36 U	39 U	39 U	39 U	37 U	36 U	36 U	37 U
8082A	12672-29-6	Aroclor 1248	µg/kg	17 U	19 U	20 U	20 U	20 U	19 U	18 U	19 U	19 U
8082A	12674-11-2	Aroclor 1016	µg/kg	17 U	19 U	20 U	20 U	20 U	19 U	18 U	19 U	19 U
8082A	37324-23-5	Aroclor 1262	µg/kg	17 U	19 U	20 U	20 U	20 U	19 U	18 U	19 U	19 U
8082A	53469-21-9	Aroclor 1242	µg/kg	17 U	19 U	20 U	20 U	20 U	19 U	18 U	19 U	19 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	36 U	39 U	39 U	39 U	37 U	36 U	36 U	37 U

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			Sample Name	SL-569-SA8-SB-7.0-8.0	SL-570-SA8-SB-0.0-0.5	SL-570-SA8-SB-4.0-5.0	SL-571-SA8-SB-0.0-0.5	SL-571-SA8-SB-6.5-7.5	SL-571-SA8-SB-12.5-13.5	SL-572-SA8-SB-0.0-0.5	SL-572-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/05/2013	07/11/2013	07/11/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013
			SDG	PH084	PH065	PH065	PH064	PH064	PH064	PH064	PH064
			Start Depth	7	0	4	0	6.5	12.5	0	4
			End Depth	8	0.5	5	0.5	7.5	13.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	19 U	19 U	19 U	18 U	20 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	19 U	19 U	19 U	18 U	20 U	19 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	19 U	19 U	19 U	18 U	20 U	19 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	19 U	19 U	19 U	18 U	20 U	19 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	12 J Z	37 U	37 U	36 U	35 U	39 U	37 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	19 U	19 U	19 U	18 U	20 U	19 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	36 U	37 U	37 U	36 U	35 U	39 U	37 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	19 U	19 U	19 U	18 U	20 U	19 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	19 U	19 U	19 U	18 U	20 U	19 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	19 U	19 U	19 U	18 U	20 U	19 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	19 U	19 U	19 U	18 U	20 U	19 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	36 U	37 U	37 U	36 U	35 U	39 U	37 U

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			Sample Name	SL-572-SA8-SB-9.0-10.0	SL-572-SA8-SB-14.0-15.0	SL-572-SA8-SB-18.5-19.5	SL-573-SA8-SB-0.0-0.5	SL-573-SA8-SB-4.0-5.0	SL-573-SA8-SB-9.5-10.5	SL-574-SA8-SB-0.0-0.5	SL-574-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/11/2013	07/11/2013
			SDG	PH064	PH064	PH064	PH064	PH064	PH064	PH065	PH065
			Start Depth	9	14	18.5	0	4	9.5	0	4
			End Depth	10	15	19.5	0.5	5	10.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	36 U	36 U	36 U	39 U	37 U	35 U	38 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	36 U	36 U	36 U	39 U	37 U	35 U	38 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	18 U	19 U	20 U	19 U	18 U	20 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	36 U	36 U	36 U	39 U	37 U	35 U	38 U	34 U

U-Compound not detected above reporting limit
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			Sample Name	SL-574-SA8-SB-9.0-10.0	SL-574-SA8-SB-14.0-15.0	SL-874-SA8-SB-14.0-15.0	SL-575-SA8-SB-0.0-0.5	SL-575-SA8-SB-4.0-5.0	SL-575-SA8-SB-9.0-10.0	SL-578-SA8-SB-0.0-0.5	SL-578-SA8-SB-4.0-5.0
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	07/11/2013	07/11/2013	07/11/2013	08/07/2013	08/07/2013	08/07/2013	07/12/2013	07/12/2013
			SDG	PH065	PH065	PH065	PH086	PH086	PH086	PH066	PH066
			Start Depth	9	14	14	0	4	9	0	4
			End Depth	10	15	15	0.5	5	10	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	19 U	18 U	19 U	20 U	19 U	18 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	19 U	18 U	19 U	20 U	19 U	18 U	19 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	19 U	18 U	19 U	20 U	19 U	18 U	19 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	19 U	18 U	19 U	20 U	19 U	18 U	19 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	36 U	35 U	37 U	38 U	37 U	35 U	37 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	19 U	18 U	19 U	20 U	19 U	18 U	19 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	36 U	35 U	37 U	38 U	37 U	35 U	37 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	19 U	18 U	19 U	20 U	19 U	18 U	19 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	19 U	18 U	19 U	20 U	19 U	18 U	19 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	19 U	18 U	19 U	20 U	19 U	18 U	19 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	19 U	18 U	19 U	20 U	19 U	18 U	19 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	36 U	35 U	37 U	38 U	37 U	35 U	37 U

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				Sample Name	SL-878-SA8-SB-4.0-5.0	SL-578-SA8-SB-9.0-10.0	SL-580-SA8-SB-0.0-0.5	SL-580-SA8-SB-4.0-5.0	SL-580-SA8-SB-10.5-11.5	SL-581-SA8-SB-0.0-0.5	SL-581-SA8-SB-4.5-5.5	SL-582-SA8-SB-0.0-0.5
				Sample Type	FD	N	N	N	N	N	N	N
				Sample Date	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	08/06/2013
				SDG	PH066	PH066	PH066	PH066	PH066	PH066	PH066	PH085
				Start Depth	4	9	0	4	10.5	0	4.5	0
				End Depth	5	10	0.5	5	11.5	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	18 U	19 U	18 U	18 U	18 U	17 U	9.5 J Z
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	18 U	19 U	18 U	18 U	18 U	17 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	18 U	19 U	18 U	18 U	18 U	17 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	18 U	19 U	18 U	18 U	18 U	17 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	35 U	36 U	35 U	34 U	35 U	34 U	61
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	18 U	19 U	18 U	18 U	18 U	17 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	35 U	36 U	35 U	34 U	35 U	34 U	35 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	18 U	19 U	18 U	18 U	18 U	17 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	18 U	19 U	18 U	18 U	18 U	17 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	18 U	19 U	18 U	18 U	18 U	17 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	18 U	19 U	18 U	18 U	18 U	17 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	35 U	36 U	35 U	34 U	35 U	34 U	35 U

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				Sample Name	SL-582-SA8-SB-2.5-3.5	SL-583-SA8-SB-0.0-0.5	SL-883-SA8-SB-0.0-0.5	SL-584-SA8-SB-0.0-0.5	SL-585-SA8-SB-0.0-0.5	SL-586-SA8-SB-0.0-0.5	SL-587-SA8-SB-0.0-0.5	SL-587-SA8-SB-6.5-7.5	SL-588-SA8-SB-0.0-0.5
				Sample Type	N	N	FD	N	N	N	N	N	N
				Sample Date	08/06/2013	08/06/2013	08/06/2013	08/06/2013	08/12/2013	07/08/2013	07/12/2013	07/12/2013	07/08/2013
				SDG	PH085	PH085	PH085	PH085	PH089	PH062	PH066	PH066	PH062
				Start Depth	2.5	0	0	0	0	0	0	6.5	0
				End Depth	3.5	0.5	0.5	0.5	0.5	0.5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	9.2 J FD, Z	17 UJ FD	17 U	17 U	17 U	18 U	17 U	18 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	20 J FD	96 J FD	17 U	17 U	18 U	17 U	18 U	17 U	
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	18 U	17 U	
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	18 U	17 U	
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	34 UJ FD	22 J FD, Z	33 U	33 U	12 J Z	33 U	34 U	33 U	
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	18 U	17 U	
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	34 U	34 U	33 U	33 U	35 U	33 U	34 U	33 U	
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	18 U	17 U	
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	18 U	17 U	
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	18 U	17 U	
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	18 U	17 U	
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	34 U	34 U	33 U	33 U	35 U	33 U	34 U	33 U	

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				Sample Name	SL-888-SA8-SB-0.0-0.5	SL-588-SA8-SB-2.0-3.0	SL-589-SA8-SB-0.0-0.5	SL-589-SA8-SB-2.5-3.5	SL-590-SA8-SB-0.0-0.5	SL-590-SA8-SB-4.0-5.0	SL-590-SA8-SB-7.0-8.0	SL-591-SA8-SB-0.0-0.5	SL-592-SA8-SB-0.0-0.5
				Sample Type	FD	N	N	N	N	N	N	N	N
				Sample Date	07/08/2013	07/08/2013	07/30/2013	07/30/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013
				SDG	PH062	PH062	PH080	PH080	PH089	PH089	PH089	PH089	PH089
				Start Depth	0	2	0	2.5	0	4	7	0	0
				End Depth	0.5	3	0.5	3.5	0.5	5	8	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
8082A	11096-82-5	Aroclor 1260	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U	8.8 J L, Z
8082A	11100-14-4	Aroclor 1268	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U	17 U
8082A	11104-28-2	Aroclor 1221	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U	17 U
8082A	11126-42-4	Aroclor 5460	µg/kg	33 U	34 U	34 U	34 U	34 U	34 U	34 U	33 U	18 J Z
8082A	11141-16-5	Aroclor 1232	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U	17 U
8082A	12642-23-8	Aroclor 5442	µg/kg	33 U	34 U	34 U	34 U	34 U	34 U	34 U	33 U	33 U
8082A	12672-29-6	Aroclor 1248	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U	17 U
8082A	12674-11-2	Aroclor 1016	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U	17 U
8082A	37324-23-5	Aroclor 1262	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U	17 U
8082A	53469-21-9	Aroclor 1242	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U	17 U
8082A	63496-31-1	Aroclor 5432	µg/kg	33 U	34 U	34 U	34 U	34 U	34 U	34 U	33 U	33 U

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			Sample Name	SL-592-SA8-SB-3.5-4.5	SL-593-SA8-SB-0.0-0.5	SL-593-SA8-SB-4.0-5.0	SL-594-SA8-SB-0.0-0.5	SL-595-SA8-SB-0.0-0.5	SL-596-SA8-SB-0.0-0.5	SL-597-SA8-SB-0.0-0.5	SL-599-SA8-SB-0.0-0.5	SL-599-SA8-SB-3.0-4.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/12/2013	08/12/2013	08/12/2013	08/15/2013	08/15/2013	07/30/2013	08/15/2013	07/31/2013	07/31/2013
			SDG	PH089	PH089	PH089	PH092	PH092	PH080	PH092	PH081	PH081
			Start Depth	3.5	0	4	0	0	0	0	0	3
			End Depth	4.5	0.5	5	0.5	0.5	0.5	0.5	0.5	4
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	17 U	18 U	17 U	85 U	17 U	17 U	17 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	9.4 J L, Z	18 U	160	380	17 U	17 U	140	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	17 U	18 U	17 U	85 U	17 U	17 U	17 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	17 U	18 U	17 U	85 U	17 U	17 U	17 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	20 J Z	34 U	33 U	170 U	33 U	33 U	34 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	17 U	18 U	17 U	85 U	17 U	17 U	17 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	33 U	34 U	33 U	170 U	33 U	33 U	34 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	17 U	18 U	17 U	85 U	17 U	17 U	17 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	17 U	18 U	17 U	85 U	17 U	17 U	17 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	17 U	18 U	17 U	85 U	17 U	17 U	17 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	17 U	18 U	17 U	85 U	17 U	17 U	17 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	33 U	34 U	33 U	170 U	33 U	33 U	34 U	34 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-600-SA8-SB-0.0-0.5	SL-600-SA8-SB-4.0-5.0	SL-601-SA8-SB-0.0-0.5	SL-601-SA8-SB-4.0-5.0	SL-602-SA8-SB-0.0-0.5	SL-602-SA8-SB-4.0-5.0	SL-606-SA8-SB-0.0-0.5	SL-606-SA8-SB-4.0-5.0	SL-607-SA8-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	08/14/2013	08/14/2013	07/18/2013	07/18/2013	08/14/2013	08/14/2013	07/19/2013	07/19/2013	08/09/2013
				SDG	PH091	PH091	PH070	PH070	PH091	PH091	PH071	PH071	PH088
				Start Depth	0	4	0	4	0	4	0	4	0
				End Depth	0.5	5	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit										
8082A	11096-82-5	Aroclor 1260	µg/kg	17 U	19 U	18 U	18 U	18 U	18 U	18 U	19 U	19 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	17 U	19 U	18 U	18 U	18 U	18 U	19 U	19 U	18 U	
8082A	11100-14-4	Aroclor 1268	µg/kg	17 U	19 U	18 U	18 U	18 U	18 U	19 U	19 U	18 U	
8082A	11104-28-2	Aroclor 1221	µg/kg	17 U	19 U	18 U	18 U	18 U	18 U	19 U	19 U	18 U	
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	36 U	35 U	35 U	34 U	36 U	30 J Z	37 U	35 U	
8082A	11141-16-5	Aroclor 1232	µg/kg	17 U	19 U	18 U	18 U	18 U	18 U	19 U	19 U	18 U	
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	36 U	35 U	35 U	34 U	36 U	36 U	37 U	35 U	
8082A	12672-29-6	Aroclor 1248	µg/kg	17 U	19 U	18 U	18 U	18 U	18 U	19 U	19 U	18 U	
8082A	12674-11-2	Aroclor 1016	µg/kg	17 U	19 U	18 U	18 U	18 U	18 U	19 U	19 U	18 U	
8082A	37324-23-5	Aroclor 1262	µg/kg	17 U	19 U	18 U	18 U	18 U	18 U	19 U	19 U	18 U	
8082A	53469-21-9	Aroclor 1242	µg/kg	17 U	19 U	18 U	18 U	18 U	18 U	19 U	19 U	18 U	
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	36 U	35 U	35 U	34 U	36 U	36 U	37 U	35 U	

U-Compound not detected above reporting limit
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			Sample Name	SL-607-SA8-SB-5.0-6.0	SL-608-SA8-SB-0.0-0.5	SL-608-SA8-SB-4.0-5.0	SL-608-SA8-SB-7.0-8.0	SL-609-SA8-SB-0.0-0.5	SL-609-SA8-SB-4.0-5.0	SL-610-SA8-SB-0.0-0.5	SL-610-SA8-SB-4.0-5.0	SL-610-SA8-SB-6.8-7.8
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/09/2013	08/01/2013	08/01/2013	08/01/2013	08/13/2013	08/13/2013	08/01/2013	08/01/2013	08/01/2013
			SDG	PH088	PH082	PH082	PH082	PH090	PH090	PH082	PH082	PH082
			Start Depth	5	0	4	7	0	4	0	4	6.8
			End Depth	6	0.5	5	8	0.5	5	0.5	5	7.8
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	340 U	180 U	180 U	18 U	19 U	31	19 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	340 U	180 U	180 U	18 U	19 U	53	12 J Z	6.3 J Z
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	340 U	180 U	180 U	18 U	19 U	17 U	19 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	340 U	180 U	180 U	18 U	19 U	17 U	19 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	36 U	670 U	360 U	360 U	34 U	37 U	34 U	37 U	36 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	340 U	180 U	180 U	18 U	19 U	17 U	19 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	36 U	670 U	360 U	360 U	34 U	37 U	34 U	37 U	36 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	340 U	180 U	180 U	18 U	19 U	17 U	19 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	340 U	180 U	180 U	18 U	19 U	17 U	19 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	340 U	180 U	180 U	18 U	19 U	17 U	19 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	340 U	180 U	180 U	18 U	19 U	17 U	19 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	36 U	670 U	360 U	360 U	34 U	37 U	34 U	37 U	36 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-612-SA8-SB-0.0-0.5	SL-612-SA8-SB-4.0-5.0	SL-613-SA8-SB-0.0-0.5	SL-613-SA8-SB-4.0-5.0	SL-614-SA8-SB-0.0-0.5	SL-614-SA8-SB-4.0-5.0	SL-615-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/30/2013	07/30/2013	08/14/2013	08/14/2013	08/13/2013	08/13/2013	08/27/2013
			SDG	PH080	PH080	PH091	PH091	PH090	PH090	PH094
			Start Depth	0	4	0	4	0	4	0
			End Depth	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	10 J Z
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	17 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	17 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	35 U	34 U	37 U	35 U	36 U	33 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	17 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	35 U	34 U	37 U	35 U	36 U	33 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	17 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	17 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	17 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	17 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	35 U	34 U	37 U	35 U	36 U	33 U

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			Sample Name	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-506-SA8-SB-0.0-0.5	SL-506-SA8-SB-4.0-5.0	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5	SL-509-SA8-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N	N
			Sample Date	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/16/2013	07/16/2013	07/18/2013
			SDG	PH068	PH068	PH068	PH070	PH070	PH068	PH068	PH068	PH070
			Start Depth	0	2.5	2.5	0	4	0	3	0	0
			End Depth	0.5	3.5	3.5	0.5	5	0.5	4	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6850	14797-73-0	Perchlorate	µg/kg	5.2 U	5.2 U	5.2 U	5.4 U	5.3 U	5.1 U	5.2 U	5.3 U	5.5 U

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			Sample Name	SL-509-SA8-SB-4.0-5.0	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-515-SA8-SB-0.0-0.5	SL-515-SA8-SB-4.0-5.0	SL-515-SA8-SB-9.0-10.0	SL-515-SA8-SB-14.0-15.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/18/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013
			SDG	PH070	PH069	PH069	PH069	PH069	PH069	PH069	PH069
			Start Depth	4	0	4	8	0	4	9	14
			End Depth	5	0.5	5	9	0.5	5	10	15
Analytic Method	CAS Number	Chemical Name	Unit								
6850	14797-73-0	Perchlorate	µg/kg	5.3 U	3.2 J Z	3.6 J Z	5.1 U	5.7 U	5.7 U	6.0 U	5.8 U

U-Compound not detected above reporting limit
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			Sample Name	SL-588-SA8-SB-0.0-0.5	SL-888-SA8-SB-0.0-0.5	SL-588-SA8-SB-2.0-3.0
			Sample Type	N	FD	N
			Sample Date	07/08/2013	07/08/2013	07/08/2013
			SDG	PH062	PH062	PH062
			Start Depth	0	0	2
			End Depth	0.5	0.5	3
Analytic Method	CAS Number	Chemical Name	Unit			
6850	14797-73-0	Perchlorate	µg/kg	3.0 J FD, Z	5.0 UJ FD	5.1 U

U-Compound not detected above reporting limit
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			Sample Name	SL-501-SA8-SB-0.0-0.5	SL-801-SA8-SB-0.0-0.5	SL-501-SA8-SB-4.0-5.0	SL-501-SA8-SB-9.0-10.0	SL-501-SA8-SB-12.0-13.0	SL-514-SA8-SB-0.0-0.5	SL-514-SA8-SB-4.0-5.0	SL-514-SA8-SB-7.5-8.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/17/2013	07/17/2013	07/17/2013
			SDG	PH067	PH067	PH067	PH067	PH067	PH069	PH069	PH069
			Start Depth	0	0	4	9	12	0	4	7.5
			End Depth	0.5	0.5	5	10	13	0.5	5	8.5
Analytic Method	CAS Number	Chemical Name	Unit								
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.86 U	0.87 U	0.89 U	0.90 U	0.88 U	0.87 U	0.98 U	0.99 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.0 U	2.0 U
8081B	2385-85-5	Mirex	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.0 U	2.0 U
8081B	309-00-2	Aldrin	µg/kg	0.86 U	0.87 U	0.89 U	0.90 U	0.88 U	0.87 U	0.98 U	0.99 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.86 U	0.87 U	0.89 U	0.90 U	0.88 U	0.87 U	0.98 U	0.99 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0	2.2 U	2.3 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.86 U	0.87 U	0.89 U	0.90 U	0.88 U	0.87 U	0.98 U	0.99 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.0 U	2.0 U
8081B	50-29-3	4,4'-DDT	µg/kg	2.0	1.8	1.8 U	1.8 U	1.8 U	1.6 J Z	0.76 J Z	2.0 U
8081B	53494-70-5	Endrin Ketone	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.1 U	2.1 U
8081B	57-74-9	Chlordane	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	20 U	20 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.86 U	0.87 U	0.89 U	0.90 U	0.88 U	0.87 U	0.98 U	0.99 U
8081B	60-57-1	Dieldrin	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.0 U	2.0 U
8081B	72-20-8	Endrin	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.0 U	2.0 U
8081B	72-43-5	Methoxychlor	µg/kg	6.9 U	7.0 U	7.2 U	7.2 U	7.1 U	7.1 U	7.9 U	8.0 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.0 U	2.0 U
8081B	72-55-9	4,4'-DDE	µg/kg	2.7 J FD	1.3 J FD, Z	1.8 U	1.8 U	1.8 U	1.8 U	2.0 U	2.0 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.0 U	2.0 U
8081B	76-44-8	Heptachlor	µg/kg	0.86 U	0.87 U	0.89 U	0.90 U	0.88 U	0.87 U	0.98 U	0.99 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	34 U	34 U	35 U	36 U	35 U	35 U	39 U	39 U
8081B	959-98-8	Endosulfan I	µg/kg	0.86 U	0.87 U	0.89 U	0.90 U	0.88 U	0.87 U	0.98 U	0.99 U

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			Sample Name	SL-542-SA8-SB-0.0-0.5	SL-542-SA8-SB-4.0-5.0	SL-542-SA8-SB-9.0-10.0	SL-542-SA8-SB-14.0-15.0	SL-542-SA8-SB-17.5-18.5	SL-553-SA8-SB-0.0-0.5	SL-553-SA8-SB-4.0-5.0	SL-853-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	FD
			Sample Date	09/26/2013	09/26/2013	09/26/2013	09/26/2013	09/26/2013	08/27/2013	08/27/2013	08/27/2013
			SDG	PH117	PH117	PH117	PH117	PH117	PH094	PH094	PH094
			Start Depth	0	4	9	14	17.5	0	4	4
			End Depth	0.5	5	10	15	18.5	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.88 U	0.95 U	0.97 U	0.97 U	0.95 U	0.91 U	0.92 U	0.93 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.8 U	1.9 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U
8081B	2385-85-5	Mirex	µg/kg	1.8 U	1.9 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U
8081B	309-00-2	Aldrin	µg/kg	0.88 U	0.95 U	0.97 U	0.97 U	0.95 U	0.91 U	0.92 U	0.93 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.88 U	0.95 U	0.97 U	0.97 U	0.95 U	0.91 U	0.92 U	0.93 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.0 U	2.2 U	2.2 U	2.2 U	2.2 U	3.6	3.8 J Q	5.0
8081B	319-86-8	Delta-Bhc	µg/kg	0.88 U	0.95 U	0.97 U	0.97 U	0.95 U	0.91 U	0.92 U	0.93 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.8 U	1.9 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U
8081B	50-29-3	4,4'-DDT	µg/kg	1.8 U	1.9 U	2.0 U	2.0 U	1.9 U	0.43 J Z	1.9 U	1.9 U
8081B	53494-70-5	Endrin Ketone	µg/kg	1.9 U	2.1 U	2.1 U	2.1 U	2.1 U	2.0 U	2.0 U	2.0 U
8081B	57-74-9	Chlordane	µg/kg	18 U	19 U	20 U	20 U	19 U	19 U	19 U	19 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.88 U	0.95 U	0.97 U	0.97 U	0.95 U	0.91 U	0.92 U	0.93 U
8081B	60-57-1	Dieldrin	µg/kg	1.8 U	1.9 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U
8081B	72-20-8	Endrin	µg/kg	1.8 U	1.9 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U
8081B	72-43-5	Methoxychlor	µg/kg	7.1 U	7.7 U	7.8 U	7.9 U	7.6 U	7.4 U	7.4 U	7.5 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.8 U	1.9 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U
8081B	72-55-9	4,4'-DDE	µg/kg	1.8 U	1.9 U	2.0 U	2.0 U	1.9 U	1.4 J Z	1.9 U	1.9 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.8 U	1.9 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U
8081B	76-44-8	Heptachlor	µg/kg	0.88 U	0.95 U	0.97 U	0.97 U	0.95 U	0.91 U	0.92 U	0.93 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	35 U	38 U	38 U	39 U	38 U	36 U	37 U	37 U
8081B	959-98-8	Endosulfan I	µg/kg	0.88 U	0.95 U	0.97 U	0.97 U	0.95 U	0.91 U	0.92 U	0.93 U

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			Sample Name	SL-553-SA8-SB-9.0-10.0	SL-553-SA8-SB-14.0-15.0	SL-553-SA8-SB-18.0-19.0	SL-564-SA8-SB-0.0-0.5	SL-567-SA8-SB-0.0-0.5	SL-567-SA8-SB-4.0-5.0	SL-567-SA8-SB-9.0-10.0	SL-575-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/28/2013	08/28/2013	08/28/2013	08/06/2013	08/08/2013	08/08/2013	08/08/2013	08/07/2013
			SDG	PH096	PH096	PH096	PH085	PH087	PH087	PH087	PH086
			Start Depth	9	14	18	0	0	4	9	0
			End Depth	10	15	19	0.5	0.5	5	10	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.96 U	0.97 U	0.89 U	0.87 U	0.98 U	0.99 U	0.97 U	0.92 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	2.0 U	2.0 U	1.8 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U
8081B	2385-85-5	Mirex	µg/kg	2.0 U	2.0 U	1.8 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U
8081B	309-00-2	Aldrin	µg/kg	0.96 U	0.97 U	0.89 U	0.87 U	0.98 U	0.99 U	0.97 U	0.92 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.96 U	0.97 U	0.89 U	0.87 U	0.98 U	0.99 U	0.97 U	0.92 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.2 U	2.2 U	2.0 U	2.0 U	2.7	2.3 U	2.2 U	2.1 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.96 U	0.97 U	0.89 U	0.87 U	0.98 U	0.99 U	0.97 U	0.92 U
8081B	33213-65-9	Endosulfan II	µg/kg	2.0 U	2.0 U	1.8 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U
8081B	50-29-3	4,4'-DDT	µg/kg	2.0 U	2.0 U	1.8 U	1.1 J S, Z	1.0 J Z	2.0 U	2.0 U	1.9 U
8081B	53494-70-5	Endrin Ketone	µg/kg	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	2.2 U	2.1 U	2.0 U
8081B	57-74-9	Chlordane	µg/kg	20 U	20 U	18 U	18 U	20 U	20 U	20 U	19 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.96 U	0.97 U	0.89 U	0.87 U	0.98 U	0.99 U	0.97 U	0.92 U
8081B	60-57-1	Dieldrin	µg/kg	2.0 U	2.0 U	1.8 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U
8081B	72-20-8	Endrin	µg/kg	2.0 U	2.0 U	1.8 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U
8081B	72-43-5	Methoxychlor	µg/kg	7.8 U	7.8 U	7.2 U	7.0 U	7.9 U	8.0 U	7.8 U	7.5 U
8081B	72-54-8	4,4'-DDD	µg/kg	2.0 U	2.0 U	1.8 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U
8081B	72-55-9	4,4'-DDE	µg/kg	2.0 U	2.0 U	1.8 U	1.3 J S, Z	2.0 U	2.0 U	2.0 U	1.9 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg	2.0 U	2.0 U	1.8 U	1.8 U	2.0 U	2.0 U	2.0 U	1.9 U
8081B	76-44-8	Heptachlor	µg/kg	0.96 U	0.97 U	0.89 U	0.87 U	0.98 U	0.99 U	0.97 U	0.92 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	38 U	38 U	36 U	35 U	39 U	39 U	39 U	37 U
8081B	959-98-8	Endosulfan I	µg/kg	0.96 U	0.97 U	0.89 U	0.87 U	0.98 U	0.99 U	0.97 U	0.92 U

U-Compound not detected above reporting limit
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			Sample Name	SL-575-SA8-SB-4.0-5.0	SL-575-SA8-SB-9.0-10.0	SL-583-SA8-SB-0.0-0.5	SL-883-SA8-SB-0.0-0.5	SL-590-SA8-SB-0.0-0.5	SL-590-SA8-SB-4.0-5.0	SL-590-SA8-SB-7.0-8.0	SL-607-SA8-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	08/07/2013	08/07/2013	08/06/2013	08/06/2013	08/12/2013	08/12/2013	08/12/2013	08/09/2013
			SDG	PH086	PH086	PH085	PH085	PH089	PH089	PH089	PH088
			Start Depth	4	9	0	0	0	4	7	0
			End Depth	5	10	0.5	0.5	0.5	5	8	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.96 U	0.94 U	0.84 U	0.85 U	0.84 U	0.87 U	0.86 U	0.23 J S, Z
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8081B	2385-85-5	Mirex	µg/kg	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8081B	309-00-2	Aldrin	µg/kg	0.96 U	0.94 U	0.84 U	0.85 U	0.84 U	0.87 U	0.86 U	0.87 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.96 U	0.22 J Z	0.84 U	0.85 U	0.84 U	0.87 U	0.86 U	0.87 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.2 U	2.1 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U	2.0 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.96 U	0.94 U	0.84 U	0.85 U	0.84 U	0.87 U	0.86 U	0.87 U
8081B	33213-65-9	Endosulfan II	µg/kg	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8081B	50-29-3	4,4'-DDT	µg/kg	2.0 U	1.9 U	3.3 U	1.7 U	0.67 J Z	1.8 U	1.8 U	9.8 J S
8081B	53494-70-5	Endrin Ketone	µg/kg	2.1 U	2.0 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U
8081B	57-74-9	Chlordane	µg/kg	20 U	19 U	17 U	17 U	17 U	18 U	18 U	18 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.96 U	0.94 U	0.84 U	0.85 U	0.84 U	0.87 U	0.86 U	0.87 U
8081B	60-57-1	Dieldrin	µg/kg	2.0 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	0.61 J S, Z
8081B	72-20-8	Endrin	µg/kg	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8081B	72-43-5	Methoxychlor	µg/kg	7.7 U	7.6 U	6.8 U	6.8 U	6.8 U	7.0 U	7.0 U	7.0 U
8081B	72-54-8	4,4'-DDD	µg/kg	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U
8081B	72-55-9	4,4'-DDE	µg/kg	2.0 U	1.9 U	1.7 U	1.7 U	1.0 J Z	1.8 U	1.8 U	11 J S
8081B	7421-93-4	Endrin Aldehyde	µg/kg	2.0 U	1.9 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	0.54 J S, Z
8081B	76-44-8	Heptachlor	µg/kg	0.96 U	0.94 U	0.84 U	0.85 U	0.84 U	0.87 U	0.86 U	0.87 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	38 U	37 U	34 U	34 U	34 U	34 U	34 U	35 U
8081B	959-98-8	Endosulfan I	µg/kg	0.96 U	0.94 U	0.84 U	0.85 U	0.84 U	0.87 U	0.86 U	0.87 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-607-SA8-SB-5.0-6.0	SL-610-SA8-SB-0.0-0.5	SL-610-SA8-SB-4.0-5.0	SL-610-SA8-SB-6.8-7.8
			Sample Type	N	N	N	N
			Sample Date	08/09/2013	08/01/2013	08/01/2013	08/01/2013
			SDG	PH088	PH082	PH082	PH082
			Start Depth	5	0	4	6.8
			End Depth	6	0.5	5	7.8
Analytic Method	CAS Number	Chemical Name	Unit				
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.91 U	0.86 U	0.93 U	0.91 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.9 U	1.8 U	1.9 U	1.9 U
8081B	2385-85-5	Mirex	µg/kg	1.9 U	2.6 U	1.9 U	1.9 U
8081B	309-00-2	Aldrin	µg/kg	0.91 U	0.86 U	0.93 U	0.91 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.91 U	0.86 U	0.93 U	0.91 U
8081B	319-85-7	Beta-Bhc	µg/kg	2.1 U	2.0 U	2.1 U	2.1 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.91 U	0.86 U	0.93 U	0.91 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.9 U	1.1 J Z	1.9 U	1.9 U
8081B	50-29-3	4,4'-DDT	µg/kg	1.9 U	12 U	1.9 U	1.9 U
8081B	53494-70-5	Endrin Ketone	µg/kg	2.0 U	1.9 U	2.0 U	2.0 U
8081B	57-74-9	Chlordane	µg/kg	19 U	18 U	19 U	19 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.91 U	0.86 U	0.93 U	0.91 U
8081B	60-57-1	Dieldrin	µg/kg	1.9 U	1.8 U	1.9 U	1.9 U
8081B	72-20-8	Endrin	µg/kg	1.9 U	1.8 U	1.9 U	1.9 U
8081B	72-43-5	Methoxychlor	µg/kg	7.3 U	6.9 U	7.5 U	7.4 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.9 U	1.8 U	1.9 U	1.9 U
8081B	72-55-9	4,4'-DDE	µg/kg	1.9 U	1.8 U	1.9 U	1.9 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.9 U	1.8 U	1.9 U	1.9 U
8081B	76-44-8	Heptachlor	µg/kg	0.91 U	0.86 U	0.93 U	0.91 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	36 U	34 U	37 U	36 U
8081B	959-98-8	Endosulfan I	µg/kg	0.91 U	0.86 U	0.93 U	0.91 U

U-Compound not detected above reporting limit
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			Sample Name	SL-501-SA8-SB-0.0-0.5	SL-801-SA8-SB-0.0-0.5	SL-501-SA8-SB-4.0-5.0	SL-501-SA8-SB-9.0-10.0	SL-501-SA8-SB-12.0-13.0	SL-502-SA8-SB-0.0-0.5	SL-502-SA8-SB-4.0-5.0	SL-502-SA8-SB-7.5-8.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013
			SDG	PH067	PH067	PH067	PH067	PH067	PH067	PH067	PH067
			Start Depth	0	0	4	9	12	0	4	7.5
			End Depth	0.5	0.5	5	10	13	0.5	5	8.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.26	7.77	6.35	7.09	6.87	6.62	7.21	7.14

U-Compound not detected above reporting limit
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			Sample Name	SL-503-SA8-SB-0.0-0.5	SL-503-SA8-SB-3.0-4.0	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-505-SA8-SB-0.0-0.5	SL-505-SA8-SB-4.0-5.0	SL-506-SA8-SB-0.0-0.5	SL-506-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	FD	N	N	N	N
			Sample Date	07/15/2013	07/15/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013
			SDG	PH067	PH067	PH068	PH068	PH068	PH068	PH068	PH070	PH070
			Start Depth	0	3	0	2.5	2.5	0	4	0	4
			End Depth	0.5	4	0.5	3.5	3.5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	6.20	7.85	7.25	8.56	8.55	7.81	8.07	7.60	7.00

U-Compound not detected above reporting limit
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			Sample Name	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5	SL-509-SA8-SB-0.0-0.5	SL-509-SA8-SB-4.0-5.0	SL-510-SA8-SB-0.0-0.5	SL-511-SA8-SB-0.0-0.5	SL-511-SA8-SB-6.0-7.0	SL-512-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/15/2013	07/15/2013	07/17/2013
			SDG	PH068	PH068	PH068	PH070	PH070	PH068	PH067	PH067	PH069
			Start Depth	0	3	0	0	4	0	0	6	0
			End Depth	0.5	4	0.5	0.5	5	0.5	0.5	7	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	8.70	8.86	7.94	7.80	8.52	6.73	6.56	6.24	5.99

U-Compound not detected above reporting limit
J-Result is an estimated value
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			Sample Name	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-514-SA8-SB-0.0-0.5	SL-514-SA8-SB-4.0-5.0	SL-514-SA8-SB-7.5-8.5	SL-515-SA8-SB-0.0-0.5	SL-515-SA8-SB-4.0-5.0	SL-515-SA8-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013
			SDG	PH069	PH069	PH069	PH069	PH069	PH069	PH069	PH069	PH069
			Start Depth	0	4	8	0	4	7.5	0	4	9
			End Depth	0.5	5	9	0.5	5	8.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	7.79	8.40	8.33	7.63	8.32	8.45	7.23	7.81	7.73

U-Compound not detected above reporting limit
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			Sample Name	SL-515-SA8-SB-14.0-15.0	SL-516-SA8-SB-0.0-0.5	SL-517-SA8-SB-0.0-0.5	SL-517-SA8-SB-3.0-4.0	SL-518-SA8-SB-0.0-0.5	SL-518-SA8-SB-4.0-5.0	SL-519-SA8-SB-0.0-0.5	SL-519-SA8-SB-3.5-4.5	SL-520-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/17/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/18/2013	07/18/2013	07/18/2013
			SDG	PH069	PH071	PH071	PH071	PH071	PH071	PH070	PH070	PH070
			Start Depth	14	0	0	3	0	4	0	3.5	0
			End Depth	15	0.5	0.5	4	0.5	5	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	7.47	5.91	7.67	7.77	8.11	7.94	7.76	8.60	7.64

U-Compound not detected above reporting limit
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			Sample Name	SL-521-SA8-SB-0.0-0.5	SL-522-SA8-SB-0.0-0.5	SL-522-SA8-SB-4.0-5.0	SL-523-SA8-SB-4.0-5.0	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0	SL-525-SA8-SB-0.0-0.5	SL-525-SA8-SB-4.0-5.0	SL-526-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N	N	N
			Sample Date	07/19/2013	07/26/2013	07/26/2013	07/25/2013	07/25/2013	07/25/2013	07/25/2013	07/25/2013	07/29/2013
			SDG	PH071	PH076	PH076	PH075	PH075	PH075	PH075	PH075	PH078
			Start Depth	0	0	4	4	4	4	0	4	0
			End Depth	0.5	0.5	5	5	5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	5.74	8.04	8.11	8.01	8.10	7.91	7.60	7.94	7.26

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-526-SA8-SB-4.0-5.0	SL-527-SA8-SB-0.0-0.5	SL-527-SA8-SB-4.0-5.0	SL-528-SA8-SB-4.0-5.0	SL-529-SA8-SB-0.0-0.5	SL-529-SA8-SB-4.0-5.0	SL-530-SA8-SB-0.0-0.5	SL-530-SA8-SB-4.0-5.0	SL-830-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	FD
			Sample Date	07/29/2013	07/24/2013	07/24/2013	07/24/2013	07/29/2013	07/29/2013	08/09/2013	08/09/2013	08/09/2013
			SDG	PH078	PH074	PH074	PH074	PH078	PH078	PH088	PH088	PH088
			Start Depth	4	0	4	4	0	4	0	4	4
			End Depth	5	0.5	5	5	0.5	5	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	7.88	8.15	8.32	8.06	8.02	7.89	7.27	8.41	8.72

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-531-SA8-SB-0.0-0.5	SL-531-SA8-SB-4.0-5.0	SL-532-SA8-SB-0.0-0.5	SL-532-SA8-SB-6.5-7.5	SL-536-SA8-SB-0.0-0.5	SL-536-SA8-SB-4.0-5.0	SL-537-SA8-SB-0.0-0.5	SL-537-SA8-SB-4.0-5.0	SL-538-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/18/2013	07/18/2013	07/19/2013	07/19/2013	07/31/2013	07/31/2013	07/31/2013	07/31/2013	08/09/2013
			SDG	PH070	PH070	PH071	PH071	PH081	PH081	PH081	PH081	PH088
			Start Depth	0	4	0	6.5	0	4	0	4	0
			End Depth	0.5	5	0.5	7.5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	7.54	7.97	7.54	8.22	7.63	8.07	8.01	8.20	7.53

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-538-SA8-SB-4.0-5.0	SL-838-SA8-SB-4.0-5.0	SL-539B-SA8-SB-0.0-0.5	SL-539B-SA8-SB-2.0-3.0	SL-540-SA8-SB-0.0-0.5	SL-540-SA8-SB-4.0-5.0	SL-541-SA8-SB-0.0-0.5	SL-541-SA8-SB-4.0-5.0	SL-542-SA8-SB-0.0-0.5
			Sample Type	N	FD	N	N	N	N	N	N	N
			Sample Date	08/09/2013	08/09/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	08/09/2013	08/09/2013	09/26/2013
			SDG	PH088	PH088	PH076	PH076	PH076	PH076	PH088	PH088	PH117
			Start Depth	4	4	0	2	0	4	0	4	0
			End Depth	5	5	0.5	3	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	7.86	7.95	7.87	7.82	8.02	7.78	7.89	7.95	7.79

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-542-SA8-SB-4.0-5.0	SL-542-SA8-SB-9.0-10.0	SL-542-SA8-SB-14.0-15.0	SL-542-SA8-SB-17.5-18.5	SL-543-SA8-SB-0.0-0.5	SL-543-SA8-SB-4.0-5.0	SL-843-SA8-SB-4.0-5.0	SL-549-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	09/26/2013	09/26/2013	09/26/2013	09/26/2013	08/13/2013	08/13/2013	08/13/2013	07/30/2013
			SDG	PH117	PH117	PH117	PH117	PH090	PH090	PH090	PH080
			Start Depth	4	9	14	17.5	0	4	4	0
			End Depth	5	10	15	18.5	0.5	5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.93	7.96	8.03	8.20	7.25	7.63	8.09	7.34

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-549-SA8-SB-4.0-5.0	SL-550-SA8-SB-0.0-0.5	SL-550-SA8-SB-4.0-5.0	SL-550-SA8-SB-9.0-10.0	SL-550-SA8-SB-14.0-15.0	SL-550-SA8-SB-17.0-18.0	SL-551-SA8-SB-0.0-0.5	SL-551-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/30/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013	07/23/2013	07/23/2013
			SDG	PH080	PH072	PH072	PH072	PH072	PH072	PH073	PH073
			Start Depth	4	0	4	9	14	17	0	4
			End Depth	5	0.5	5	10	15	18	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.94	7.18	7.78	8.15	8.18	8.32	6.82	7.42

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-851-SA8-SB-4.0-5.0	SL-551-SA8-SB-9.0-10.0	SL-551-SA8-SB-14.0-15.0	SL-551-SA8-SB-19.0-20.0	SL-552-SA8-SB-0.0-0.5	SL-552-SA8-SB-4.0-5.0	SL-552-SA8-SB-7.5-8.5	SL-553-SA8-SB-0.0-0.5
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	07/23/2013	07/23/2013	07/23/2013	07/23/2013	08/02/2013	08/02/2013	08/02/2013	08/27/2013
			SDG	PH073	PH073	PH073	PH073	PH083	PH083	PH083	PH094
			Start Depth	4	9	14	19	0	4	7.5	0
			End Depth	5	10	15	20	0.5	5	8.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.97	8.07	8.05	8.02	7.45	7.84	7.93	7.80

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-553-SA8-SB-4.0-5.0	SL-853-SA8-SB-4.0-5.0	SL-553-SA8-SB-9.0-10.0	SL-553-SA8-SB-14.0-15.0	SL-553-SA8-SB-18.0-19.0	SL-554-SA8-SB-0.0-0.5	SL-554-SA8-SB-4.0-5.0	SL-555-SA8-SB-0.0-0.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	08/27/2013	08/27/2013	08/28/2013	08/28/2013	08/28/2013	07/22/2013	07/22/2013	07/23/2013
			SDG	PH094	PH094	PH096	PH096	PH096	PH072	PH072	PH073
			Start Depth	4	4	9	14	18	0	4	0
			End Depth	5	5	10	15	19	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.79	7.68	7.93	8.47	8.71	7.89	8.34	8.10

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-555-SA8-SB-4.0-5.0	SL-556-SA8-SB-0.0-0.5	SL-556-SA8-SB-4.0-5.0	SL-558-SA8-SB-0.0-0.5	SL-558-SA8-SB-4.0-5.0	SL-558-SA8-SB-9.0-10.0	SL-558-SA8-SB-12.5-13.5	SL-559-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/23/2013	07/22/2013	07/22/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013
			SDG	PH073	PH072	PH072	PH083	PH083	PH083	PH083	PH083
			Start Depth	4	0	4	0	4	9	12.5	0
			End Depth	5	0.5	5	0.5	5	10	13.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.85	7.67	8.10	7.37	8.09	8.25	8.34	7.05

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-559-SA8-SB-4.0-5.0	SL-560-SA8-SB-0.0-0.5	SL-560-SA8-SB-4.0-5.0	SL-561-SA8-SB-0.0-0.5	SL-561-SA8-SB-4.0-5.0	SL-562-SA8-SB-0.0-0.5	SL-563-SA8-SB-0.0-0.5	SL-563-SA8-SB-2.0-3.0	SL-564-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/02/2013	07/30/2013	07/30/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	07/09/2013	08/06/2013
			SDG	PH083	PH080	PH080	PH063	PH063	PH063	PH063	PH063	PH085
			Start Depth	4	0	4	0	4	0	0	2	0
			End Depth	5	0.5	5	0.5	5	0.5	0.5	3	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	7.79	7.45	7.88	6.07	7.23	6.14	6.16	6.16	6.63

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-565-SA8-SB-0.0-0.5	SL-565-SA8-SB-4.0-5.0	SL-566-SA8-SB-0.0-0.5	SL-566-SA8-SB-4.0-5.0	SL-567-SA8-SB-0.0-0.5	SL-567-SA8-SB-4.0-5.0	SL-567-SA8-SB-9.0-10.0	SL-568-SA8-SB-0.0-0.5	SL-568-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/08/2013	08/08/2013	08/07/2013	08/07/2013	08/08/2013	08/08/2013	08/08/2013	08/05/2013	08/05/2013
			SDG	PH087	PH087	PH086	PH086	PH087	PH087	PH087	PH084	PH084
			Start Depth	0	4	0	4	0	4	9	0	4
			End Depth	0.5	5	0.5	5	0.5	5	10	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	7.50	7.82	7.34	8.31	7.48	7.91	8.06	8.17	8.32

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-569-SA8-SB-0.0-0.5	SL-569-SA8-SB-4.0-5.0	SL-569-SA8-SB-7.0-8.0	SL-570-SA8-SB-0.0-0.5	SL-570-SA8-SB-4.0-5.0	SL-571-SA8-SB-0.0-0.5	SL-571-SA8-SB-6.5-7.5	SL-571-SA8-SB-12.5-13.5	SL-572-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/05/2013	08/05/2013	08/05/2013	07/11/2013	07/11/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013
			SDG	PH084	PH084	PH084	PH065	PH065	PH064	PH064	PH064	PH064
			Start Depth	0	4	7	0	4	0	6.5	12.5	0
			End Depth	0.5	5	8	0.5	5	0.5	7.5	13.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	8.34	8.44	8.38	9.56	8.27	8.06	8.20	8.15	9.70

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-572-SA8-SB-4.0-5.0	SL-572-SA8-SB-9.0-10.0	SL-572-SA8-SB-14.0-15.0	SL-572-SA8-SB-18.5-19.5	SL-573-SA8-SB-0.0-0.5	SL-573-SA8-SB-4.0-5.0	SL-573-SA8-SB-9.5-10.5	SL-574-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/11/2013
			SDG	PH064	PH064	PH064	PH064	PH064	PH064	PH064	PH065
			Start Depth	4	9	14	18.5	0	4	9.5	0
			End Depth	5	10	15	19.5	0.5	5	10.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.55	8.61	8.60	8.61	11.4	8.60	8.28	8.32

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-574-SA8-SB-4.0-5.0	SL-574-SA8-SB-9.0-10.0	SL-574-SA8-SB-14.0-15.0	SL-874-SA8-SB-14.0-15.0	SL-575-SA8-SB-0.0-0.5	SL-575-SA8-SB-4.0-5.0	SL-575-SA8-SB-9.0-10.0	SL-578-SA8-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	07/11/2013	07/11/2013	07/11/2013	07/11/2013	08/07/2013	08/07/2013	08/07/2013	07/12/2013
			SDG	PH065	PH065	PH065	PH065	PH086	PH086	PH086	PH066
			Start Depth	4	9	14	14	0	4	9	0
			End Depth	5	10	15	15	0.5	5	10	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.23	8.90	8.10	7.96	6.91	8.00	8.16	9.39

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-578-SA8-SB-4.0-5.0	SL-878-SA8-SB-4.0-5.0	SL-578-SA8-SB-9.0-10.0	SL-580-SA8-SB-0.0-0.5	SL-580-SA8-SB-4.0-5.0	SL-580-SA8-SB-10.5-11.5	SL-581-SA8-SB-0.0-0.5	SL-581-SA8-SB-4.5-5.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013
			SDG	PH066	PH066	PH066	PH066	PH066	PH066	PH066	PH066
			Start Depth	4	4	9	0	4	10.5	0	4.5
			End Depth	5	5	10	0.5	5	11.5	0.5	5.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.12	5.91	8.14	7.91	8.04	7.73	7.27	7.70

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-582-SA8-SB-0.0-0.5	SL-582-SA8-SB-2.5-3.5	SL-583-SA8-SB-0.0-0.5	SL-883-SA8-SB-0.0-0.5	SL-584-SA8-SB-0.0-0.5	SL-585-SA8-SB-0.0-0.5	SL-586-SA8-SB-0.0-0.5	SL-587-SA8-SB-0.0-0.5	SL-587-SA8-SB-6.5-7.5
			Sample Type	N	N	N	FD	N	N	N	N	N
			Sample Date	08/06/2013	08/06/2013	08/06/2013	08/06/2013	08/06/2013	08/12/2013	07/08/2013	07/12/2013	07/12/2013
			SDG	PH085	PH085	PH085	PH085	PH085	PH089	PH062	PH066	PH066
			Start Depth	0	2.5	0	0	0	0	0	0	6.5
			End Depth	0.5	3.5	0.5	0.5	0.5	0.5	0.5	0.5	7.5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	5.46	5.45	6.52	6.71	6.10	9.32	6.34	6.04	6.82

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-588-SA8-SB-0.0-0.5	SL-888-SA8-SB-0.0-0.5	SL-588-SA8-SB-2.0-3.0	SL-589-SA8-SB-0.0-0.5	SL-589-SA8-SB-2.5-3.5	SL-590-SA8-SB-4.0-5.0	SL-590-SA8-SB-7.0-8.0	SL-591-SA8-SB-0.0-0.5	SL-592-SA8-SB-0.0-0.5
			Sample Type	N	FD	N	N	N	N	N	N	N
			Sample Date	07/08/2013	07/08/2013	07/08/2013	07/30/2013	07/30/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013
			SDG	PH062	PH062	PH062	PH080	PH080	PH089	PH089	PH089	PH089
			Start Depth	0	0	2	0	2.5	4	7	0	0
			End Depth	0.5	0.5	3	0.5	3.5	5	8	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	6.56	6.42	6.45	7.63	7.52	6.87	7.05	7.10	7.01

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-592-SA8-SB-3.5-4.5	SL-593-SA8-SB-0.0-0.5	SL-593-SA8-SB-4.0-5.0	SL-594-SA8-SB-0.0-0.5	SL-595-SA8-SB-0.0-0.5	SL-596-SA8-SB-0.0-0.5	SL-597-SA8-SB-0.0-0.5	SL-600-SA8-SB-0.0-0.5	SL-600-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/12/2013	08/12/2013	08/12/2013	08/15/2013	08/15/2013	07/30/2013	08/15/2013	08/14/2013	08/14/2013
			SDG	PH089	PH089	PH089	PH092	PH092	PH080	PH092	PH091	PH091
			Start Depth	3.5	0	4	0	0	0	0	0	4
			End Depth	4.5	0.5	5	0.5	0.5	0.5	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	6.96	6.78	6.82	7.09	6.81	7.30	6.22	7.55	7.88

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-601-SA8-SB-0.0-0.5	SL-601-SA8-SB-4.0-5.0	SL-602-SA8-SB-0.0-0.5	SL-602-SA8-SB-4.0-5.0	SL-604-SA8-SB-0.0-0.5	SL-904-SA8-SB-0.0-0.5	SL-605-SA8-SB-0.0-0.5	SL-606-SA8-SB-0.0-0.5	SL-606-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	FD	N	N	N
			Sample Date	07/18/2013	07/18/2013	08/14/2013	08/14/2013	08/29/2013	08/29/2013	08/29/2013	07/19/2013	07/19/2013
			SDG	PH070	PH070	PH091	PH091	PH097	PH097	PH097	PH071	PH071
			Start Depth	0	4	0	4	0	0	0	0	4
			End Depth	0.5	5	0.5	5	0.5	0.5	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	7.76	8.24	7.97	7.99	7.88	7.99	7.89	7.44	7.78

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-607-SA8-SB-0.0-0.5	SL-607-SA8-SB-5.0-6.0	SL-608-SA8-SB-0.0-0.5	SL-608-SA8-SB-4.0-5.0	SL-608-SA8-SB-7.0-8.0	SL-609-SA8-SB-0.0-0.5	SL-609-SA8-SB-4.0-5.0	SL-610-SA8-SB-0.0-0.5	SL-610-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/09/2013	08/09/2013	08/01/2013	08/01/2013	08/01/2013	08/13/2013	08/13/2013	08/01/2013	08/01/2013
			SDG	PH088	PH088	PH082	PH082	PH082	PH090	PH090	PH082	PH082
			Start Depth	0	5	0	4	7	0	4	0	4
			End Depth	0.5	6	0.5	5	8	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
9045M	pH	pH	pH	7.77	7.89	8.00	8.13	8.04	7.99	7.96	7.51	8.18

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-610-SA8-SB-6.8-7.8	SL-612-SA8-SB-0.0-0.5	SL-612-SA8-SB-4.0-5.0	SL-613-SA8-SB-0.0-0.5	SL-613-SA8-SB-4.0-5.0	SL-614-SA8-SB-0.0-0.5	SL-614-SA8-SB-4.0-5.0	SL-615-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/01/2013	07/30/2013	07/30/2013	08/14/2013	08/14/2013	08/13/2013	08/13/2013	08/27/2013
			SDG	PH082	PH080	PH080	PH091	PH091	PH090	PH090	PH094
			Start Depth	6.8	0	4	0	4	0	4	0
			End Depth	7.8	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	8.30	8.36	8.41	7.99	8.03	8.04	8.11	7.05

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-506-SA8-SB-0.0-0.5	SL-506-SA8-SB-4.0-5.0	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/16/2013	07/16/2013
			SDG	PH068	PH068	PH068	PH070	PH070	PH068	PH068	PH068
			Start Depth	0	2.5	2.5	0	4	0	3	0
			End Depth	0.5	3.5	3.5	0.5	5	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D	100-01-6	4-Nitroaniline	µg/kg	170 U	170 U	170 U	180 U	170 U	170 U	170 U	170 U
8270D	100-02-7	4-Nitrophenol	µg/kg	520 U	520 U	520 U	530 U	520 U	510 U	520 U	520 U
8270D	100-51-6	Benzyl Alcohol	µg/kg	350 U	350 U	350 U	350 U	350 U	340 U	350 U	520 U
8270D	101-55-3	4-Bromophenyl-phenylether	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	105-67-9	2,4-Dimethylphenol	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	106-44-5	4-Methylphenol	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	106-46-7	1,4-Dichlorobenzene	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	106-47-8	4-Chloroaniline	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	108-68-9	3,5-Dimethylphenol	µg/kg	170 U	170 U	170 U	180 U	170 U	170 U	170 U	170 U
8270D	108-95-2	Phenol	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	110-86-1	Pyridine	µg/kg	170 U	170 U	170 U	180 U	170 U	170 U	170 U	170 U
8270D	111-44-4	bis(2-chloroethyl) ether	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	111-91-1	bis(2-chloroethoxy)methane	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	118-74-1	Hexachlorobenzene	µg/kg	18 U	18 U	18 U	18 U	18 U	17 U	18 U	18 U
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	120-82-1	1,2,4-Trichlorobenzene	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	120-83-2	2,4-Dichlorophenol	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	122-66-7	1,2-Diphenylhydrazine	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	129-00-0	Pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	132-64-9	Dibenzofuran	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	39638-32-9	bis(2-chloroisopropyl) ether	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	51-28-5	2,4-Dinitrophenol	µg/kg	680 U	680 U	690 U	700 U	680 U	670 U	680 U	1000 U
8270D	534-52-1	4,6-Dinitro-2-methylphenol	µg/kg	520 U	520 U	520 U	530 U	520 U	510 U	520 U	520 U
8270D	541-73-1	1,3-Dichlorobenzene	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	59-50-7	4-Chloro-3-methylphenol	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	621-64-7	N-Nitroso-di-n-propylamine	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	62-53-3	Aniline	µg/kg	350 U	350 U	350 U	350 U	350 U	340 U	350 U	520 U
8270D	65-85-0	Benzoic Acid	µg/kg	520 U	520 U	520 U	530 U	520 U	510 U	520 U	520 U
8270D	67-72-1	Hexachloroethane	µg/kg	170 U	170 U	170 U	180 U	170 U	170 U	170 U	170 U
8270D	7005-72-3	4-Chlorophenyl-phenylether	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	77-47-4	Hexachlorocyclopentadiene	µg/kg	520 U	520 U	520 U	530 U	520 U	510 U	520 U	520 U
8270D	78-59-1	Isophorone	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	--	--	--	--	--	--

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-506-SA8-SB-0.0-0.5	SL-506-SA8-SB-4.0-5.0	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5
				Sample Type	N	N	FD	N	N	N	N	N
				Sample Date	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/16/2013	07/16/2013
				SDG	PH068	PH068	PH068	PH070	PH070	PH068	PH068	PH068
				Start Depth	0	2.5	2.5	0	4	0	3	0
				End Depth	0.5	3.5	3.5	0.5	5	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	--	--	--	--	--	--	--
8270D	86-30-6	N-Nitrosodiphenylamine	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	86-74-8	Carbazole	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	87-65-0	2,6-Dichlorophenol	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	87-68-3	Hexachlorobutadiene	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	87-86-5	Pentachlorophenol	µg/kg	180 U	180 U	180 U	180 U	180 U	170 U	180 U	180 U	180 U
8270D	88-06-2	2,4,6-Trichlorophenol	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	88-74-4	2-Nitroaniline	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	88-75-5	2-Nitrophenol	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--	--
8270D	91-58-7	2-Chloronaphthalene	µg/kg	34 U	34 U	34 U	35 U	34 U	33 U	34 U	34 U	34 U
8270D	91-94-1	3,3'-Dichlorobenzidine	µg/kg	350 U	350 U	350 U	350 U	350 U	340 U	350 U	350 U	350 U
8270D	92-52-4	1,1'-Biphenyl	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	92-87-5	Benzidine	µg/kg	1700 U	1700 UJ Q	1700 U	1800 R	1700 U	1700 U	1700 U	1700 U	3500 U
8270D	95-48-7	2-Methylphenol	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	95-50-1	1,2-Dichlorobenzene	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	95-57-8	2-Chlorophenol	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	95-95-4	2,4,5-Trichlorophenol	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	98-95-3	Nitrobenzene	µg/kg	35 U	35 U	35 U	35 U	35 U	34 U	35 U	35 U	35 U
8270D	99-09-2	3-Nitroaniline	µg/kg	170 U	170 U	170 U	180 U	170 U	170 U	170 U	170 U	170 U
8270D	NDPA122-39-4	Diphenylamine	µg/kg	170 U	170 U	170 U	180 U	170 U	170 U	170 U	170 U	170 U

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				Sample Name	SL-509-SA8-SB-0.0-0.5	SL-509-SA8-SB-4.0-5.0	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-523-SA8-SB-4.0-5.0	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	FD	N
				Sample Date	07/18/2013	07/18/2013	07/17/2013	07/17/2013	07/17/2013	07/25/2013	07/25/2013	07/25/2013
				SDG	PH070	PH070	PH069	PH069	PH069	PH075	PH075	PH075
				Start Depth	0	4	0	4	8	4	4	4
				End Depth	0.5	5	0.5	5	9	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D	100-01-6	4-Nitroaniline	µg/kg	180 U	170 U	180 U	180 U	170 U	190 U	190 U	190 U
8270D	100-02-7	4-Nitrophenol	µg/kg	540 U	520 U	540 U	550 U	510 U	570 U	570 U	580 U
8270D	100-51-6	Benzyl Alcohol	µg/kg	360 U	350 U	540 U	550 U	510 U	380 U	380 U	380 U
8270D	101-55-3	4-Bromophenyl-phenylether	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	105-67-9	2,4-Dimethylphenol	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	106-44-5	4-Methylphenol	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	106-46-7	1,4-Dichlorobenzene	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	106-47-8	4-Chloroaniline	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	108-68-9	3,5-Dimethylphenol	µg/kg	180 U	170 U	180 U	180 U	170 U	190 U	190 U	190 U
8270D	108-95-2	Phenol	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	110-86-1	Pyridine	µg/kg	180 U	170 U	180 U	180 U	170 U	190 U	190 U	190 U
8270D	111-44-4	bis(2-chloroethyl) ether	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	111-91-1	bis(2-chloroethoxy)methane	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	180 U	190 U	--	--	--	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	180 U	180 U	--	--	--	--
8270D	118-74-1	Hexachlorobenzene	µg/kg	18 U	18 U	18 U	19 U	17 U	20 U	19 U	20 U
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--
8270D	120-82-1	1,2,4-Trichlorobenzene	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	120-83-2	2,4-Dichlorophenol	µg/kg	36 U	35 U	36 U	37 UJ C	34 UJ C	38 U	38 U	38 U
8270D	122-66-7	1,2-Diphenylhydrazine	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	129-00-0	Pyrene	µg/kg	--	--	--	4 J Z	--	--	--	--
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	180 U	180 U	--	--	--	--
8270D	132-64-9	Dibenzofuran	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	8 J Z	--	--	--	--	--
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	7 J Z	--	--	--	--
8270D	206-44-0	Fluoranthene	µg/kg	--	--	--	--	--	--	--	--
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	5 J Z	--	--	--	--	--
8270D	218-01-9	Chrysene	µg/kg	--	--	--	--	--	--	--	--
8270D	39638-32-9	bis(2-chloroisopropyl) ether	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	9 J Z	--	--	--	--	--
8270D	51-28-5	2,4-Dinitrophenol	µg/kg	720 U	690 U	1100 UJ C	1100 U	1000 U	760 U	750 U	760 U
8270D	534-52-1	4,6-Dinitro-2-methylphenol	µg/kg	540 U	520 U	540 U	550 U	510 U	570 U	570 U	580 U
8270D	541-73-1	1,3-Dichlorobenzene	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	--	5 J Z	--	--	--	--	--
8270D	59-50-7	4-Chloro-3-methylphenol	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	621-64-7	N-Nitroso-di-n-propylamine	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	62-53-3	Aniline	µg/kg	360 U	350 U	540 U	550 U	510 U	380 U	380 U	380 U
8270D	65-85-0	Benzoic Acid	µg/kg	540 U	520 U	540 U	550 U	510 U	570 U	570 U	580 U
8270D	67-72-1	Hexachloroethane	µg/kg	180 U	170 U	180 U	180 U	170 U	190 U	190 U	190 U
8270D	7005-72-3	4-Chlorophenyl-phenylether	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	77-47-4	Hexachlorocyclopentadiene	µg/kg	540 U	520 U	540 UJ C	550 UJ C	510 UJ C	570 U	570 U	580 U
8270D	78-59-1	Isophorone	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	180 U	180 U	--	--	--	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	180 U	180 U	--	--	--	--
8270D	85-01-8	Phenanthrene	µg/kg	--	--	15 J Z	--	--	--	--	--

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R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-509-SA8-SB-0.0-0.5	SL-509-SA8-SB-4.0-5.0	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-523-SA8-SB-4.0-5.0	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	FD	N
				Sample Date	07/18/2013	07/18/2013	07/17/2013	07/17/2013	07/17/2013	07/25/2013	07/25/2013	07/25/2013
				SDG	PH070	PH070	PH069	PH069	PH069	PH075	PH075	PH075
				Start Depth	0	4	0	4	8	4	4	4
				End Depth	0.5	5	0.5	5	9	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	--	180 U	180 U	--	--	--	--	--
8270D	86-30-6	N-Nitrosodiphenylamine	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	86-74-8	Carbazole	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	87-65-0	2,6-Dichlorophenol	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	87-68-3	Hexachlorobutadiene	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	87-86-5	Pentachlorophenol	µg/kg	180 U	180 U	180 U	190 U	170 U	200 U	190 U	200 U	
8270D	88-06-2	2,4,6-Trichlorophenol	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	88-74-4	2-Nitroaniline	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	88-75-5	2-Nitrophenol	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	91-20-3	Naphthalene	µg/kg	--	--	4 J Z	--	--	--	--	--	--
8270D	91-58-7	2-Chloronaphthalene	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	91-94-1	3,3'-Dichlorobenzidine	µg/kg	360 U	350 U	360 U	370 U	340 U	380 U	380 U	380 U	380 U
8270D	92-52-4	1,1'-Biphenyl	µg/kg	36 U	35 U	25 J Z	37 U	34 U	38 U	38 U	38 U	38 U
8270D	92-87-5	Benzidine	µg/kg	1800 U	1700 U	3600 U	3700 U	3400 U	1900 R	1900 U	1900 U	1900 U
8270D	95-48-7	2-Methylphenol	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	95-50-1	1,2-Dichlorobenzene	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	95-57-8	2-Chlorophenol	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	95-95-4	2,4,5-Trichlorophenol	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	98-95-3	Nitrobenzene	µg/kg	36 U	35 U	36 U	37 U	34 U	38 U	38 U	38 U	38 U
8270D	99-09-2	3-Nitroaniline	µg/kg	180 U	170 U	180 U	180 U	170 U	190 U	190 U	190 U	190 U
8270D	NDPA122-39-4	Diphenylamine	µg/kg	180 U	170 U	180 U	180 U	170 U	190 U	190 U	190 U	190 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-578-SA8-SB-0.0-0.5	SL-578-SA8-SB-4.0-5.0	SL-878-SA8-SB-4.0-5.0	SL-578-SA8-SB-9.0-10.0	SL-580-SA8-SB-0.0-0.5	SL-580-SA8-SB-4.0-5.0	SL-580-SA8-SB-10.5-11.5	SL-583-SA8-SB-0.0-0.5
				Sample Type	N	N	FD	N	N	N	N	N
				Sample Date	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	08/06/2013
				SDG	PH066	PH066	PH066	PH066	PH066	PH066	PH066	PH085
				Start Depth	0	4	4	9	0	4	10.5	0
				End Depth	0.5	5	5	10	0.5	5	11.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D	100-01-6	4-Nitroaniline	µg/kg	180 U	190 U	190 U	180 U	180 U	180 U	180 U	170 U	170 U
8270D	100-02-7	4-Nitrophenol	µg/kg	540 U	570 U	560 U	530 U	550 U	540 U	520 U	510 U	
8270D	100-51-6	Benzyl Alcohol	µg/kg	360 U	380 U	380 U	350 U	370 U	360 U	350 U	340 U	
8270D	101-55-3	4-Bromophenyl-phenylether	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	105-67-9	2,4-Dimethylphenol	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	106-44-5	4-Methylphenol	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	106-46-7	1,4-Dichlorobenzene	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	106-47-8	4-Chloroaniline	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	108-68-9	3,5-Dimethylphenol	µg/kg	180 U	190 U	190 U	180 U	180 U	180 U	170 U	170 U	
8270D	108-95-2	Phenol	µg/kg	36 U	38 U	38 U	35 U	890	36 U	35 U	34 U	
8270D	110-86-1	Pyridine	µg/kg	180 U	190 U	190 U	180 U	180 U	180 U	170 U	170 U	
8270D	111-44-4	bis(2-chloroethyl) ether	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	111-91-1	bis(2-chloroethoxy)methane	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--	--	--	--	--	--	--	--	
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--	--	--	--	--	--	--	--	
8270D	118-74-1	Hexachlorobenzene	µg/kg	18 U	19 U	19 U	18 U	19 U	18 U	18 U	17 U	
8270D	120-12-7	Anthracene	µg/kg	--	--	--	--	--	--	--	--	
8270D	120-82-1	1,2,4-Trichlorobenzene	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	120-83-2	2,4-Dichlorophenol	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	122-66-7	1,2-Diphenylhydrazine	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	129-00-0	Pyrene	µg/kg	--	11 J Z	--	--	--	--	--	8 J Z	
8270D	131-11-3	Dimethylphthalate	µg/kg	--	--	--	--	--	--	--	--	
8270D	132-64-9	Dibenzofuran	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	--	--	--	--	--	--	--	--	
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	--	--	--	--	--	--	--	--	
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	--	--	--	--	--	--	--	8 J Z	
8270D	206-44-0	Fluoranthene	µg/kg	--	8 J Z	--	--	--	7 J Z	--	4 J FD, Z	
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	--	--	--	--	--	--	--	8 J FD, Z	
8270D	218-01-9	Chrysene	µg/kg	--	9 J Z	--	--	--	--	--	7 J Z	
8270D	39638-32-9	bis(2-chloroisopropyl) ether	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	50-32-8	Benzo(a)pyrene	µg/kg	--	--	--	--	--	--	--	--	
8270D	51-28-5	2,4-Dinitrophenol	µg/kg	720 U	750 U	740 U	700 U	730 U	720 U	690 U	670 U	
8270D	534-52-1	4,6-Dinitro-2-methylphenol	µg/kg	540 U	570 U	560 U	530 U	550 U	540 U	520 U	510 U	
8270D	541-73-1	1,3-Dichlorobenzene	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	56-55-3	Benzo(a)anthracene	µg/kg	--	8 J Z	--	--	--	--	--	7 J Z	
8270D	59-50-7	4-Chloro-3-methylphenol	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	621-64-7	N-Nitroso-di-n-propylamine	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	62-53-3	Aniline	µg/kg	360 U	380 U	380 U	350 U	370 U	360 U	350 U	340 U	
8270D	65-85-0	Benzoic Acid	µg/kg	540 U	570 U	560 U	530 U	550 U	540 U	520 U	510 U	
8270D	67-72-1	Hexachloroethane	µg/kg	180 U	190 U	190 U	180 U	180 U	180 U	170 U	170 U	
8270D	7005-72-3	4-Chlorophenyl-phenylether	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	77-47-4	Hexachlorocyclopentadiene	µg/kg	540 U	570 U	560 U	530 U	550 U	540 U	520 U	510 U	
8270D	78-59-1	Isophorone	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	84-66-2	Diethylphthalate	µg/kg	--	--	--	--	--	--	--	--	
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--	--	--	--	--	--	--	--	
8270D	85-01-8	Phenanthrene	µg/kg	--	5 J Z	--	--	--	--	--	5 J Z	

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				Sample Name	SL-578-SA8-SB-0.0-0.5	SL-578-SA8-SB-4.0-5.0	SL-878-SA8-SB-4.0-5.0	SL-578-SA8-SB-9.0-10.0	SL-580-SA8-SB-0.0-0.5	SL-580-SA8-SB-4.0-5.0	SL-580-SA8-SB-10.5-11.5	SL-583-SA8-SB-0.0-0.5
				Sample Type	N	N	FD	N	N	N	N	N
				Sample Date	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	08/06/2013
				SDG	PH066	PH066	PH066	PH066	PH066	PH066	PH066	PH085
				Start Depth	0	4	4	9	0	4	10.5	0
				End Depth	0.5	5	5	10	0.5	5	11.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--	38 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U
8270D	86-30-6	N-Nitrosodiphenylamine	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	86-74-8	Carbazole	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	87-65-0	2,6-Dichlorophenol	µg/kg	36 UJ L	38 UJ L	38 UJ L	35 UJ L	37 UJ L	36 UJ L	35 UJ L	34 U	
8270D	87-68-3	Hexachlorobutadiene	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	87-86-5	Pentachlorophenol	µg/kg	180 U	190 U	190 U	180 U	190 U	180 U	180 U	170 U	
8270D	88-06-2	2,4,6-Trichlorophenol	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	88-74-4	2-Nitroaniline	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	88-75-5	2-Nitrophenol	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	91-20-3	Naphthalene	µg/kg	--	--	--	--	--	--	--	--	
8270D	91-58-7	2-Chloronaphthalene	µg/kg	36 U	37 U	37 U	35 U	36 U	36 U	34 U	34 U	
8270D	91-94-1	3,3'-Dichlorobenzidine	µg/kg	360 U	380 U	380 U	350 U	370 U	360 U	350 U	340 U	
8270D	92-52-4	1,1'-Biphenyl	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	92-87-5	Benzidine	µg/kg	1800 U	1900 R	1900 U	1800 U	1800 U	1800 U	1700 U	1700 R	
8270D	95-48-7	2-Methylphenol	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	95-50-1	1,2-Dichlorobenzene	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	95-57-8	2-Chlorophenol	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	95-95-4	2,4,5-Trichlorophenol	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	98-95-3	Nitrobenzene	µg/kg	36 U	38 U	38 U	35 U	37 U	36 U	35 U	34 U	
8270D	99-09-2	3-Nitroaniline	µg/kg	180 U	190 U	190 U	180 U	180 U	180 U	170 U	170 U	
8270D	NDPA122-39-4	Diphenylamine	µg/kg	180 U	190 U	190 U	180 U	180 U	180 U	170 U	170 U	

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			Sample Name	SL-883-SA8-SB-0.0-0.5
			Sample Type	FD
			Sample Date	08/06/2013
			SDG	PH085
			Start Depth	0
			End Depth	0.5
Analytic Method	CAS Number	Chemical Name	Unit	
8270D	100-01-6	4-Nitroaniline	µg/kg	170 U
8270D	100-02-7	4-Nitrophenol	µg/kg	510 U
8270D	100-51-6	Benzyl Alcohol	µg/kg	340 U
8270D	101-55-3	4-Bromophenyl-phenylether	µg/kg	34 U
8270D	105-67-9	2,4-Dimethylphenol	µg/kg	34 U
8270D	106-44-5	4-Methylphenol	µg/kg	34 U
8270D	106-46-7	1,4-Dichlorobenzene	µg/kg	34 U
8270D	106-47-8	4-Chloroaniline	µg/kg	34 U
8270D	108-68-9	3,5-Dimethylphenol	µg/kg	170 U
8270D	108-95-2	Phenol	µg/kg	34 U
8270D	110-86-1	Pyridine	µg/kg	170 U
8270D	111-44-4	bis(2-chloroethyl) ether	µg/kg	34 U
8270D	111-91-1	bis(2-chloroethoxy)methane	µg/kg	34 U
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	--
8270D	117-84-0	Di-n-octylphthalate	µg/kg	--
8270D	118-74-1	Hexachlorobenzene	µg/kg	17 U
8270D	120-12-7	Anthracene	µg/kg	3 J Z
8270D	120-82-1	1,2,4-Trichlorobenzene	µg/kg	34 U
8270D	120-83-2	2,4-Dichlorophenol	µg/kg	34 U
8270D	122-66-7	1,2-Diphenylhydrazine	µg/kg	34 U
8270D	129-00-0	Pyrene	µg/kg	10 J Z
8270D	131-11-3	Dimethylphthalate	µg/kg	--
8270D	132-64-9	Dibenzofuran	µg/kg	34 U
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	6 J Z
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	5 J Z
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	9 J Z
8270D	206-44-0	Fluoranthene	µg/kg	8 J FD, Z
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	4 J FD, Z
8270D	218-01-9	Chrysene	µg/kg	--
8270D	39638-32-9	bis(2-chloroisopropyl) ether	µg/kg	34 U
8270D	50-32-8	Benzo(a)pyrene	µg/kg	8 J Z
8270D	51-28-5	2,4-Dinitrophenol	µg/kg	670 U
8270D	534-52-1	4,6-Dinitro-2-methylphenol	µg/kg	510 U
8270D	541-73-1	1,3-Dichlorobenzene	µg/kg	34 U
8270D	56-55-3	Benzo(a)anthracene	µg/kg	5 J Z
8270D	59-50-7	4-Chloro-3-methylphenol	µg/kg	34 U
8270D	621-64-7	N-Nitroso-di-n-propylamine	µg/kg	34 U
8270D	62-53-3	Aniline	µg/kg	340 U
8270D	65-85-0	Benzoic Acid	µg/kg	510 U
8270D	67-72-1	Hexachloroethane	µg/kg	170 U
8270D	7005-72-3	4-Chlorophenyl-phenylether	µg/kg	34 U
8270D	77-47-4	Hexachlorocyclopentadiene	µg/kg	510 U
8270D	78-59-1	Isophorone	µg/kg	34 U
8270D	84-66-2	Diethylphthalate	µg/kg	--
8270D	84-74-2	Di-n-butylphthalate	µg/kg	--
8270D	85-01-8	Phenanthrene	µg/kg	6 J Z

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			Sample Name	SL-883-SA8-SB-0.0-0.5
			Sample Type	FD
			Sample Date	08/06/2013
			SDG	PH085
			Start Depth	0
			End Depth	0.5
Analytic Method	CAS Number	Chemical Name	Unit	
8270D	85-68-7	Butylbenzylphthalate	µg/kg	--
8270D	86-30-6	N-Nitrosodiphenylamine	µg/kg	34 U
8270D	86-74-8	Carbazole	µg/kg	34 U
8270D	87-65-0	2,6-Dichlorophenol	µg/kg	34 U
8270D	87-68-3	Hexachlorobutadiene	µg/kg	34 U
8270D	87-86-5	Pentachlorophenol	µg/kg	170 U
8270D	88-06-2	2,4,6-Trichlorophenol	µg/kg	34 U
8270D	88-74-4	2-Nitroaniline	µg/kg	34 U
8270D	88-75-5	2-Nitrophenol	µg/kg	34 U
8270D	91-20-3	Naphthalene	µg/kg	--
8270D	91-58-7	2-Chloronaphthalene	µg/kg	34 U
8270D	91-94-1	3,3'-Dichlorobenzidine	µg/kg	340 U
8270D	92-52-4	1,1'-Biphenyl	µg/kg	34 U
8270D	92-87-5	Benzidine	µg/kg	1700 U
8270D	95-48-7	2-Methylphenol	µg/kg	34 U
8270D	95-50-1	1,2-Dichlorobenzene	µg/kg	34 U
8270D	95-57-8	2-Chlorophenol	µg/kg	34 U
8270D	95-95-4	2,4,5-Trichlorophenol	µg/kg	34 U
8270D	98-95-3	Nitrobenzene	µg/kg	34 U
8270D	99-09-2	3-Nitroaniline	µg/kg	170 U
8270D	NDPA122-39-4	Diphenylamine	µg/kg	170 U

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			Sample Name	SL-501-SA8-SB-0.0-0.5	SL-801-SA8-SB-0.0-0.5	SL-501-SA8-SB-4.0-5.0	SL-501-SA8-SB-9.0-10.0	SL-501-SA8-SB-12.0-13.0	SL-502-SA8-SB-0.0-0.5	SL-502-SA8-SB-4.0-5.0	SL-502-SA8-SB-7.5-8.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013
			SDG	PH067	PH067	PH067	PH067	PH067	PH067	PH067	PH067
			Start Depth	0	0	4	9	12	0	4	7.5
			End Depth	0.5	0.5	5	10	13	0.5	5	8.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.2 U	5.3 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	2.6 J Z	2.4 J Z	5.3 U	5.4 U	5.3 U	2.9 J Z	5.4 U	5.4 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	24	20	5.3 U	5.4 U	5.3 U	27	15	13
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	51	41	11 U	11 U	11 U	91	42	28
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.2 U	5.3 U	5.4 U	5.3 U	5.2 U	5.4 U	5.4 U

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			Sample Name	SL-503-SA8-SB-0.0-0.5	SL-503-SA8-SB-3.0-4.0	SL-504-SA8-SB-0.0-0.5	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-505-SA8-SB-0.0-0.5	SL-505-SA8-SB-4.0-5.0	SL-506-SA8-SB-0.0-0.5	SL-506-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	FD	N	N	N	N
			Sample Date	07/15/2013	07/15/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013
			SDG	PH067	PH067	PH068	PH068	PH068	PH068	PH068	PH070	PH070
			Start Depth	0	3	0	2.5	2.5	0	4	0	4
			End Depth	0.5	4	0.5	3.5	3.5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.3 U	5.3 U	5.2 U	5.2 U	5.2 U	5.4 U	5.5 U	5.4 U	5.3 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.3 U	5.3 U	5.2 U	5.2 U	5.2 U	5.4 U	5.5 U	5.4 U	5.3 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	6.7	5.3 U	4.9 J Z	5.2 U	5.2 U	6.5	5.5 U	8.5 J Q	5.3 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	15	11 U	11	10 U	10 U	20	11 U	23	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.3 U	5.3 U	5.2 U	5.2 U	5.2 U	5.4 U	5.5 U	5.4 U	5.3 U

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			Sample Name	SL-507-SA8-SB-0.0-0.5	SL-507-SA8-SB-3.0-4.0	SL-508-SA8-SB-0.0-0.5	SL-509-SA8-SB-0.0-0.5	SL-509-SA8-SB-4.0-5.0	SL-510-SA8-SB-0.0-0.5	SL-511-SA8-SB-0.0-0.5	SL-511-SA8-SB-6.0-7.0	SL-512-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/16/2013	07/16/2013	07/16/2013	07/18/2013	07/18/2013	07/16/2013	07/15/2013	07/15/2013	07/17/2013
			SDG	PH068	PH068	PH068	PH070	PH070	PH068	PH067	PH067	PH069
			Start Depth	0	3	0	0	4	0	0	6	0
			End Depth	0.5	4	0.5	0.5	5	0.5	0.5	7	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.2 U	5.3 U	5.5 U	5.3 U	5.1 U	5.1 U	5.8 U	5.1 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U	5.2 U	5.3 U	5.5 U	5.3 U	5.1 U	5.1 U	5.8 U	3.0 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	4.6 J Z	5.2 U	4.7 J Z	7.8	5.3 U	13	5.8	5.8 U	36
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	12	10 U	12	21	11 U	42	13	12 U	51
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.2 U	5.3 U	5.5 U	5.3 U	5.1 U	5.1 U	5.8 U	5.1 U

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			Sample Name	SL-513-SA8-SB-0.0-0.5	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-514-SA8-SB-0.0-0.5	SL-514-SA8-SB-4.0-5.0	SL-514-SA8-SB-7.5-8.5	SL-515-SA8-SB-0.0-0.5	SL-515-SA8-SB-4.0-5.0	SL-515-SA8-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/17/2013
			SDG	PH069	PH069	PH069	PH069	PH069	PH069	PH069	PH069	PH069
			Start Depth	0	4	8	0	4	7.5	0	4	9
			End Depth	0.5	5	9	0.5	5	8.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	11 U	5.6 U	5.1 U	5.3 U	5.9 U	5.9 U	140 U	5.7 U	6.0 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	11 U	5.6 U	5.1 U	2.9 J Z	5.9 U	5.9 U	140 U	5.7 U	6.0 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	16	5.6 U	5.1 U	21	5.0 J Z	3.6 J Q, Z	320	5.7 U	6.0 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	120	11 U	10 U	56	21	12 J Q	1100	11 U	12 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	11 U	5.6 U	5.1 U	5.3 U	5.9 U	5.9 U	140 U	5.7 U	6.0 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-515-SA8-SB-14.0-15.0	SL-516-SA8-SB-0.0-0.5	SL-517-SA8-SB-0.0-0.5	SL-517-SA8-SB-3.0-4.0	SL-518-SA8-SB-0.0-0.5	SL-518-SA8-SB-4.0-5.0	SL-519-SA8-SB-0.0-0.5	SL-519-SA8-SB-3.5-4.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/17/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/19/2013	07/18/2013	07/18/2013
			SDG	PH069	PH071	PH071	PH071	PH071	PH071	PH070	PH070
			Start Depth	14	0	0	3	0	4	0	3.5
			End Depth	15	0.5	0.5	4	0.5	5	0.5	4.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.8 U	5.0 U	5.1 U	5.2 U	5.1 U	5.2 U	5.4 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.8 U	5.0 U	5.1 U	5.2 U	5.1 U	5.2 U	2.8 J Z	5.2 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	2.7 J Z	7.0 J Q	9.4	5.2 U	5.1 U	5.2 U	32	5.2 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	10 J Z	35 J Q	34	10 U	10 U	10 U	71	10 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.8 U	5.0 U	5.1 U	5.2 U	5.1 U	5.2 U	5.4 U	5.2 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-520-SA8-SB-0.0-0.5	SL-521-SA8-SB-0.0-0.5	SL-522-SA8-SB-0.0-0.5	SL-522-SA8-SB-4.0-5.0	SL-523-SA8-SB-4.0-5.0	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0	SL-525-SA8-SB-0.0-0.5	SL-525-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	FD	N	N	N
			Sample Date	07/18/2013	07/19/2013	07/26/2013	07/26/2013	07/25/2013	07/25/2013	07/25/2013	07/25/2013	07/25/2013
			SDG	PH070	PH071	PH076	PH076	PH075	PH075	PH075	PH075	PH075
			Start Depth	0	0	0	4	4	4	4	0	4
			End Depth	0.5	0.5	0.5	5	5	5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.1 U	5.5 U	5.6 U	5.7 U	5.7 U	5.8 U	5.3 U	5.6 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.2 U	5.1 U	5.5 U	2.9 J Z	5.7 U	5.7 U	5.8 U	2.5 J Z	5.6 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	3.9 J Z	13	3.9 J Z	6.5	5.7 U	5.7 U	5.8 U	11	5.6 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	7.9 J Z	45	11	17	11 U	11 U	12 U	24	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.1 U	5.5 U	5.6 U	5.7 U	5.7 U	5.8 U	5.3 U	5.6 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-526-SA8-SB-0.0-0.5	SL-526-SA8-SB-4.0-5.0	SL-527-SA8-SB-0.0-0.5	SL-527-SA8-SB-4.0-5.0	SL-528-SA8-SB-4.0-5.0	SL-529-SA8-SB-0.0-0.5	SL-529-SA8-SB-4.0-5.0	SL-530-SA8-SB-0.0-0.5	SL-530-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/29/2013	07/29/2013	07/24/2013	07/24/2013	07/24/2013	07/29/2013	07/29/2013	08/09/2013	08/09/2013
			SDG	PH078	PH078	PH074	PH074	PH074	PH078	PH078	PH088	PH088
			Start Depth	0	4	0	4	4	0	4	0	4
			End Depth	0.5	5	0.5	5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.5 U	5.8 U	5.5 U	5.9 U	5.8 U	5.4 U	5.8 U	5.3 U	5.6 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	2.3 J Z	5.8 U	5.5 U	5.9 U	5.8 U	2.5 J Z	5.8 U	2.7 J Z	5.6 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	16	3.6 J Z	5.5 U	5.9 U	5.8 U	19	3.8 J Z	18	7.1 J Q
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	34	6.8 J Z	11 U	12 U	12 U	37	8.5 J Z	39	6.1 J Q, Z
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.5 U	5.8 U	5.5 U	5.9 U	5.8 U	5.4 U	5.8 U	5.3 U	5.6 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-830-SA8-SB-4.0-5.0	SL-531-SA8-SB-0.0-0.5	SL-531-SA8-SB-4.0-5.0	SL-532-SA8-SB-0.0-0.5	SL-532-SA8-SB-6.5-7.5	SL-536-SA8-SB-0.0-0.5	SL-536-SA8-SB-4.0-5.0	SL-537-SA8-SB-0.0-0.5	SL-537-SA8-SB-4.0-5.0
			Sample Type	FD	N	N	N	N	N	N	N	N
			Sample Date	08/09/2013	07/18/2013	07/18/2013	07/19/2013	07/19/2013	07/31/2013	07/31/2013	07/31/2013	07/31/2013
			SDG	PH088	PH070	PH070	PH071	PH071	PH081	PH081	PH081	PH081
			Start Depth	4	0	4	0	6.5	0	4	0	4
			End Depth	5	0.5	5	0.5	7.5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.6 U	5.3 U	5.7 U	5.4 U	5.7 U	10 U	5.5 U	5.2 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.6 U	2.5 J Z	5.7 U	2.6 J Z	5.7 U	10 U	5.5 U	5.2 U	5.4 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	4.8 J Z	7.9	5.7 U	6.1	5.7 U	31	8.3	27	7.4
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	4.8 J Z	15	11 U	12	11 U	100	21	58	12
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.6 U	5.3 U	5.7 U	5.4 U	5.7 U	10 U	5.5 U	5.2 U	5.4 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-538-SA8-SB-0.0-0.5	SL-538-SA8-SB-4.0-5.0	SL-838-SA8-SB-4.0-5.0	SL-539B-SA8-SB-0.0-0.5	SL-539B-SA8-SB-2.0-3.0	SL-540-SA8-SB-0.0-0.5	SL-540-SA8-SB-4.0-5.0	SL-541-SA8-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	08/09/2013	08/09/2013	08/09/2013	07/26/2013	07/26/2013	07/26/2013	07/26/2013	08/09/2013
			SDG	PH088	PH088	PH088	PH076	PH076	PH076	PH076	PH088
			Start Depth	0	4	4	0	2	0	4	0
			End Depth	0.5	5	5	0.5	3	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.3 U	5.8 U	5.8 U	5.7 U	5.8 U	5.5 U	5.6 U	5.3 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.3 U	5.8 U	5.8 U	5.7 U	5.8 U	5.5 U	5.6 U	4.5 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	12	5.8 UJ FD	3.3 J FD, Z	2.8 J Z	5.8 U	3.2 J Z	10	34
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	29	12 UJ FD	5.6 J FD, Z	11 U	12 U	7.5 J Z	27	74
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.3 U	5.8 U	5.8 U	5.7 U	5.8 U	5.5 U	5.6 U	5.3 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-541-SA8-SB-4.0-5.0	SL-542-SA8-SB-0.0-0.5	SL-542-SA8-SB-4.0-5.0	SL-542-SA8-SB-9.0-10.0	SL-542-SA8-SB-14.0-15.0	SL-542-SA8-SB-17.5-18.5	SL-543-SA8-SB-0.0-0.5	SL-543-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/09/2013	09/26/2013	09/26/2013	09/26/2013	09/26/2013	09/26/2013	08/13/2013	08/13/2013
			SDG	PH088	PH117	PH117	PH117	PH117	PH117	PH090	PH090
			Start Depth	4	0	4	9	14	17.5	0	4
			End Depth	5	0.5	5	10	15	18.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.6 U	5.2 U	5.7 U	5.8 U	5.8 U	5.7 U	5.2 U	5.6 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	2.7 J Z	5.2 U	5.7 U	5.8 U	5.8 U	5.7 U	5.2 U	5.6 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.8	5.7	5.7 U	6.3	5.8 U	5.7 U	8.1	5.6 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	13	11	11 U	11 J Z	12 U	11 U	23	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.6 U	5.2 U	5.7 U	5.8 U	5.8 U	5.7 U	5.2 U	5.6 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-843-SA8-SB-4.0-5.0	SL-549-SA8-SB-0.0-0.5	SL-549-SA8-SB-4.0-5.0	SL-550-SA8-SB-0.0-0.5	SL-550-SA8-SB-4.0-5.0	SL-550-SA8-SB-9.0-10.0	SL-550-SA8-SB-14.0-15.0	SL-550-SA8-SB-17.0-18.0
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	08/13/2013	07/30/2013	07/30/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013
			SDG	PH090	PH080	PH080	PH072	PH072	PH072	PH072	PH072
			Start Depth	4	0	4	0	4	9	14	17
			End Depth	5	0.5	5	0.5	5	10	15	18
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.6 U	5.4 U	5.6 U	5.6 U	5.7 U	5.5 U	6.0 U	5.3 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.6 U	5.4 U	5.6 U	5.6 U	5.7 U	5.5 U	6.0 U	5.3 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.6 U	14	2.7 J Z	7.4	5.7 U	5.5 U	6.0 U	5.3 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	29	5.1 J Z	18	11 U	11 U	12 U	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.6 U	5.4 U	5.6 U	5.6 U	5.7 U	5.5 U	6.0 U	5.3 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-551-SA8-SB-0.0-0.5	SL-551-SA8-SB-4.0-5.0	SL-851-SA8-SB-4.0-5.0	SL-551-SA8-SB-9.0-10.0	SL-551-SA8-SB-14.0-15.0	SL-551-SA8-SB-19.0-20.0	SL-552-SA8-SB-0.0-0.5	SL-552-SA8-SB-4.0-5.0
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	07/23/2013	07/23/2013	07/23/2013	07/23/2013	07/23/2013	07/23/2013	08/02/2013	08/02/2013
			SDG	PH073	PH073	PH073	PH073	PH073	PH073	PH083	PH083
			Start Depth	0	4	4	9	14	19	0	4
			End Depth	0.5	5	5	10	15	20	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.7 U	5.2 U	5.7 U	5.9 U	5.8 U	5.9 U	10 U	5.7 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.7 U	5.2 U	5.7 U	5.9 U	5.8 U	5.9 U	4.8 J Z	5.7 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.7 U	5.2 U	5.7 U	5.9 U	5.8 U	5.9 U	52	3.8 J Z
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	10 U	11 U	12 U	12 U	12 U	130	11
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.7 U	5.2 U	5.7 U	5.9 U	5.8 U	5.9 U	10 U	5.7 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-552-SA8-SB-7.5-8.5	SL-553-SA8-SB-0.0-0.5	SL-553-SA8-SB-4.0-5.0	SL-853-SA8-SB-4.0-5.0	SL-553-SA8-SB-9.0-10.0	SL-553-SA8-SB-14.0-15.0	SL-553-SA8-SB-18.0-19.0	SL-554-SA8-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	08/02/2013	08/27/2013	08/27/2013	08/27/2013	08/28/2013	08/28/2013	08/28/2013	07/22/2013
			SDG	PH083	PH094	PH094	PH094	PH096	PH096	PH096	PH072
			Start Depth	7.5	0	4	4	9	14	18	0
			End Depth	8.5	0.5	5	5	10	15	19	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.6 U	5.5 U	5.6 U	5.6 U	5.8 U	5.8 U	5.4 U	5.7 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.6 U	5.5 U	5.6 U	5.6 U	5.8 U	5.8 U	5.4 U	5.7 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	3.0 J Z	4.9 J Z	5.6 U	5.6 U	5.8 U	5.8 U	5.4 U	5.7 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	9.3 J Z	8.1 J Z	11 U	11 U	12 U	12 U	11 U	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.6 U	5.5 U	5.6 U	5.6 U	5.8 U	5.8 U	5.4 U	5.7 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-554-SA8-SB-4.0-5.0	SL-555-SA8-SB-0.0-0.5	SL-555-SA8-SB-4.0-5.0	SL-556-SA8-SB-0.0-0.5	SL-556-SA8-SB-4.0-5.0	SL-558-SA8-SB-0.0-0.5	SL-558-SA8-SB-4.0-5.0	SL-558-SA8-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/22/2013	07/23/2013	07/23/2013	07/22/2013	07/22/2013	08/02/2013	08/02/2013	08/02/2013
			SDG	PH072	PH073	PH073	PH072	PH072	PH083	PH083	PH083
			Start Depth	4	0	4	0	4	0	4	9
			End Depth	5	0.5	5	0.5	5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.7 U	5.7 U	5.6 U	5.7 U	5.5 U	5.2 U	5.8 U	5.9 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.7 U	5.7 U	5.6 U	5.7 U	5.5 U	2.5 J Z	5.8 U	5.9 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.7 U	5.7 U	5.6 U	5.7 U	3.2 J Z	28	4.5 J Z	3.5 J Z
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	11 U	11 U	11 U	9.3 J Z	52	11 J Z	8.5 J Z
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.7 U	5.7 U	5.6 U	5.7 U	5.5 U	5.2 U	5.8 U	5.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-558-SA8-SB-12.5-13.5	SL-559-SA8-SB-0.0-0.5	SL-559-SA8-SB-4.0-5.0	SL-560-SA8-SB-0.0-0.5	SL-560-SA8-SB-4.0-5.0	SL-561-SA8-SB-0.0-0.5	SL-561-SA8-SB-4.0-5.0	SL-562-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/02/2013	08/02/2013	08/02/2013	07/30/2013	07/30/2013	07/09/2013	07/09/2013	07/09/2013
			SDG	PH083	PH083	PH083	PH080	PH080	PH063	PH063	PH063
			Start Depth	12.5	0	4	0	4	0	4	0
			End Depth	13.5	0.5	5	0.5	5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.6 U	5.2 U	5.6 U	27 U	5.5 U	5.2 U	5.4 U	5.1 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.6 U	5.2 U	5.6 U	27 U	5.5 U	3.1 J Z	5.4 U	5.1 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	3.9 J Z	23	7.4	47	5.5 U	45	5.4 U	12
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	9.9 J Z	54	16	180	11 U	82	11 U	35
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.6 U	5.2 U	5.6 U	27 U	5.5 U	5.2 U	5.4 U	5.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-563-SA8-SB-0.0-0.5	SL-563-SA8-SB-2.0-3.0	SL-564-SA8-SB-0.0-0.5	SL-565-SA8-SB-0.0-0.5	SL-565-SA8-SB-4.0-5.0	SL-566-SA8-SB-0.0-0.5	SL-566-SA8-SB-4.0-5.0	SL-567-SA8-SB-0.0-0.5	SL-567-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/09/2013	07/09/2013	08/06/2013	08/08/2013	08/08/2013	08/07/2013	08/07/2013	08/08/2013	08/08/2013
			SDG	PH063	PH063	PH085	PH087	PH087	PH086	PH086	PH087	PH087
			Start Depth	0	2	0	0	4	0	4	0	4
			End Depth	0.5	3	0.5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.3 U	5.2 U	5.3 U	5.9 U	5.1 U	5.4 U	30 U	6.0 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U	5.3 U	5.2 U	4.1 J Z	5.9 U	3.1 J Z	2.2 J Z	30 U	6.0 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	7.2	4.9 J Z	11	38	5.9 U	20	7.0	43	6.0 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	22	12	29	92	12 U	40	12	200	12 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.3 U	5.2 U	5.3 U	5.9 U	5.1 U	5.4 U	30 U	6.0 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-567-SA8-SB-9.0-10.0	SL-568-SA8-SB-0.0-0.5	SL-568-SA8-SB-4.0-5.0	SL-569-SA8-SB-0.0-0.5	SL-569-SA8-SB-4.0-5.0	SL-569-SA8-SB-7.0-8.0	SL-570-SA8-SB-0.0-0.5	SL-570-SA8-SB-4.0-5.0	SL-571-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/08/2013	08/05/2013	08/05/2013	08/05/2013	08/05/2013	08/05/2013	07/11/2013	07/11/2013	07/10/2013
			SDG	PH087	PH084	PH084	PH084	PH084	PH084	PH065	PH065	PH064
			Start Depth	9	0	4	0	4	7	0	4	0
			End Depth	10	0.5	5	0.5	5	8	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.8 U	11 U	5.5 U	55 U	28 U	5.4 U	140 U	28 U	11 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.8 U	11 U	5.5 U	55 U	28 U	5.4 U	140 U	28 U	11 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.8 U	30	11	170	110	7.1	330	31	35
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	12 U	92	27	640	270	27	860	130	110
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.8 U	11 U	5.5 U	55 U	28 U	5.4 U	140 U	28 U	11 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-571-SA8-SB-6.5-7.5	SL-571-SA8-SB-12.5-13.5	SL-572-SA8-SB-0.0-0.5	SL-572-SA8-SB-4.0-5.0	SL-572-SA8-SB-9.0-10.0	SL-572-SA8-SB-14.0-15.0	SL-572-SA8-SB-18.5-19.5	SL-573-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013
			SDG	PH064	PH064	PH064	PH064	PH064	PH064	PH064	PH064
			Start Depth	6.5	12.5	0	4	9	14	18.5	0
			End Depth	7.5	13.5	0.5	5	10	15	19.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.5 U	5.4 U	12 U	28 U	11 U	5.5 U	5.6 U	30 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.5 U	5.4 U	12 U	28 U	11 U	5.5 U	5.6 U	30 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	6.6	5.1 J Z	18	73	26	5.5 U	5.6 U	95
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	18	16	79	220	88	11 U	11 U	320
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.5 U	5.4 U	12 U	28 U	11 U	5.5 U	5.6 U	30 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-573-SA8-SB-4.0-5.0	SL-573-SA8-SB-9.5-10.5	SL-574-SA8-SB-0.0-0.5	SL-574-SA8-SB-4.0-5.0	SL-574-SA8-SB-9.0-10.0	SL-574-SA8-SB-14.0-15.0	SL-874-SA8-SB-14.0-15.0	SL-575-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	07/10/2013	07/10/2013	07/11/2013	07/11/2013	07/11/2013	07/11/2013	07/11/2013	08/07/2013
			SDG	PH064	PH064	PH065	PH065	PH065	PH065	PH065	PH086
			Start Depth	4	9.5	0	4	9	14	14	0
			End Depth	5	10.5	0.5	5	10	15	15	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	28 U	11 U	58 U	5.2 U	5.6 U	5.5 U	5.3 U	28 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	28 U	11 U	58 U	5.2 U	5.6 U	5.5 U	5.3 U	28 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	100	19	110	5.8	5.6	5.5 U	5.3 U	78
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	310	86	250	14	23	11 U	11 U	250
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	28 U	11 U	58 U	5.2 U	5.6 U	5.5 U	5.3 U	28 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-575-SA8-SB-4.0-5.0	SL-575-SA8-SB-9.0-10.0	SL-578-SA8-SB-0.0-0.5	SL-578-SA8-SB-4.0-5.0	SL-878-SA8-SB-4.0-5.0	SL-578-SA8-SB-9.0-10.0	SL-580-SA8-SB-0.0-0.5	SL-580-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	08/07/2013	08/07/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013
			SDG	PH086	PH086	PH066	PH066	PH066	PH066	PH066	PH066
			Start Depth	4	9	0	4	4	9	0	4
			End Depth	5	10	0.5	5	5	10	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	11 U	5.6 U	11 U	5.6 U	5.6 U	5.2 U	280 U	5.3 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	11 U	5.6 U	11 U	5.6 U	5.6 U	5.2 U	280 U	5.3 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	24	9.0	13	5.7 J Q	5.6	5.0 J Z	340	12
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	86	16	53	28 J Q	18	17	1600	51
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	11 U	5.6 U	11 U	5.6 U	5.6 U	5.2 U	280 U	5.3 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-580-SA8-SB-10.5-11.5	SL-581-SA8-SB-0.0-0.5	SL-581-SA8-SB-4.5-5.5	SL-582-SA8-SB-0.0-0.5	SL-582-SA8-SB-2.5-3.5	SL-583-SA8-SB-0.0-0.5	SL-883-SA8-SB-0.0-0.5	SL-584-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	07/12/2013	07/12/2013	07/12/2013	08/06/2013	08/06/2013	08/06/2013	08/06/2013	08/06/2013
			SDG	PH066	PH066	PH066	PH085	PH085	PH085	PH085	PH085
			Start Depth	10.5	0	4.5	0	2.5	0	0	0
			End Depth	11.5	0.5	5.5	0.5	3.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.4 U	5.1 U	11 U	5.3 U	5.1 U	5.1 U	5.0 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.2 U	5.4 U	5.1 U	5.8 J Z	5.3 U	5.1 UJ FD	2.4 J FD, Z	5.0 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	9.0	7.0	5.1 U	50	2.5 J Z	13 J FD, Q	24 J FD	9.2
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	37	15	10 U	110	11 U	34 J FD	66 J FD	27
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.4 U	5.1 U	11 U	5.3 U	5.1 U	5.1 U	5.0 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-585-SA8-SB-0.0-0.5	SL-586-SA8-SB-0.0-0.5	SL-587-SA8-SB-0.0-0.5	SL-587-SA8-SB-6.5-7.5	SL-588-SA8-SB-0.0-0.5	SL-888-SA8-SB-0.0-0.5	SL-588-SA8-SB-2.0-3.0	SL-589-SA8-SB-0.0-0.5	SL-589-SA8-SB-2.5-3.5
			Sample Type	N	N	N	N	N	FD	N	N	N
			Sample Date	08/12/2013	07/08/2013	07/12/2013	07/12/2013	07/08/2013	07/08/2013	07/08/2013	07/30/2013	07/30/2013
			SDG	PH089	PH062	PH066	PH066	PH062	PH062	PH062	PH080	PH080
			Start Depth	0	0	0	6.5	0	0	2	0	2.5
			End Depth	0.5	0.5	0.5	7.5	0.5	0.5	3	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.0 U	10 U	5.1 U	5.2 U	5.0 U	5.0 U	5.1 U	5.2 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	2.3 J Z	7.5 J Z	5.1 U	5.2 U	5.0 U	5.0 U	5.1 U	5.2 U	5.2 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	23	69	2.8 J Z	5.2 U	9.3 J Q	10	7.2	4.0 J Z	3.8 J Z
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	49	130	6.6 J Z	4.6 J Z	25	27	22	8.5 J Z	8.7 J Z
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.0 U	10 U	5.1 U	5.2 U	5.0 U	5.0 U	5.1 U	5.2 U	5.2 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-590-SA8-SB-0.0-0.5	SL-590-SA8-SB-4.0-5.0	SL-590-SA8-SB-7.0-8.0	SL-591-SA8-SB-0.0-0.5	SL-592-SA8-SB-0.0-0.5	SL-592-SA8-SB-3.5-4.5	SL-593-SA8-SB-0.0-0.5	SL-593-SA8-SB-4.0-5.0	SL-594-SA8-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/15/2013
			SDG	PH089	PH089	PH089	PH089	PH089	PH089	PH089	PH089	PH092
			Start Depth	0	4	7	0	0	3.5	0	4	0
			End Depth	0.5	5	8	0.5	0.5	4.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.2 U	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U	5.1 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	4.1 J Z	2.3 J Z	6.3	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U	5.1 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	18	11	29	13	6.8	4.6 J Z	4.3 J Z	7.4	3.6 J Z
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	43	29	34	35	24	16	14	20	7.0 J Z
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.2 U	5.2 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U	5.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-595-SA8-SB-0.0-0.5	SL-596-SA8-SB-0.0-0.5	SL-597-SA8-SB-0.0-0.5	SL-600-SA8-SB-0.0-0.5	SL-600-SA8-SB-4.0-5.0	SL-601-SA8-SB-0.0-0.5	SL-601-SA8-SB-4.0-5.0	SL-602-SA8-SB-0.0-0.5	SL-602-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/15/2013	07/30/2013	08/15/2013	08/14/2013	08/14/2013	07/18/2013	07/18/2013	08/14/2013	08/14/2013
			SDG	PH092	PH080	PH092	PH091	PH091	PH070	PH070	PH091	PH091
			Start Depth	0	0	0	0	4	0	4	0	4
			End Depth	0.5	0.5	0.5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.0 U	5.1 U	5.0 U	5.1 U	5.5 U	5.4 U	5.3 U	5.2 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.0 U	5.1 U	5.0 U	5.1 U	5.5 U	5.4 U	5.3 U	3.6 J Z	2.5 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.0	5.5	9.6	12	6.3	13	4.4 J Z	28	11
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	15	14	33	47	11	29	7.3 J Z	55	33
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.0 U	5.1 U	5.0 U	5.1 U	5.5 U	5.4 U	5.3 U	5.2 U	5.4 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-606-SA8-SB-0.0-0.5	SL-606-SA8-SB-4.0-5.0	SL-607-SA8-SB-0.0-0.5	SL-607-SA8-SB-5.0-6.0	SL-608-SA8-SB-0.0-0.5	SL-608-SA8-SB-4.0-5.0	SL-608-SA8-SB-7.0-8.0	SL-609-SA8-SB-0.0-0.5	SL-609-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	07/19/2013	07/19/2013	08/09/2013	08/09/2013	08/01/2013	08/01/2013	08/01/2013	08/13/2013	08/13/2013
			SDG	PH071	PH071	PH088	PH088	PH082	PH082	PH082	PH090	PH090
			Start Depth	0	4	0	5	0	4	7	0	4
			End Depth	0.5	5	0.5	6	0.5	5	8	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.5 U	5.6 U	5.2 U	5.5 U	5.1 U	5.5 U	5.5 U	5.2 U	5.5 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	3.9 J Z	5.6 U	3.3 J Z	5.5 U	5.1 U	2.2 J Z	5.5 U	5.2 U	5.5 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	33	5.6 U	26	5.4 J Z	20	12	17	5.6	2.9 J Z
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	57	11 U	56	12	47	30	34	19	9.2 J Z
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.5 U	5.6 U	5.2 U	5.5 U	5.1 U	5.5 U	5.5 U	5.2 U	5.5 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-610-SA8-SB-0.0-0.5	SL-610-SA8-SB-4.0-5.0	SL-610-SA8-SB-6.8-7.8	SL-612-SA8-SB-0.0-0.5	SL-612-SA8-SB-4.0-5.0	SL-613-SA8-SB-0.0-0.5	SL-613-SA8-SB-4.0-5.0	SL-614-SA8-SB-0.0-0.5	SL-614-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	08/01/2013	08/01/2013	08/01/2013	07/30/2013	07/30/2013	08/14/2013	08/14/2013	08/13/2013	08/13/2013
			SDG	PH082	PH082	PH082	PH080	PH080	PH091	PH091	PH090	PH090
			Start Depth	0	4	6.8	0	4	0	4	0	4
			End Depth	0.5	5	7.8	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	10 U	5.6 U	5.5 U	5.7 U	5.3 U	5.2 U	5.6 U	5.3 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	4.7 J Z	5.6 U	5.5 U	5.7 U	5.3 U	3.7 J Z	5.6 U	5.3 U	5.4 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	46	6.3	4.4 J Z	5.7 U	3.2 J Z	25	5.9	11	6.7
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	110	11	8.4 J Z	6.1 J Z	12 J Q	76	12	38	26
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	10 U	5.6 U	5.5 U	5.7 U	5.3 U	5.2 U	3.1 J Z	5.3 U	5.4 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-615-SA8-SB-0.0-0.5
			Sample Type	N
			Sample Date	08/27/2013
			SDG	PH094
			Start Depth	0
			End Depth	0.5
Analytic Method	CAS Number	Chemical Name	Unit	
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	14
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	21
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-501-SA8-SB-4.0-5.0	SL-501-SA8-SB-9.0-10.0	SL-501-SA8-SB-12.0-13.0	SL-502-SA8-SB-4.0-5.0	SL-502-SA8-SB-7.5-8.5	SL-503-SA8-SB-3.0-4.0	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N	FD
			Sample Date	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/15/2013	07/16/2013	07/16/2013
			SDG	PH067	PH067	PH067	PH067	PH067	PH067	PH068	PH068
			Start Depth	4	9	12	4	7.5	3	2.5	2.5
			End Depth	5	10	13	5	8.5	4	3.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.0 U	1.1 U	1.1 U	1.0 U	1.2 U	1.1 U	1 U	1.0 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-505-SA8-SB-4.0-5.0	SL-506-SA8-SB-4.0-5.0	SL-507-SA8-SB-3.0-4.0	SL-509-SA8-SB-4.0-5.0	SL-511-SA8-SB-6.0-7.0	SL-513-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-514-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/16/2013	07/18/2013	07/16/2013	07/18/2013	07/15/2013	07/17/2013	07/17/2013	07/17/2013
			SDG	PH068	PH070	PH068	PH070	PH067	PH069	PH069	PH069
			Start Depth	4	4	3	4	6	4	8	4
			End Depth	5	5	4	5	7	5	9	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.0 U	1.1 U	1.0 U	1.1 U	1.0 U	1.1 U	1.2 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-514-SA8-SB-7.5-8.5	SL-515-SA8-SB-4.0-5.0	SL-515-SA8-SB-9.0-10.0	SL-515-SA8-SB-14.0-15.0	SL-517-SA8-SB-3.0-4.0	SL-518-SA8-SB-4.0-5.0	SL-519-SA8-SB-3.5-4.5	SL-522-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/17/2013	07/17/2013	07/17/2013	07/17/2013	07/19/2013	07/19/2013	07/18/2013	07/26/2013
			SDG	PH069	PH069	PH069	PH069	PH071	PH071	PH070	PH076
			Start Depth	7.5	4	9	14	3	4	3.5	4
			End Depth	8.5	5	10	15	4	5	4.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1 U	1.1 U	1.0 U	1.1 U	1.0 U	1.0 U	1.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-523-SA8-SB-4.0-5.0	SL-823-SA8-SB-4.0-5.0	SL-524-SA8-SB-4.0-5.0	SL-525-SA8-SB-4.0-5.0	SL-526-SA8-SB-4.0-5.0	SL-527-SA8-SB-4.0-5.0	SL-528-SA8-SB-4.0-5.0	SL-529-SA8-SB-4.0-5.0
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	07/25/2013	07/25/2013	07/25/2013	07/25/2013	07/29/2013	07/24/2013	07/24/2013	07/29/2013
			SDG	PH075	PH075	PH075	PH075	PH078	PH074	PH074	PH078
			Start Depth	4	4	4	4	4	4	4	4
			End Depth	5	5	5	5	5	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.2 U	1.1 U	1.3 U	1.1 U	1.1 U	1.2 U	1.0 U	1.2 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-530-SA8-SB-4.0-5.0	SL-830-SA8-SB-4.0-5.0	SL-531-SA8-SB-4.0-5.0	SL-532-SA8-SB-6.5-7.5	SL-536-SA8-SB-4.0-5.0	SL-537-SA8-SB-4.0-5.0	SL-538-SA8-SB-4.0-5.0	SL-838-SA8-SB-4.0-5.0
			Sample Type	N	FD	N	N	N	N	N	FD
			Sample Date	08/09/2013	08/09/2013	07/18/2013	07/19/2013	07/31/2013	07/31/2013	08/09/2013	08/09/2013
			SDG	PH088	PH088	PH070	PH071	PH081	PH081	PH088	PH088
			Start Depth	4	4	4	6.5	4	4	4	4
			End Depth	5	5	5	7.5	5	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.0 U	1.3 U	1.0 U	1.2 U	1 U	1.9	1.2 U	1.4 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-539B-SA8-SB-2.0-3.0	SL-540-SA8-SB-4.0-5.0	SL-541-SA8-SB-4.0-5.0	SL-542-SA8-SB-4.0-5.0	SL-542-SA8-SB-9.0-10.0	SL-542-SA8-SB-14.0-15.0	SL-542-SA8-SB-17.5-18.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/26/2013	07/26/2013	08/09/2013	09/26/2013	09/26/2013	09/26/2013	09/26/2013
			SDG	PH076	PH076	PH088	PH117	PH117	PH117	PH117
			Start Depth	2	4	4	4	9	14	17.5
			End Depth	3	5	5	5	10	15	18.5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-543-SA8-SB-4.0-5.0	SL-843-SA8-SB-4.0-5.0	SL-549-SA8-SB-4.0-5.0	SL-550-SA8-SB-4.0-5.0	SL-550-SA8-SB-9.0-10.0	SL-550-SA8-SB-14.0-15.0	SL-550-SA8-SB-17.0-18.0
			Sample Type	N	FD	N	N	N	N	N
			Sample Date	08/13/2013	08/13/2013	07/30/2013	07/22/2013	07/22/2013	07/22/2013	07/22/2013
			SDG	PH090	PH090	PH080	PH072	PH072	PH072	PH072
			Start Depth	4	4	4	4	9	14	17
			End Depth	5	5	5	5	10	15	18
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.1 U	1.2 U	1 U	0.9 U	1.1 U	1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-551-SA8-SB-4.0-5.0	SL-851-SA8-SB-4.0-5.0	SL-551-SA8-SB-9.0-10.0	SL-551-SA8-SB-14.0-15.0	SL-551-SA8-SB-19.0-20.0	SL-552-SA8-SB-4.0-5.0	SL-552-SA8-SB-7.5-8.5
			Sample Type	N	FD	N	N	N	N	N
			Sample Date	07/23/2013	07/23/2013	07/23/2013	07/23/2013	07/23/2013	08/02/2013	08/02/2013
			SDG	PH073	PH073	PH073	PH073	PH073	PH083	PH083
			Start Depth	4	4	9	14	19	4	7.5
			End Depth	5	5	10	15	20	5	8.5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	0.9 U	0.9 U	1.0 U	1.0 U	1.1 U	1.4 U	1.4 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-553-SA8-SB-4.0-5.0	SL-853-SA8-SB-4.0-5.0	SL-553-SA8-SB-9.0-10.0	SL-553-SA8-SB-14.0-15.0	SL-553-SA8-SB-18.0-19.0	SL-554-SA8-SB-4.0-5.0	SL-555-SA8-SB-4.0-5.0
			Sample Type	N	FD	N	N	N	N	N
			Sample Date	08/27/2013	08/27/2013	08/28/2013	08/28/2013	08/28/2013	07/22/2013	07/23/2013
			SDG	PH094	PH094	PH096	PH096	PH096	PH072	PH073
			Start Depth	4	4	9	14	18	4	4
			End Depth	5	5	10	15	19	5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.0 U	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-556-SA8-SB-4.0-5.0	SL-558-SA8-SB-4.0-5.0	SL-558-SA8-SB-9.0-10.0	SL-558-SA8-SB-12.5-13.5	SL-559-SA8-SB-4.0-5.0	SL-560-SA8-SB-4.0-5.0	SL-561-SA8-SB-4.0-5.0	SL-563-SA8-SB-2.0-3.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/22/2013	08/02/2013	08/02/2013	08/02/2013	08/02/2013	07/30/2013	07/09/2013	07/09/2013
			SDG	PH072	PH083	PH083	PH083	PH083	PH080	PH063	PH063
			Start Depth	4	4	9	12.5	4	4	4	2
			End Depth	5	5	10	13.5	5	5	5	3
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.2 U	1.4 U	1.3 U	1.4 U	1.3 U	1.2 U	1.3 U	1.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-565-SA8-SB-4.0-5.0	SL-566-SA8-SB-4.0-5.0	SL-567-SA8-SB-4.0-5.0	SL-567-SA8-SB-9.0-10.0	SL-568-SA8-SB-4.0-5.0	SL-569-SA8-SB-4.0-5.0	SL-569-SA8-SB-7.0-8.0	SL-570-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/08/2013	08/07/2013	08/08/2013	08/08/2013	08/05/2013	08/05/2013	08/05/2013	07/11/2013
			SDG	PH087	PH086	PH087	PH087	PH084	PH084	PH084	PH065
			Start Depth	4	4	4	9	4	4	7	4
			End Depth	5	5	5	10	5	5	8	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.2 U	1.4 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	0.9 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-571-SA8-SB-6.5-7.5	SL-571-SA8-SB-12.5-13.5	SL-572-SA8-SB-4.0-5.0	SL-572-SA8-SB-9.0-10.0	SL-572-SA8-SB-14.0-15.0	SL-572-SA8-SB-18.5-19.5	SL-573-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013	07/10/2013
			SDG	PH064	PH064	PH064	PH064	PH064	PH064	PH064
			Start Depth	6.5	12.5	4	9	14	18.5	4
			End Depth	7.5	13.5	5	10	15	19.5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.0 U	1 U	1.0 U	1.0 U	1 U	1.0 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-573-SA8-SB-9.5-10.5	SL-574-SA8-SB-4.0-5.0	SL-574-SA8-SB-9.0-10.0	SL-574-SA8-SB-14.0-15.0	SL-874-SA8-SB-14.0-15.0	SL-575-SA8-SB-4.0-5.0	SL-575-SA8-SB-9.0-10.0
			Sample Type	N	N	N	N	FD	N	N
			Sample Date	07/10/2013	07/11/2013	07/11/2013	07/11/2013	07/11/2013	08/07/2013	08/07/2013
			SDG	PH064	PH065	PH065	PH065	PH065	PH086	PH086
			Start Depth	9.5	4	9	14	14	4	9
			End Depth	10.5	5	10	15	15	5	10
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1 U	0.8 U	0.9 U	1.0 U	1.0 U	1.0 U	1.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-578-SA8-SB-4.0-5.0	SL-878-SA8-SB-4.0-5.0	SL-578-SA8-SB-9.0-10.0	SL-580-SA8-SB-4.0-5.0	SL-580-SA8-SB-10.5-11.5	SL-581-SA8-SB-4.5-5.5	SL-582-SA8-SB-2.5-3.5	SL-587-SA8-SB-6.5-7.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	07/12/2013	08/06/2013	07/12/2013
			SDG	PH066	PH066	PH066	PH066	PH066	PH066	PH085	PH066
			Start Depth	4	4	9	4	10.5	4.5	2.5	6.5
			End Depth	5	5	10	5	11.5	5.5	3.5	7.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.1 U	1.0 U	1.1 U	1 U	1.0 U	1.1 U	1.0 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-588-SA8-SB-2.0-3.0	SL-589-SA8-SB-2.5-3.5	SL-590-SA8-SB-4.0-5.0	SL-590-SA8-SB-7.0-8.0	SL-592-SA8-SB-3.5-4.5	SL-593-SA8-SB-4.0-5.0	SL-600-SA8-SB-4.0-5.0	SL-601-SA8-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/08/2013	07/30/2013	08/12/2013	08/12/2013	08/12/2013	08/12/2013	08/14/2013	07/18/2013
			SDG	PH062	PH080	PH089	PH089	PH089	PH089	PH091	PH070
			Start Depth	2	2.5	4	7	3.5	4	4	4
			End Depth	3	3.5	5	8	4.5	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.3 U	1.1 U	1.3 U	1.1 U	1.1 U	1.3 U	1.0 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-602-SA8-SB-4.0-5.0	SL-606-SA8-SB-4.0-5.0	SL-607-SA8-SB-5.0-6.0	SL-608-SA8-SB-4.0-5.0	SL-608-SA8-SB-7.0-8.0	SL-609-SA8-SB-4.0-5.0	SL-610-SA8-SB-4.0-5.0	SL-610-SA8-SB-6.8-7.8
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	08/14/2013	07/19/2013	08/09/2013	08/01/2013	08/01/2013	08/13/2013	08/01/2013	08/01/2013
			SDG	PH091	PH071	PH088	PH082	PH082	PH090	PH082	PH082
			Start Depth	4	4	5	4	7	4	4	6.8
			End Depth	5	5	6	5	8	5	5	7.8
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.2 U	1.1 U	1.4 U	1.6 U	1.6 U	1.2 U	1.4 U	1.6 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

			Sample Name	SL-612-SA8-SB-4.0-5.0	SL-613-SA8-SB-4.0-5.0	SL-614-SA8-SB-4.0-5.0
			Sample Type	N	N	N
			Sample Date	07/30/2013	08/14/2013	08/13/2013
			SDG	PH080	PH091	PH090
			Start Depth	4	4	4
			End Depth	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit			
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.2 U	1.5 U	1.1 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

		Sample Name	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-506-SA8-SB-4.0-5.0	SL-507-SA8-SB-3.0-4.0	SL-509-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-572-SA8-SB-18.5-19.5	SL-573-SA8-SB-9.5-10.5
		Sample Type	N	FD	N	N	N	N	N	N
		Sample Date	07/16/2013	07/16/2013	07/18/2013	07/16/2013	07/18/2013	07/17/2013	07/10/2013	07/10/2013
		SDG	PH068	PH068	PH070	PH068	PH070	PH069	PH064	PH064
		Start Depth	2.5	2.5	4	3	4	8	18.5	9.5
		End Depth	3.5	3.5	5	4	5	9	19.5	10.5
Analytic Method	CAS Number	Chemical Name	Unit							
8260B	100-41-4	Ethylbenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	100-42-5	Styrene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	10061-01-5	cis-1,3-Dichloropropene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	10061-02-6	trans-1,3-Dichloropropene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	103-65-1	n-Propylbenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	104-51-8	n-Butylbenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	106-43-4	4-Chlorotoluene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	106-46-7	1,4-Dichlorobenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	106-93-4	1,2-Dibromoethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	107-02-8	Acrolein	µg/kg	100 U	100 U	98 U	100 U	100 U	99 U	100 U	110 U
8260B	107-06-2	1,2-Dichloroethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	107-13-1	Acrylonitrile	µg/kg	20 U	21 U	20 U	20 U	21 U	20 U	21 U	22 U
8260B	108-05-4	Vinyl Acetate	µg/kg	10 U	10 U	10 U	10 U	10 U	10 UJ C	10 U	11 U
8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	µg/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
8260B	108-20-3	Di isopropyl Ether	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	108-67-8	1,3,5-Trimethylbenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	108-86-1	Bromobenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	108-88-3	Toluene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	108-90-7	Chlorobenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	110-75-8	2-Chloroethyl Vinyl Ether	µg/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
8260B	120-82-1	1,2,4-Trichlorobenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	124-48-1	Dibromochloromethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	127-18-4	Tetrachloroethene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	135-98-8	2-Phenylbutane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	142-28-9	1,3-Dichloropropane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	156-59-2	cis-1,2-Dichloroethene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	156-60-5	trans-1,2-Dichloroethene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	1634-04-4	Methyl Tert-Butyl Ether	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	179601-23-1	m,p-Xylene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	541-73-1	1,3-Dichlorobenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	544-10-5	1-Chlorohexane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	56-23-5	Carbon Tetrachloride	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	563-58-6	1,1-Dichloropropene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	591-78-6	2-Hexanone	µg/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
8260B	594-20-7	2,2-Dichloropropane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	630-20-6	1,1,1,2-Tetrachloroethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	637-92-3	tert-Butyl ethyl ether	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	67-64-1	Acetone	µg/kg	20 U	21 U	20 U	20 U	21 U	20 U	21 U F	22 U
8260B	67-66-3	Chloroform	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	71-43-2	Benzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	71-55-6	1,1,1-Trichloroethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	74-83-9	Bromomethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	74-87-3	Chloromethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	74-88-4	Methyl Iodide	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	74-95-3	Dibromomethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	74-97-5	Bromochloromethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

U-Compound not detected above reporting limit
J-Result is an estimated value
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				Sample Name	SL-504-SA8-SB-2.5-3.5	SL-804-SA8-SB-2.5-3.5	SL-506-SA8-SB-4.0-5.0	SL-507-SA8-SB-3.0-4.0	SL-509-SA8-SB-4.0-5.0	SL-513-SA8-SB-8.0-9.0	SL-572-SA8-SB-18.5-19.5	SL-573-SA8-SB-9.5-10.5
				Sample Type	N	FD	N	N	N	N	N	N
				Sample Date	07/16/2013	07/16/2013	07/18/2013	07/16/2013	07/18/2013	07/17/2013	07/10/2013	07/10/2013
				SDG	PH068	PH068	PH070	PH068	PH070	PH069	PH064	PH064
				Start Depth	2.5	2.5	4	3	4	8	18.5	9.5
				End Depth	3.5	3.5	5	4	5	9	19.5	10.5
Analytic Method	CAS Number	Chemical Name	Unit									
8260B	75-00-3	Chloroethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	75-01-4	Vinyl Chloride	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	75-09-2	Methylene Chloride	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	75-15-0	Carbon Disulfide	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	75-25-2	Bromoform	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	75-27-4	Bromodichloromethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	75-34-3	1,1-Dichloroethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	75-35-4	1,1-Dichloroethene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	75-65-0	Tertiary butyl alcohol	µg/kg	51 U	52 U	49 U	51 U	52 U	50 U	52 U	54 U	
8260B	75-69-4	Trichlorofluoromethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	75-71-8	Dichlorodifluoromethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	75-88-7	2-Chloro-1,1,1-trifluoroethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	78-87-5	1,2-Dichloropropane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	78-93-3	2-Butanone (MEK)	µg/kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	
8260B	79-00-5	1,1,2-Trichloroethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	79-01-6	Trichloroethene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	79-34-5	1,1,2,2-Tetrachloroethane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	79-38-9	Chlorotrifluoroethylene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	87-61-6	1,2,3-Trichlorobenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	87-68-3	Hexachloro-1,3-butadiene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	95-47-6	o-Xylene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	95-49-8	2-Chlorotoluene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	95-50-1	1,2-Dichlorobenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	95-63-6	1,2,4-Trimethylbenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	96-12-8	1,2-Dibromo-3-chloropropane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	96-18-4	1,2,3-Trichloropropane	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	98-06-6	tert-Butylbenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	98-82-8	Isopropylbenzene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	994-05-8	Tertiary amyl methyl ether	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
8260B	99-87-6	Cymene	µg/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

U-Compound not detected above reporting limit
J-Result is an estimated value
R-Result is rejected if R qualifier is in first position. If R qualifier is after another qualifier, result is not rejected but qualified as estimated during validation

				Sample Name	SL-574-SA8-SB-14.0-15.0	SL-874-SA8-SB-14.0-15.0	SL-582-SA8-SB-2.5-3.5
				Sample Type	N	FD	N
				Sample Date	07/11/2013	07/11/2013	08/06/2013
				SDG	PH065	PH065	PH085
				Start Depth	14	14	2.5
				End Depth	15	15	3.5
Analytic Method	CAS Number	Chemical Name	Unit				
8260B	100-41-4	Ethylbenzene	µg/kg	5 U	6 U	6 U
8260B	100-42-5	Styrene	µg/kg	5 U	6 U	6 U
8260B	10061-01-5	cis-1,3-Dichloropropene	µg/kg	5 U	6 U	6 U
8260B	10061-02-6	trans-1,3-Dichloropropene	µg/kg	5 U	6 U	6 U
8260B	103-65-1	n-Propylbenzene	µg/kg	5 U	6 U	6 U
8260B	104-51-8	n-Butylbenzene	µg/kg	5 U	6 U	6 U
8260B	106-43-4	4-Chlorotoluene	µg/kg	5 U	6 U	6 U
8260B	106-46-7	1,4-Dichlorobenzene	µg/kg	5 U	6 U	6 U
8260B	106-93-4	1,2-Dibromoethane	µg/kg	5 U	6 U	6 U
8260B	107-02-8	Acrolein	µg/kg	100 U	110 U	110 U
8260B	107-06-2	1,2-Dichloroethane	µg/kg	5 U	6 U	6 U
8260B	107-13-1	Acrylonitrile	µg/kg	20 U	23 U	23 U
8260B	108-05-4	Vinyl Acetate	µg/kg	10 U	11 U	11 U
8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	µg/kg	10 U	11 U	11 U
8260B	108-20-3	Di isopropyl Ether	µg/kg	5 U	6 U	6 U
8260B	108-67-8	1,3,5-Trimethylbenzene	µg/kg	5 U	6 U	6 U
8260B	108-86-1	Bromobenzene	µg/kg	5 U	6 U	6 U
8260B	108-88-3	Toluene	µg/kg	5 U	6 U	6 U
8260B	108-90-7	Chlorobenzene	µg/kg	5 U	6 U	6 U
8260B	110-75-8	2-Chloroethyl Vinyl Ether	µg/kg	10 U	11 U	11 U
8260B	120-82-1	1,2,4-Trichlorobenzene	µg/kg	5 U	6 U	6 U
8260B	124-48-1	Dibromochloromethane	µg/kg	5 U	6 U	6 U
8260B	127-18-4	Tetrachloroethene	µg/kg	5 U	6 U	6 U
8260B	135-98-8	2-Phenylbutane	µg/kg	5 U	6 U	6 U
8260B	142-28-9	1,3-Dichloropropane	µg/kg	5 U	6 U	6 U
8260B	156-59-2	cis-1,2-Dichloroethene	µg/kg	5 U	6 U	6 U
8260B	156-60-5	trans-1,2-Dichloroethene	µg/kg	5 U	6 U	6 U
8260B	1634-04-4	Methyl Tert-Butyl Ether	µg/kg	5 U	6 U	6 U
8260B	179601-23-1	m,p-Xylene	µg/kg	5 U	6 U	6 U
8260B	541-73-1	1,3-Dichlorobenzene	µg/kg	5 U	6 U	6 U
8260B	544-10-5	1-Chlorohexane	µg/kg	5 U	6 U	6 U
8260B	56-23-5	Carbon Tetrachloride	µg/kg	5 U	6 U	6 U
8260B	563-58-6	1,1-Dichloropropene	µg/kg	5 U	6 U	6 U
8260B	591-78-6	2-Hexanone	µg/kg	10 U	11 U	11 U
8260B	594-20-7	2,2-Dichloropropane	µg/kg	5 U	6 U	6 U
8260B	630-20-6	1,1,1,2-Tetrachloroethane	µg/kg	5 U	6 U	6 U
8260B	637-92-3	tert-Butyl ethyl ether	µg/kg	5 U	6 U	6 U
8260B	67-64-1	Acetone	µg/kg	20 U	23 U	23 U
8260B	67-66-3	Chloroform	µg/kg	5 U	6 U	6 U
8260B	71-43-2	Benzene	µg/kg	5 U	6 U	6 U
8260B	71-55-6	1,1,1-Trichloroethane	µg/kg	5 U	6 U	6 U
8260B	74-83-9	Bromomethane	µg/kg	5 U	6 U	6 U
8260B	74-87-3	Chloromethane	µg/kg	5 U	6 U	6 U
8260B	74-88-4	Methyl Iodide	µg/kg	5 U	6 U	6 U
8260B	74-95-3	Dibromomethane	µg/kg	5 U	6 U	6 U
8260B	74-97-5	Bromochloromethane	µg/kg	5 U	6 U	6 U

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				Sample Name	SL-574-SA8-SB-14.0-15.0	SL-874-SA8-SB-14.0-15.0	SL-582-SA8-SB-2.5-3.5
				Sample Type	N	FD	N
				Sample Date	07/11/2013	07/11/2013	08/06/2013
				SDG	PH065	PH065	PH085
				Start Depth	14	14	2.5
				End Depth	15	15	3.5
Analytic Method	CAS Number	Chemical Name	Unit				
8260B	75-00-3	Chloroethane	µg/kg	5 U	6 U	6 U
8260B	75-01-4	Vinyl Chloride	µg/kg	5 U	6 U	6 U
8260B	75-09-2	Methylene Chloride	µg/kg	5 U	6 U	6 U
8260B	75-15-0	Carbon Disulfide	µg/kg	5 U	6 U	6 U
8260B	75-25-2	Bromoform	µg/kg	5 U	6 U	6 U
8260B	75-27-4	Bromodichloromethane	µg/kg	5 U	6 U	6 U
8260B	75-34-3	1,1-Dichloroethane	µg/kg	5 U	6 U	6 U
8260B	75-35-4	1,1-Dichloroethene	µg/kg	5 U	6 U	6 U
8260B	75-65-0	Tertiary butyl alcohol	µg/kg	51 U	57 U	57 U
8260B	75-69-4	Trichlorofluoromethane	µg/kg	5 U	6 U	6 U
8260B	75-71-8	Dichlorodifluoromethane	µg/kg	5 U	6 U	6 U
8260B	75-88-7	2-Chloro-1,1,1-trifluoroethane	µg/kg	5 U	6 U	6 U
8260B	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	5 U	6 U	6 U
8260B	78-87-5	1,2-Dichloropropane	µg/kg	5 U	6 U	6 U
8260B	78-93-3	2-Butanone (MEK)	µg/kg	10 U	11 U	11 U
8260B	79-00-5	1,1,2-Trichloroethane	µg/kg	5 U	6 U	6 U
8260B	79-01-6	Trichloroethene	µg/kg	5 U	6 U	6 U
8260B	79-34-5	1,1,2,2-Tetrachloroethane	µg/kg	5 U	6 U	6 U
8260B	79-38-9	Chlorotrifluoroethylene	µg/kg	5 U	6 U	6 U
8260B	87-61-6	1,2,3-Trichlorobenzene	µg/kg	5 U	6 U	6 U
8260B	87-68-3	Hexachloro-1,3-butadiene	µg/kg	5 U	6 U	6 U
8260B	95-47-6	o-Xylene	µg/kg	5 U	6 U	6 U
8260B	95-49-8	2-Chlorotoluene	µg/kg	5 U	6 U	6 U
8260B	95-50-1	1,2-Dichlorobenzene	µg/kg	5 U	6 U	6 U
8260B	95-63-6	1,2,4-Trimethylbenzene	µg/kg	5 U	6 U	6 U
8260B	96-12-8	1,2-Dibromo-3-chloropropane	µg/kg	5 U	6 U	6 U
8260B	96-18-4	1,2,3-Trichloropropane	µg/kg	5 U	6 U	6 U
8260B	98-06-6	tert-Butylbenzene	µg/kg	5 U	6 U	6 U
8260B	98-82-8	Isopropylbenzene	µg/kg	5 U	6 U	6 U
8260B	994-05-8	Tertiary amyl methyl ether	µg/kg	5 U	6 U	6 U
8260B	99-87-6	Cymene	µg/kg	5 U	6 U	6 U

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Appendix B
Laboratory Reports
(On CD)

SAMPLE DELIVERY GROUP

PH093

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 11, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/27/2013
Group Number: 1414412
SDG: PH093
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-548-SA5D-SB-0.0-0.5 Soil	7176110
SL-548-SA5D-SB-4.0-5.0 Soil	7176111
TB-082613 Water	7176112

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

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: SL-548-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7176110
LL Group # 1414412
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/26/2013 13:00 by VC

Submitted: 08/27/2013 09:40
Reported: 09/11/2013 19:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54800 SDG#: PH093-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.6	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.6	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	3.5		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.1	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.1	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	3.5		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	26		19	6.2	1
12969	Fluoranthene	206-44-0	3.4		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.0	J	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.4	J	1.7	0.69	1
12969	Naphthalene	91-20-3	2.0		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	2.8		1.7	0.69	1
12969	Pyrene	129-00-0	3.3		1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	10	U	10	4.1	2
12952	EFH (C15-C20)	n.a.	10	U	10	4.1	2
12952	EFH (C21-C30)	n.a.	42		10	4.1	2
12952	EFH (C30-C40)	n.a.	110		21	8.2	2
12952	EFH (C8-C11)	n.a.	10	U	10	4.1	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-548-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7176110
LL Group # 1414412
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/26/2013 13:00 by VC

Submitted: 08/27/2013 09:40
Reported: 09/11/2013 19:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54800 SDG#: PH093-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,600		40.7	7.34	1
06944	Antimony	7440-36-0	4.07	U	4.07	0.753	1
06935	Arsenic	7440-38-2	7.99		4.07	0.712	1
06946	Barium	7440-39-3	128		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.877	J	1.02	0.0682	1
07914	Boron	7440-42-8	7.14	J	10.2	0.855	1
06949	Cadmium	7440-43-9	0.325	J	1.02	0.0773	1
01650	Calcium	7440-70-2	5,580		20.4	3.40	1
06951	Chromium	7440-47-3	33.6		3.05	0.163	1
06952	Cobalt	7440-48-4	9.27		1.02	0.101	1
06953	Copper	7440-50-8	18.7		2.04	0.295	1
01654	Iron	7439-89-6	29,900		81.4	7.37	2
06955	Lead	7439-92-1	12.1		3.05	0.509	1
01656	Lithium	7439-93-2	25.1		4.1	0.35	1
01657	Magnesium	7439-95-4	6,490		10.2	1.70	1
06958	Manganese	7439-96-5	496		1.02	0.0845	1
06960	Molybdenum	7439-98-7	0.425	J	2.04	0.173	1
06961	Nickel	7440-02-0	18.6		2.04	0.132	1
10145	Phosphorus	7723-14-0	559		10.2	2.94	1
01662	Potassium	7440-09-7	5,720		102	8.49	1
01667	Sodium	7440-23-5	87.1	J	102	17.0	1
06969	Tin	7440-31-5	3.31	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,330		1.02	0.173	1
06971	Vanadium	7440-62-2	65.8		1.02	0.132	1
06972	Zinc	7440-66-6	73.9		4.07	0.204	1
10146	Zirconium	7440-67-7	5.22		5.09	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.214	J	0.407	0.102	2
06142	Silver	7440-22-4	0.0521	J	0.204	0.0265	2
06144	Strontium	7440-24-6	30.4		0.407	0.0692	2
06145	Thallium	7440-28-0	0.367		0.204	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0191		0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.43		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-548-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7176110
LL Group # 1414412
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/26/2013 13:00 by VC

Submitted: 08/27/2013 09:40
Reported: 09/11/2013 19:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54800 SDG#: PH093-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0631	JQ	1.02	0.0464	1
11031	12378-PeCDD	40321-76-4	0.236	JB	5.10	0.0442	1
11031	123478-HxCDD	39227-28-6	0.188	JB	5.10	0.0344	1
11031	123678-HxCDD	57653-85-7	0.669	JB	5.10	0.0358	1
11031	123789-HxCDD	19408-74-3	0.667	JB	5.10	0.0346	1
11031	1234678-HpCDD	35822-46-9	9.17	B	5.10	0.0384	1
11031	OCDD	3268-87-9	106	B	10.2	0.0334	1
11031	2378-TCDF	51207-31-9	0.181	J	1.02	0.0582	1
11031	12378-PeCDF	57117-41-6	0.468	JB	5.10	0.0274	1
11031	23478-PeCDF	57117-31-4	0.356	JB	5.10	0.0271	1
11031	123478-HxCDF	70648-26-9	0.193	JB	5.10	0.0225	1
11031	123678-HxCDF	57117-44-9	0.191	JB	5.10	0.0211	1
11031	123789-HxCDF	72918-21-9	0.534	JB	5.10	0.0221	1
11031	234678-HxCDF	60851-34-5	0.201	JB	5.10	0.0213	1
11031	1234678-HpCDF	67562-39-4	1.48	JB	5.10	0.0149	1
11031	1234789-HpCDF	55673-89-7	0.140	JBQ	5.10	0.0201	1
11031	OCDF	39001-02-0	4.10	JB	10.2	0.0285	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.779				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	89	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	94	24 - 169
13C12-12378-PeCDF	101	24 - 185
13C12-23478-PeCDF	95	21 - 178
13C12-123478-HxCDF	93	26 - 152
13C12-123678-HxCDF	98	26 - 123
13C12-234678-HxCDF	93	28 - 136
13C12-123789-HxCDF	94	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	85	26 - 138
13C12-OCDF	81	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-548-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7176110
LL Group # 1414412
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/26/2013 13:00 by VC

Submitted: 08/27/2013 09:40
Reported: 09/11/2013 19:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54800 SDG#: PH093-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-548-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7176110
LL Group # 1414412
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/26/2013 13:00 by VC

Submitted: 08/27/2013 09:40
Reported: 09/11/2013 19:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54800 SDG#: PH093-01

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 12:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 15:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/05/2013 00:46	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/06/2013 20:16	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132390637001	09/02/2013 23:06	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132390637001	09/02/2013 23:06	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132390637001	09/02/2013 23:06	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132390637001	09/02/2013 10:24	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132390637001	09/02/2013 23:06	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132390637001	09/02/2013 09:56	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132390637001B	08/28/2013 11:14	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132390637001A	08/28/2013 11:14	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132390637001A	08/28/2013 11:14	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132390637001A	08/28/2013 11:14	Choon Y Tian	2

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

Sample Description: SL-548-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7176110
LL Group # 1414412
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/26/2013 13:00 by VC

Submitted: 08/27/2013 09:40
Reported: 09/11/2013 19:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54800 SDG#: PH093-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132390638002	08/28/2013 12:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132390637001	08/27/2013 21:58	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132390638002	08/28/2013 02:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13239039402A	08/27/2013 23:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401A	08/31/2013 00:12	Scott W Freisher	1

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

Sample Description: SL-548-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7176111
LL Group # 1414412
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/26/2013 14:35 by VC

Submitted: 08/27/2013 09:40
Reported: 09/11/2013 19:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54840 SDG#: PH093-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.1	J	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	0.48	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	26		20	6.7	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	0.87	J	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.1	J	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.61
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

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

Sample Description: SL-548-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7176111
LL Group # 1414412
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/26/2013 14:35 by VC

Submitted: 08/27/2013 09:40
Reported: 09/11/2013 19:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54840 SDG#: PH093-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	9.0		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	8.3	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,400		43.3	7.81	1
06944	Antimony	7440-36-0	4.33	U	4.33	0.802	1
06935	Arsenic	7440-38-2	6.08		4.33	0.758	1
06946	Barium	7440-39-3	120		1.08	0.0358	1
06947	Beryllium	7440-41-7	0.865	J	1.08	0.0726	1
07914	Boron	7440-42-8	6.76	J	10.8	0.910	1
06949	Cadmium	7440-43-9	0.168	J	1.08	0.0824	1
01650	Calcium	7440-70-2	4,870		21.7	3.62	1
06951	Chromium	7440-47-3	34.9		3.25	0.173	1
06952	Cobalt	7440-48-4	8.57		1.08	0.107	1
06953	Copper	7440-50-8	16.1		2.17	0.314	1
01654	Iron	7439-89-6	32,300		86.7	7.85	2
06955	Lead	7439-92-1	8.22		3.25	0.542	1
01656	Lithium	7439-93-2	27.6		4.3	0.37	1
01657	Magnesium	7439-95-4	7,110		10.8	1.81	1
06958	Manganese	7439-96-5	329		1.08	0.0899	1
06960	Molybdenum	7439-98-7	0.185	J	2.17	0.184	1
06961	Nickel	7440-02-0	17.7		2.17	0.141	1
10145	Phosphorus	7723-14-0	319		10.8	3.13	1
01662	Potassium	7440-09-7	4,400		108	9.04	1
01667	Sodium	7440-23-5	91.3	J	108	18.1	1
06969	Tin	7440-31-5	3.13	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,090		1.08	0.184	1
06971	Vanadium	7440-62-2	67.6		1.08	0.141	1
06972	Zinc	7440-66-6	72.2		4.33	0.217	1
10146	Zirconium	7440-67-7	6.49		5.42	0.910	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.265	J	0.433	0.108	2
06142	Silver	7440-22-4	0.0483	J	0.217	0.0282	2
06144	Strontium	7440-24-6	43.6		0.433	0.0737	2
06145	Thallium	7440-28-0	0.465		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164	J	0.0184	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.13		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.4		0.10	0.10	1

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

Sample Description: SL-548-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7176111
LL Group # 1414412
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/26/2013 14:35 by VC

Submitted: 08/27/2013 09:40
Reported: 09/11/2013 19:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54840 SDG#: PH093-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 06:16	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13242A16A	08/30/2013 20:09	Laura M Krieger	24.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201323932185	08/27/2013 15:02	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201323932185	08/27/2013 15:02	Lisa J Cooke	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 16:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/04/2013 23:21	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132390637001	09/02/2013 23:30	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132390637001	09/02/2013 23:30	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132390637001	09/02/2013 23:30	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132390637001	09/02/2013 10:55	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1

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

Sample Description: SL-548-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7176111
LL Group # 1414412
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/26/2013 14:35 by VC

Submitted: 08/27/2013 09:40
Reported: 09/11/2013 19:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54840 SDG#: PH093-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132390637001	09/02/2013 23:30	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132390637001	09/02/2013 10:20	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132390637001B	08/28/2013 11:33	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132390637001A	08/28/2013 11:33	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132390637001A	08/28/2013 11:33	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132390637001A	08/28/2013 11:33	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132390638002	08/28/2013 12:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132390637001	08/27/2013 21:58	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132390638002	08/28/2013 02:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13239039402A	08/27/2013 23:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401A	08/31/2013 00:12	Scott W Freisher	1

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

Sample Description: TB-082613 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7176112
LL Group # 1414412
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/26/2013 08:00

Submitted: 08/27/2013 09:40
Reported: 09/11/2013 19:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

548TB SDG#: PH093-03TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13238A20A	08/27/2013 19:33	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13238A20A	08/27/2013 19:33	Catherine J Schwarz	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414412
Reported: 09/11/13 at 07:31 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13243SLC026	Sample number(s): 7176110-7176111									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	93		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	92		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	96		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	123		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	97		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	119		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	104		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	99		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	98		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	93		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	108		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	96		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	96		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	95		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	92		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	82		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	116		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	92		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	98		79-112		
Batch number: 13238A20A	Sample number(s): 7176112									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	100	97	75-135	3	30
Batch number: 13242A16A	Sample number(s): 7176111									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	76		67-119		
Batch number: 132430008A	Sample number(s): 7176110-7176111									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	83	78	36-106	7	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	103		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414412
Reported: 09/11/13 at 07:31 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	115		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132460005A	Sample number(s): 7176110-7176111									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	105		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	108		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	111		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	104		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	89		49-107		
Batch number: 132390637001	Sample number(s): 7176110-7176111									
Aluminum	40.0	U	40.0	7.21	mg/kg	95		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	97		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	96		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	101		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	92		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	96		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	97		80-120		
Calcium	6.47	J	20.0	3.34	mg/kg	96		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	100		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	98		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	100		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	95		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	100		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	97		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	95		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	95		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	95		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	101		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	100		80-120		
Potassium	100 U		100.	8.34	mg/kg	96		80-120		
Sodium	100 U		100.	16.7	mg/kg	95		80-120		
Tin	1.64	J	10.0	0.220	mg/kg	94		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	93		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	97		80-120		
Zinc	0.280	J	4.00	0.200	mg/kg	98		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	96		80-120		
Batch number: 132390637001A	Sample number(s): 7176110-7176111									
Silver	0.200	U	0.200	0.0260	mg/kg	109		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	103		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	109		80-120		
Batch number: 132390637001B	Sample number(s): 7176110-7176111									
Selenium	0.400	U	0.400	0.100	mg/kg	110		80-120		
Batch number: 132390638002	Sample number(s): 7176110-7176111									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	113		85-120		
Batch number: 13239039402A	Sample number(s): 7176110-7176111									
15a pH by 9045D						100		95-105		
Batch number: 13242162401A	Sample number(s): 7176110-7176111									

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414412
Reported: 09/11/13 at 07:31 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13248003	Sample number(s): 7176110								
2378-TCDD	1.00 U	1.00	0.0486	ng/kg	99		67-158		
12378-PeCDD	0.0657 J	5.00	0.0361	ng/kg	99		70-142		
123478-HxCDD	0.0423 J	5.00	0.0239	ng/kg	100		70-164		
123678-HxCDD	0.0502 J	5.00	0.0246	ng/kg	98		76-134		
123789-HxCDD	0.0844 J	5.00	0.0236	ng/kg	99		64-162		
1234678-HpCDD	0.122 J	5.00	0.0287	ng/kg	98		70-140		
OCDD	0.464 J	10.0	0.0292	ng/kg	94		78-144		
2378-TCDF	1.00 U	1.00	0.0435	ng/kg	101		75-158		
12378-PeCDF	0.0612 J	5.00	0.0217	ng/kg	98		80-134		
23478-PeCDF	0.0677 J	5.00	0.0205	ng/kg	99		68-160		
123478-HxCDF	0.0557 J	5.00	0.0146	ng/kg	99		72-134		
123678-HxCDF	0.0251 J	5.00	0.0128	ng/kg	98		84-130		
123789-HxCDF	0.0604 J	5.00	0.0161	ng/kg	97		78-130		
234678-HxCDF	0.0455 J	5.00	0.0138	ng/kg	98		70-156		
1234678-HpCDF	0.0567 J	5.00	0.0111	ng/kg	94		82-122		
1234789-HpCDF	0.0816 J	5.00	0.0182	ng/kg	96		78-138		
OCDF	0.216 J	10.0	0.0364	ng/kg	96		63-170		
TEQ WHO 2005 - EDLx0.0	0.0715			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13243SLC026	Sample number(s): 7176110-7176111 UNSPK: P177750								
Acenaphthene	92	81	48-127	13	30				
Acenaphthylene	92	82	49-121	12	30				
Anthracene	96	81	52-126	17	30				
Benzo(a)anthracene	102	87	44-143	16	30				
Benzo(a)pyrene	104	87	44-140	18	30				
Benzo(b)fluoranthene	125	107	26-142	16	30				
Benzo(e)pyrene	96	82	70-130	16	30				
Benzo(g,h,i)perylene	70	58	33-141	19	30				
Benzo(k)fluoranthene	101	85	54-142	18	30				
Butylbenzylphthalate	124	106	49-151	16	30				
Di-n-butylphthalate	104	89	52-147	16	30				
Chrysene	100	86	29-148	15	30				
Dibenz(a,h)anthracene	82	69	20-137	17	30				
Diethylphthalate	93	84	43-145	11	30				
Dimethylphthalate	93	81	58-129	14	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414412
Reported: 09/11/13 at 07:31 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Bis(2-Ethylhexyl)phthalate	120	97	39-167	22	30				
Fluoranthene	94	81	40-148	15	30				
Fluorene	95	84	51-137	13	30				
Indeno(1,2,3-cd)pyrene	80	67	17-136	18	30				
1-Methylnaphthalene	96	84	50-131	13	30				
2-Methylnaphthalene	97	86	35-152	12	30				
Naphthalene	93	83	31-148	12	30				
N-Nitrosodimethylamine	76	69	48-113	11	30				
Di-n-octylphthalate	130	112	52-162	15	30				
Phenanthrene	95	81	29-142	16	30				
Pyrene	96	83	26-143	15	30				
Batch number: 13242A16A	Sample number(s): 7176111 UNSPK: P177750								
11a TPH by EPA 8015B GRO	76	76	69-123	7	30				
Batch number: 132430008A	Sample number(s): 7176110-7176111 UNSPK: P177750								
PCB-1016	98	97	16-146	0	50				
PCB-1260	110	111	40-134	2	50				
Batch number: 132460005A	Sample number(s): 7176110-7176111 UNSPK: P177750								
EFH (C12-C14)	87	84	49-123	3	20				
EFH (C15-C20)	97	96	49-123	1	20				
EFH (C21-C30)	108	113	49-123	4	20				
EFH (C30-C40)	105	112	49-123	7	20				
EFH (C8-C11)	82	80	49-123	3	20				
Batch number: 132390637001	Sample number(s): 7176110-7176111 UNSPK: 7176110 BKG: 7176110								
Aluminum	2878 (2)	1876 (2)	75-125	7	20	24,000	21,200	12	20
Antimony	48*	50*	75-125	3	20	3.96 U	3.96 U	0 (1)	20
Arsenic	88	86	75-125	2	20	7.77	6.28	21* (1)	20
Barium	93	94	75-125	1	20	124	108	14	20
Beryllium	97	92	75-125	4	20	0.853 J	0.736 J	15 (1)	20
Boron	91	94	75-125	3	20	6.94 J	6.37 J	9 (1)	20
Cadmium	88	89	75-125	2	20	0.316 J	0.304 J	4 (1)	20
Calcium	119 (2)	59 (2)	75-125	4	20	5,420	5,000	8	20
Chromium	97	94	75-125	1	20	32.7	29.6	10	20
Cobalt	85	84	75-125	1	20	9.01	6.92	26*	20
Copper	98	91	75-125	4	20	18.2	15.5	16	20
Iron	-850 (2)	-1726 (2)	75-125	3	20	29,100	26,300	10	20
Lead	83	86	75-125	2	20	11.8	10.2	15 (1)	20
Lithium	98	94	75-125	3	20	24.4	21.3	14	20
Magnesium	148 (2)	-21 (2)	75-125	5	20	6,320	5,710	10	20
Manganese	-94 (2)	-132 (2)	75-125	4	20	483	352	31*	20
Molybdenum	87	86	75-125	0	20	0.414 J	0.320 J	26* (1)	20
Nickel	88	85	75-125	2	20	18.1	15.4	16	20
Phosphorus	30 (2)	16 (2)	75-125	2	20	544	478	13	20
Potassium	123 (2)	99 (2)	75-125	4	20	5,570	4,870	13	20
Sodium	94	92	75-125	2	20	84.7 J	77.7 J	9 (1)	20
Tin	82	82	75-125	0	20	3.22 J	2.86 J	12 (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414412
Reported: 09/11/13 at 07:31 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Titanium	360 (2)	297 (2)	75-125	4	20	1,300	1,120	14	20
Vanadium	93	91	75-125	1	20	64.0	55.2	15	20
Zinc	91	133*	75-125	16	20	71.9	64.7	11	20
Zirconium	88	85	75-125	3	20	5.08	5.83	14 (1)	20
Batch number: 132390637001A	Sample number(s): 7176110-7176111 UNSPK: 7176110 BKG: 7176110								
Silver	108	124	75-125	14	20	0.0507 J	0.0500 J	1 (1)	20
Strontium	107	201*	75-125	18	20	29.5	33.1	11	20
Thallium	102	133*	75-125	15	20	0.357	0.383	7 (1)	20
Batch number: 132390637001B	Sample number(s): 7176110-7176111 UNSPK: 7176110 BKG: 7176110								
Selenium	101	110	75-125	9	20	0.208 J	0.232 J	11 (1)	20
Batch number: 132390638002	Sample number(s): 7176110-7176111 UNSPK: 7176111 BKG: 7176111								
3a Mercury 7471A	106	107	65-135	2	20	0.0147 J	0.0104 J	35* (1)	20
Batch number: 13239039402A	Sample number(s): 7176110-7176111 BKG: 7176111								
15a pH by 9045D						7.13	7.15	0	3
Batch number: 13242162401A	Sample number(s): 7176110-7176111 BKG: P177750								
14a Moisture Content by 160.3						11.3	11.1	2	20
Batch number: 13248003	Sample number(s): 7176110 UNSPK: P177750								
2378-TCDD	101	100	40-135	2	20				
12378-PeCDD	101	101	40-135	1	20				
123478-HxCDD	102	102	40-135	0	20				
123678-HxCDD	102	101	40-135	1	20				
123789-HxCDD	102	102	40-135	0	20				
1234678-HpCDD	100	99	40-135	1	20				
OCDD	94	94	40-135	0	20				
2378-TCDF	101	101	40-135	0	20				
12378-PeCDF	102	101	40-135	1	20				
23478-PeCDF	103	102	40-135	1	20				
123478-HxCDF	98	102	40-135	3	20				
123678-HxCDF	99	101	40-135	2	20				
123789-HxCDF	98	99	40-135	1	20				
234678-HxCDF	99	100	40-135	0	20				
1234678-HpCDF	96	96	40-135	1	20				
1234789-HpCDF	98	99	40-135	0	20				
OCDF	94	95	40-135	0	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13243SLC026

Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414412
Reported: 09/11/13 at 07:31 PM

Surrogate Quality Control

			d10
7176110	87	96	100
7176111	86	98	103
Blank	83	97	99
LCS	83	94	96
MS	86	100	99
MSD	74	84	89
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13238A20A

	Trifluorotoluene-F
7176112	85
Blank	85
LCS	120
LCSD	119
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13242A16A

	Trifluorotoluene-F
7176111	75
Blank	76
LCS	76
MS	72
MSD	70
Limits:	50-142

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132430008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7176110	114	103
7176111	116	114
Blank	116	112
LCS	112	116
LCSD	123*	120
MS	108	109
MSD	101	108
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132460005A

	Chlorobenzene	Orthoterphenyl
7176110	86	90
7176111	90	95
Blank	94	99
LCS	98	103

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414412
Reported: 09/11/13 at 07:31 PM

Surrogate Quality Control

MS	90	86
MSD	84	79
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13248003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7176110	89	95	93	98	93	94
Blank	67	74	75	83	76	71
MS	73	83	83	95	87	80
MSD	70	77	83	92	85	78
OPR	76	85	84	96	87	79
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7176110	104	85	81	88	87	88
Blank	99	68	63	73	76	78
MS	114	71	69	77	84	84
MSD	106	75	71	71	79	80
OPR	120	77	70	86	89	89
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7176110	87	88	86	94	101
Blank	75	78	77	67	78
MS	82	81	86	75	90
MSD	78	81	84	74	84
OPR	90	92	93	76	93
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 13013 Group# 1414412 Sample # 7176110-12

COC # 213686

Please print. Instructions on reverse side correspond with circled numbers.

For Lab Use Only
FSC: _____
SCR#: _____

(1) Client: DOE Acct. #: _____
Project Name/#: SSFL PWSID #: _____
Project Manager: John Wondolleck P.O.#: _____
Sampler: Vidal Cortes Quote #: _____
Name of state where samples were collected: CA

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

airbill #: 796548579170

(6) Temperature of samples upon receipt (if requested)

(2) Sample Identification	Date Collected	Time Collected	(3) Grab	Composite	(4) Matrix: Soil	Water	Other	Total # of Containers	(5) Analyses Requested: Metals+Hg EPA 6010/6020/7471	PAH EPA 8270C SIM	Dioxins/Furans EPA 1613	PCBs/PCTs EPA 8082	pH EPA 9045C	TPH-GRO EPA 8015B	TPH-DRO EPA 8015B	TPH-GRO EPA 8015B	Remarks
SL-548-SA5D-SB-0.0-0.5	08/26/2013	1300	X		X			3	X	X	X	X	X		X		
SL-548-SA5D-SB-4.0-5.0		1435	X		X			5	X	X		X	X	X	X		
TB-082613		0800	X			X		3								X	

(7) **Turnaround Time Requested** (TAT) (please circle): (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: 10 day
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: _____

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes (No)
Site-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No _____

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
Shey Mupel	08/26/13	1600			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
				8-27-13	0940

Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2300 Fax: (717) 656-6766
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

AMO 8/27/13

1 of 1

2102.03

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1414412

Client/Project: DOE

Date of Receipt: 8-27-13

Time of Receipt: ~~1000~~ 0940

Source Code: ~~Client~~ AHOS/27/13 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	2.5	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 52oc **Date/Time:** 8-27-13 1030

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH095

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 16, 2013

Project: SSFL Phase 3 Sampling

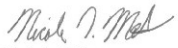
Submittal Date: 08/29/2013
Group Number: 1415078
SDG: PH095
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB1-082813 Water	7179316
EB2-082813 Water	7179317
TB2-082813 Water	7179318
SL-536-SA5D-SB-0.0-0.5 Soil	7179319
SL-536-SA5D-SB-3.5-4.5 Soil	7179320
SL-537-SA5D-SB-0.0-0.5 Soil	7179321
SL-537-SA5D-SB-2.5-3.5 Soil	7179322
SL-538-SA5D-SB-0.0-0.5 Soil	7179323
SL-538-SA5D-SB-3.0-4.0 Soil	7179324

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

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,



Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: EB1-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179316
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB128 SDG#: PH095-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.19	J	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.37	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.19	J	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.051	U	0.051	0.010	1
12971	Naphthalene	91-20-3	0.051	U	0.051	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.031	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	
10407	2,4-D	94-75-7	0.49	U	0.49	0.16	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.25	1
10407	2,4-DB	94-82-6	0.98	U	0.98	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.079	1
10407	Dinoseb	88-85-7	0.49	U	0.49	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.49	U	0.49	0.16	1
10407	MCPA	94-74-6	200	U	200	49	1
10407	MCPP	93-65-2	200	U	200	49	1
10407	2,4,5-T	93-76-5	0.049	U	0.049	0.015	1
10407	2,4,5-TP	93-72-1	0.049	U	0.049	0.0098	1
Pesticides/PCBs	**SW-846 8081B**		ug/l		ug/l	ug/l	
10589	Aldrin	309-00-2	0.0085	U	0.0085	0.0017	1

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

Sample Description: EB1-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179316
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB128 SDG#: PH095-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Alpha BHC	319-84-6	0.0085	U	0.0085	0.0026	1
10589	Beta BHC	319-85-7	0.0085	U	0.0085	0.0029	1
10589	Gamma BHC - Lindane	58-89-9	0.0085	U	0.0085	0.0017	1
10589	Chlordane	57-74-9	0.43	U	0.43	0.14	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0043	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0043	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0044	1
10589	Delta BHC	319-86-8	0.0085	U	0.0085	0.0029	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0045	1
10589	Endosulfan I	959-98-8	0.0085	U	0.0085	0.0037	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0050	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0069	1
10589	Endrin Aldehyde	7421-93-4	0.085	U	0.085	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0043	1
10589	Heptachlor	76-44-8	0.0085	U	0.0085	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0085	U	0.0085	0.0020	1
10589	Methoxychlor	72-43-5	0.085	U	0.085	0.026	1
10589	Mirex	2385-85-5	0.21	U	0.21	0.072	1
10589	Toxaphene	8001-35-2	2.6	U	2.6	0.85	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.43	U	0.43	0.085	1
13092	Aroclor 5442	12642-23-8	0.43	U	0.43	0.085	1
13092	Aroclor 5460	11126-42-4	0.43	U	0.43	0.094	1
13092	PCB-1016	12674-11-2	0.43	U	0.43	0.085	1
13092	PCB-1221	11104-28-2	0.43	U	0.43	0.085	1
13092	PCB-1232	11141-16-5	0.43	U	0.43	0.17	1
13092	PCB-1242	53469-21-9	0.43	U	0.43	0.085	1
13092	PCB-1248	12672-29-6	0.43	U	0.43	0.085	1
13092	PCB-1254	11097-69-1	0.43	U	0.43	0.085	1
13092	PCB-1260	11096-82-5	0.43	U	0.43	0.13	1
13092	PCB-1262	37324-23-5	0.43	U	0.43	0.17	1
13092	PCB-1268	11100-14-4	0.43	U	0.43	0.14	1

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.095	U	0.095	0.047	1
10365	EFH (C15-C20)	n.a.	0.095	U	0.095	0.047	1
10365	EFH (C21-C30)	n.a.	0.095	U	0.095	0.047	1
10365	EFH (C30 - C40)	n.a.	0.47	U	0.47	0.095	1
10365	EFH (C8-C11)	n.a.	0.095	U	0.095	0.047	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

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

Sample Description: EB1-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179316
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB128 SDG#: PH095-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
Metals		**SW-846 6010C**	**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.00035 J	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0080 J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
		SW-846 6020A	**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
		SW-846 7470A	**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry		**SW-846 9040C**	**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.9	0.010	0.010	1

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

Sample Description: EB1-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179316
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB128 SDG#: PH095-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.93	U	1.93	0.524	1
10915	12378-PeCDD	40321-76-4	9.67	U	9.67	0.556	1
10915	123478-HxCDD	39227-28-6	9.67	U	9.67	0.316	1
10915	123678-HxCDD	57653-85-7	9.67	U	9.67	0.329	1
10915	123789-HxCDD	19408-74-3	0.471	JBQ	9.67	0.308	1
10915	1234678-HpCDD	35822-46-9	0.608	JBQ	9.67	0.423	1
10915	OCDD	3268-87-9	1.43	JBQ	19.3	0.457	1
10915	2378-TCDF	51207-31-9	1.93	U	1.93	0.447	1
10915	12378-PeCDF	57117-41-6	0.501	JBQ	9.67	0.314	1
10915	23478-PeCDF	57117-31-4	9.67	U	9.67	0.277	1
10915	123478-HxCDF	70648-26-9	0.222	JBQ	9.67	0.169	1
10915	123678-HxCDF	57117-44-9	0.467	JBQ	9.67	0.163	1
10915	123789-HxCDF	72918-21-9	0.245	JB	9.67	0.189	1
10915	234678-HxCDF	60851-34-5	0.417	JBQ	9.67	0.167	1
10915	1234678-HpCDF	67562-39-4	0.299	JBQ	9.67	0.163	1
10915	1234789-HpCDF	55673-89-7	0.554	JBQ	9.67	0.193	1
10915	OCDF	39001-02-0	1.41	JBQ	19.3	0.612	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0245				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	86	24 - 169
13C12-12378-PeCDF	98	24 - 185
13C12-23478-PeCDF	100	21 - 178
13C12-123478-HxCDF	89	26 - 152
13C12-123678-HxCDF	90	26 - 123
13C12-234678-HxCDF	89	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	70	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: EB1-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179316
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB128 SDG#: PH095-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: EB1-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179316
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB128 SDG#: PH095-01EB

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243WAJ026	09/04/2013 01:48	Brian K Graham	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13243WAJ026	09/03/2013 09:10	Anna E Stager	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13242A20A	08/30/2013 12:55	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13242A20A	08/30/2013 12:55	Catherine J Schwarz	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132470014A	09/06/2013 23:35	Elizabeth J Marin	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132470020A	09/05/2013 19:44	Jamie L Brillhart	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132470019A	09/05/2013 23:30	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132470019A	09/04/2013 23:30	Karen L Beyer	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132470020A	09/04/2013 23:30	Karen L Beyer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132470014A	09/04/2013 20:00	Elaine F Stoltzfus	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470006A	09/05/2013 02:53	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132470006A	09/04/2013 15:45	Seth A Farrier	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248004	09/09/2013 22:07	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13248004	09/06/2013 14:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07052	Cobalt	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
01756	Lithium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07060	Molybdenum	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07061	Nickel	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1

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

Sample Description: EB1-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179316
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB128 SDG#: PH095-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10143	Phosphorus	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
07072	Zinc	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	132410635001	09/02/2013 10:16	Katlin N Cataldi	1
06041	Selenium	SW-846 6020A	1	132410639001B	08/30/2013 22:04	David K Beck	1
06042	Silver	SW-846 6020A	1	132410639001A	08/30/2013 22:04	David K Beck	1
06044	Strontium	SW-846 6020A	1	132410639001A	08/30/2013 22:04	David K Beck	1
06045	Thallium	SW-846 6020A	1	132410639001A	08/30/2013 22:04	David K Beck	1
00259	3b Mercury 7470A	SW-846 7470A	1	132425713008	09/01/2013 10:02	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132410635001	08/29/2013 23:30	Annamaria Stipkovits	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132410639001	08/29/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132425713008	08/31/2013 09:50	Nelli S Markaryan	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13241006101A	08/29/2013 19:11	Clayton C Litchmore	1

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

Sample Description: EB2-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179317
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB228 SDG#: PH095-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.053	U	0.053	0.011	1
12971	Acenaphthylene	208-96-8	0.053	U	0.053	0.011	1
12971	Anthracene	120-12-7	0.053	U	0.053	0.011	1
12971	Benzo(a)anthracene	56-55-3	0.053	U	0.053	0.011	1
12971	Benzo(a)pyrene	50-32-8	0.053	U	0.053	0.011	1
12971	Benzo(b)fluoranthene	205-99-2	0.053	U	0.053	0.011	1
12971	Benzo(e)pyrene	192-97-2	0.053	U	0.053	0.011	1
12971	Benzo(g,h,i)perylene	191-24-2	0.053	U	0.053	0.011	1
12971	Benzo(k)fluoranthene	207-08-9	0.053	U	0.053	0.011	1
12971	Butylbenzylphthalate	85-68-7	1.1	U	1.1	0.053	1
12971	Di-n-butylphthalate	84-74-2	0.18	J	1.1	0.053	1
12971	Chrysene	218-01-9	0.053	U	0.053	0.011	1
12971	Dibenz(a,h)anthracene	53-70-3	0.053	U	0.053	0.011	1
12971	Diethylphthalate	84-66-2	0.36	J	1.1	0.053	1
12971	Dimethylphthalate	131-11-3	1.1	U	1.1	0.053	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.12	J	1.1	0.053	1
12971	Fluoranthene	206-44-0	0.053	U	0.053	0.011	1
12971	Fluorene	86-73-7	0.053	U	0.053	0.011	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.053	U	0.053	0.011	1
12971	1-Methylnaphthalene	90-12-0	0.053	U	0.053	0.011	1
12971	2-Methylnaphthalene	91-57-6	0.053	U	0.053	0.011	1
12971	Naphthalene	91-20-3	0.053	U	0.053	0.032	1
12971	N-Nitrosodimethylamine	62-75-9	0.053	U	0.053	0.011	1
12971	Di-n-octylphthalate	117-84-0	1.1	U	1.1	0.053	1
12971	Phenanthrene	85-01-8	0.053	U	0.053	0.032	1
12971	Pyrene	129-00-0	0.053	U	0.053	0.011	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Pesticides/PCBs	**SW-846 8082A**		ug/l		ug/l	ug/l	
13092	Aroclor 5432	63496-31-1	0.42	U	0.42	0.084	1
13092	Aroclor 5442	12642-23-8	0.42	U	0.42	0.084	1
13092	Aroclor 5460	11126-42-4	0.42	U	0.42	0.092	1
13092	PCB-1016	12674-11-2	0.42	U	0.42	0.084	1
13092	PCB-1221	11104-28-2	0.42	U	0.42	0.084	1
13092	PCB-1232	11141-16-5	0.42	U	0.42	0.17	1
13092	PCB-1242	53469-21-9	0.42	U	0.42	0.084	1
13092	PCB-1248	12672-29-6	0.42	U	0.42	0.084	1
13092	PCB-1254	11097-69-1	0.42	U	0.42	0.084	1
13092	PCB-1260	11096-82-5	0.42	U	0.42	0.13	1
13092	PCB-1262	37324-23-5	0.42	U	0.42	0.17	1
13092	PCB-1268	11100-14-4	0.42	U	0.42	0.13	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

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

Sample Description: EB2-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179317
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB228 SDG#: PH095-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.097 U	0.097	0.049	1
10365	EFH (C15-C20)	n.a.	0.097 U	0.097	0.049	1
10365	EFH (C21-C30)	n.a.	0.097 U	0.097	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49 U	0.49	0.097	1
10365	EFH (C8-C11)	n.a.	0.097 U	0.097	0.049	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits. For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.					
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0022 J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	

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

Sample Description: EB2-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179317
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB228 SDG#: PH095-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.6	0.010	0.010	1

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

Sample Description: EB2-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179317
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB228 SDG#: PH095-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.97	U	1.97	0.326	1
10915	12378-PeCDD	40321-76-4	0.352	JB	9.85	0.336	1
10915	123478-HxCDD	39227-28-6	9.85	U	9.85	0.214	1
10915	123678-HxCDD	57653-85-7	9.85	U	9.85	0.204	1
10915	123789-HxCDD	19408-74-3	9.85	U	9.85	0.194	1
10915	1234678-HpCDD	35822-46-9	0.721	JBQ	9.85	0.303	1
10915	OCDD	3268-87-9	1.48	JBQ	19.7	0.365	1
10915	2378-TCDF	51207-31-9	1.97	U	1.97	0.294	1
10915	12378-PeCDF	57117-41-6	0.364	JB	9.85	0.203	1
10915	23478-PeCDF	57117-31-4	0.323	JB	9.85	0.181	1
10915	123478-HxCDF	70648-26-9	0.223	JBQ	9.85	0.119	1
10915	123678-HxCDF	57117-44-9	9.85	U	9.85	0.120	1
10915	123789-HxCDF	72918-21-9	9.85	U	9.85	0.120	1
10915	234678-HxCDF	60851-34-5	0.302	JB	9.85	0.111	1
10915	1234678-HpCDF	67562-39-4	0.427	JBQ	9.85	0.102	1
10915	1234789-HpCDF	55673-89-7	0.404	JBQ	9.85	0.114	1
10915	OCDF	39001-02-0	1.00	JB	19.7	0.423	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.490				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	54	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	88	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	67	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	44	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: EB2-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179317
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB228 SDG#: PH095-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: EB2-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179317
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB228 SDG#: PH095-02EB

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243WAJ026	09/04/2013 02:15	Brian K Graham	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13243WAJ026	09/03/2013 09:10	Anna E Stager	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13242A20A	08/30/2013 13:17	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13242A20A	08/30/2013 13:17	Catherine J Schwarz	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132470019A	09/05/2013 23:48	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132470019A	09/04/2013 23:30	Karen L Beyer	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470006A	09/05/2013 03:15	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132470006A	09/04/2013 15:45	Seth A Farrier	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248004	09/09/2013 23:04	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13248004	09/06/2013 14:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07052	Cobalt	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
01756	Lithium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07060	Molybdenum	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07061	Nickel	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
10143	Phosphorus	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
07072	Zinc	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	132410635001	09/02/2013 10:20	Katlin N Cataldi	1

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

Sample Description: EB2-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179317
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB228 SDG#: PH095-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06041	Selenium	SW-846 6020A	1	132410639001B	08/30/2013 22:06	David K Beck	1
06042	Silver	SW-846 6020A	1	132410639001A	08/30/2013 22:06	David K Beck	1
06044	Strontium	SW-846 6020A	1	132410639001A	08/30/2013 22:06	David K Beck	1
06045	Thallium	SW-846 6020A	1	132410639001A	08/30/2013 22:06	David K Beck	1
00259	3b Mercury 7470A	SW-846 7470A	1	132425713008	09/01/2013 10:05	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132410635001	08/29/2013 23:30	Annamaria Stipkovits	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132410639001	08/29/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132425713008	08/31/2013 09:50	Nelli S Markaryan	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13241006101A	08/29/2013 19:32	Clayton C Litchmore	1

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

Sample Description: TB2-082813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7179318
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 08:00

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB228 SDG#: PH095-03TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13242A20A	08/30/2013 13:39	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13242A20A	08/30/2013 13:39	Catherine J Schwarz	1

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

Sample Description: SL-536-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179319
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 11:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55360 SDG#: PH095-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-536-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179319
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 11:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55360 SDG#: PH095-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,200		41.7	7.51	1
06944	Antimony	7440-36-0	1.40	J	4.17	0.771	1
06935	Arsenic	7440-38-2	7.11		4.17	0.729	1
06946	Barium	7440-39-3	72.9		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.524	J	1.04	0.0698	1
07914	Boron	7440-42-8	4.70	J	10.4	0.875	1
06949	Cadmium	7440-43-9	0.319	J	1.04	0.0792	1
01650	Calcium	7440-70-2	3,750		20.8	3.48	1
06951	Chromium	7440-47-3	23.1		3.13	0.167	1
06952	Cobalt	7440-48-4	5.17		1.04	0.103	1
06953	Copper	7440-50-8	7.58		2.08	0.302	1
01654	Iron	7439-89-6	23,400		41.7	3.77	1
06955	Lead	7439-92-1	5.78		3.13	0.521	1
01656	Lithium	7439-93-2	28.9		4.2	0.35	1
01657	Magnesium	7439-95-4	4,870		10.4	1.74	1
06958	Manganese	7439-96-5	242		1.04	0.0865	1
06960	Molybdenum	7439-98-7	0.185	J	2.08	0.177	1
06961	Nickel	7440-02-0	16.0		2.08	0.135	1
10145	Phosphorus	7723-14-0	321		10.4	3.01	1
01662	Potassium	7440-09-7	1,810		104	8.69	1
01667	Sodium	7440-23-5	102	J	104	17.4	1
06969	Tin	7440-31-5	3.13	J	10.4	0.229	1
06970	Titanium	7440-32-6	910		1.04	0.177	1
06971	Vanadium	7440-62-2	38.0		1.04	0.135	1
06972	Zinc	7440-66-6	56.2		4.17	0.208	1
10146	Zirconium	7440-67-7	5.21	U	5.21	0.875	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.417	U	0.417	0.104	2
06142	Silver	7440-22-4	0.0836	J	0.208	0.0271	2
06144	Strontium	7440-24-6	24.1		0.417	0.0708	2
06145	Thallium	7440-28-0	0.189	J	0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0112	J	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.36		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-536-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179319
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 11:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55360 SDG#: PH095-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0385 JQ	1.02	0.0256	1
11031	12378-PeCDD	40321-76-4	0.109 JBQ	5.10	0.0213	1
11031	123478-HxCDD	39227-28-6	0.0567 JBQ	5.10	0.0164	1
11031	123678-HxCDD	57653-85-7	0.0604 JBQ	5.10	0.0173	1
11031	123789-HxCDD	19408-74-3	0.0718 JB	5.10	0.0171	1
11031	1234678-HpCDD	35822-46-9	0.595 JBQ	5.10	0.0179	1
11031	OCDD	3268-87-9	7.52 JB	10.2	0.0164	1
11031	2378-TCDF	51207-31-9	0.0360 J	1.02	0.0231	1
11031	12378-PeCDF	57117-41-6	0.143 JBQ	5.10	0.0116	1
11031	23478-PeCDF	57117-31-4	0.0605 JB	5.10	0.0118	1
11031	123478-HxCDF	70648-26-9	0.0644 JBQ	5.10	0.00765	1
11031	123678-HxCDF	57117-44-9	0.0535 JBQ	5.10	0.00627	1
11031	123789-HxCDF	72918-21-9	0.0397 JBQ	5.10	0.00744	1
11031	234678-HxCDF	60851-34-5	0.0435 JB	5.10	0.00701	1
11031	1234678-HpCDF	67562-39-4	0.0869 JBQ	5.10	0.00850	1
11031	1234789-HpCDF	55673-89-7	0.0433 JBQ	5.10	0.0122	1
11031	OCDF	39001-02-0	0.245 JB	10.2	0.0168	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0357			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	93	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	93	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-536-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179319
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 11:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55360 SDG#: PH095-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-536-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179319
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 11:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55360 SDG#: PH095-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 08:23	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 18:23	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/04/2013 22:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/09/2013 14:18	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 05:00	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 00:32	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 00:32	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 00:32	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 00:32	David K Beck	2

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

Sample Description: SL-536-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179319
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 11:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55360 SDG#: PH095-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 09:42	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13241039401A	08/29/2013 20:54	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401B	08/31/2013 00:12	Scott W Freisher	1

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

Sample Description: SL-536-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179320
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 12:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55363 SDG#: PH095-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	3.4		1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	6.0		1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	6.3	J	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	3.0		1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	3.0		1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	4.0		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.2	J	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	0.74	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.1	J	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	0.77	J	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.95
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	27	U	27	11	5
12952	EFH (C15-C20)	n.a.	27	U	27	11	5

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

Sample Description: SL-536-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179320
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 12:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55363 SDG#: PH095-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	93		27	11	5
12952	EFH (C30-C40)	n.a.	420		54	22	5
12952	EFH (C8-C11)	n.a.	27	U	27	11	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,600		43.5	7.85	1
06944	Antimony	7440-36-0	2.84	J	4.35	0.805	1
06935	Arsenic	7440-38-2	15.3		4.35	0.762	1
06946	Barium	7440-39-3	141		1.09	0.0359	1
06947	Beryllium	7440-41-7	1.63		1.09	0.0729	1
07914	Boron	7440-42-8	8.78	J	10.9	0.914	1
06949	Cadmium	7440-43-9	0.601	J	1.09	0.0827	1
01650	Calcium	7440-70-2	7,340		21.8	3.63	1
06951	Chromium	7440-47-3	49.6		3.26	0.174	1
06952	Cobalt	7440-48-4	13.5		1.09	0.108	1
06953	Copper	7440-50-8	36.8		2.18	0.316	1
01654	Iron	7439-89-6	48,800		218	19.7	5
06955	Lead	7439-92-1	20.4		3.26	0.544	1
01656	Lithium	7439-93-2	74.6		4.4	0.37	1
01657	Magnesium	7439-95-4	11,900		10.9	1.82	1
06958	Manganese	7439-96-5	522		1.09	0.0903	1
06960	Molybdenum	7439-98-7	0.487	J	2.18	0.185	1
06961	Nickel	7440-02-0	36.2		2.18	0.141	1
10145	Phosphorus	7723-14-0	860		10.9	3.14	1
01662	Potassium	7440-09-7	4,310		109	9.08	1
01667	Sodium	7440-23-5	322		109	18.2	1
06969	Tin	7440-31-5	4.70	J	10.9	0.239	1
06970	Titanium	7440-32-6	1,870		1.09	0.185	1
06971	Vanadium	7440-62-2	80.2		1.09	0.141	1
06972	Zinc	7440-66-6	137		4.35	0.218	1
10146	Zirconium	7440-67-7	3.47	J	5.44	0.914	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.252	J	0.435	0.109	2
06142	Silver	7440-22-4	0.144	J	0.218	0.0283	2
06144	Strontium	7440-24-6	47.9		0.435	0.0740	2
06145	Thallium	7440-28-0	0.376		0.218	0.0326	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0140	J	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	8.07		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.1		0.10	0.10	1

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

Sample Description: SL-536-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179320
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 12:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55363 SDG#: PH095-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 13:12	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13242A16A	08/30/2013 21:25	Laura M Krieger	24.95
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324132216	08/29/2013 15:23	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324132216	08/29/2013 15:23	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 18:41	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/05/2013 01:07	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 19:08	John P Hook	5
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1

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

Sample Description: SL-536-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179320
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 12:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55363 SDG#: PH095-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 05:04	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 00:34	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 00:34	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 00:34	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 00:34	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 09:44	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13241039401A	08/29/2013 20:54	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401B	08/31/2013 00:12	Scott W Freisher	1

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

Sample Description: SL-537-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179321
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 10:20 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55370 SDG#: PH095-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	0.49	J	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	3.8		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	4.1		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	9.2		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	4.0	J	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	3.1		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	8.1		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	7.6		1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	2.4		1.7	0.70	1
12969	Pyrene	129-00-0	6.9		1.7	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.5	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	6.8		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	12		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-537-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179321
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 10:20 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55370 SDG#: PH095-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,400	41.9	7.56	1
06944	Antimony	7440-36-0	0.981 J	4.19	0.776	1
06935	Arsenic	7440-38-2	6.43	4.19	0.734	1
06946	Barium	7440-39-3	108	1.05	0.0346	1
06947	Beryllium	7440-41-7	0.689 J	1.05	0.0702	1
07914	Boron	7440-42-8	6.45 J	10.5	0.881	1
06949	Cadmium	7440-43-9	0.481 J	1.05	0.0797	1
01650	Calcium	7440-70-2	2,680	21.0	3.50	1
06951	Chromium	7440-47-3	24.1	3.14	0.168	1
06952	Cobalt	7440-48-4	6.50	1.05	0.104	1
06953	Copper	7440-50-8	13.4	2.10	0.304	1
01654	Iron	7439-89-6	21,900	41.9	3.79	1
06955	Lead	7439-92-1	10.3	3.14	0.524	1
01656	Lithium	7439-93-2	21.5	4.2	0.36	1
01657	Magnesium	7439-95-4	4,100	10.5	1.75	1
06958	Manganese	7439-96-5	327	1.05	0.0870	1
06960	Molybdenum	7439-98-7	0.411 J	2.10	0.178	1
06961	Nickel	7440-02-0	15.4	2.10	0.136	1
10145	Phosphorus	7723-14-0	305	10.5	3.03	1
01662	Potassium	7440-09-7	3,500	105	8.74	1
01667	Sodium	7440-23-5	259	105	17.5	1
06969	Tin	7440-31-5	2.94 J	10.5	0.231	1
06970	Titanium	7440-32-6	975	1.05	0.178	1
06971	Vanadium	7440-62-2	40.7	1.05	0.136	1
06972	Zinc	7440-66-6	56.6	4.19	0.210	1
10146	Zirconium	7440-67-7	1.84 J	5.24	0.881	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.182 J	0.419	0.105	2
06142	Silver	7440-22-4	0.0501 J	0.210	0.0273	2
06144	Strontium	7440-24-6	24.0	0.419	0.0713	2
06145	Thallium	7440-28-0	0.271	0.210	0.0314	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0130 J	0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.09	0.0100	0.0100	1
	The pH was measured in water at 22.1 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.6	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-537-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179321
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 10:20 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55370 SDG#: PH095-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0978	J	1.02	0.0390	1
11031	12378-PeCDD	40321-76-4	0.533	JB	5.11	0.0480	1
11031	123478-HxCDD	39227-28-6	0.748	JB	5.11	0.0342	1
11031	123678-HxCDD	57653-85-7	3.34	JB	5.11	0.0355	1
11031	123789-HxCDD	19408-74-3	2.22	JB	5.11	0.0328	1
11031	1234678-HpCDD	35822-46-9	87.6	B	5.11	0.0747	1
11031	OCDD	3268-87-9	1,500	B	10.2	0.0485	1
11031	2378-TCDF	51207-31-9	0.0942	JQ	1.02	0.0439	1
11031	12378-PeCDF	57117-41-6	0.341	JB	5.11	0.0214	1
11031	23478-PeCDF	57117-31-4	0.229	JB	5.11	0.0200	1
11031	123478-HxCDF	70648-26-9	0.490	JB	5.11	0.0201	1
11031	123678-HxCDF	57117-44-9	0.326	JB	5.11	0.0171	1
11031	123789-HxCDF	72918-21-9	0.654	JB	5.11	0.0200	1
11031	234678-HxCDF	60851-34-5	0.404	JB	5.11	0.0186	1
11031	1234678-HpCDF	67562-39-4	18.0	B	5.11	0.0174	1
11031	1234789-HpCDF	55673-89-7	0.970	JB	5.11	0.0258	1
11031	OCDF	39001-02-0	69.9	B	10.2	0.0292	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	3.06				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	90	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	104	17 - 157
13C12-2378-TCDF	85	24 - 169
13C12-12378-PeCDF	101	24 - 185
13C12-23478-PeCDF	95	21 - 178
13C12-123478-HxCDF	89	26 - 152
13C12-123678-HxCDF	100	26 - 123
13C12-234678-HxCDF	92	28 - 136
13C12-123789-HxCDF	93	29 - 147
13C12-1234678-HpCDF	114	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	81	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-537-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179321
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 10:20 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55370 SDG#: PH095-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-537-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179321
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 10:20 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55370 SDG#: PH095-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 08:56	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 19:00	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/05/2013 00:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/09/2013 15:14	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 05:16	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 00:41	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 00:41	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 00:41	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 00:41	David K Beck	2

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

Sample Description: SL-537-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179321
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 10:20 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55370 SDG#: PH095-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 09:46	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13241039401A	08/29/2013 20:54	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401B	08/31/2013 00:12	Scott W Freisher	1

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

Sample Description: SL-537-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179322
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 10:30 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55372 SDG#: PH095-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.83
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

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

Sample Description: SL-537-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179322
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 10:30 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55372 SDG#: PH095-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,300		41.8	7.53	1
06944	Antimony	7440-36-0	1.22	J	4.18	0.773	1
06935	Arsenic	7440-38-2	12.4		4.18	0.731	1
06946	Barium	7440-39-3	83.0		1.04	0.0345	1
06947	Beryllium	7440-41-7	0.532	J	1.04	0.0700	1
07914	Boron	7440-42-8	4.76	J	10.4	0.878	1
06949	Cadmium	7440-43-9	0.292	J	1.04	0.0794	1
01650	Calcium	7440-70-2	2,940		20.9	3.49	1
06951	Chromium	7440-47-3	20.8		3.13	0.167	1
06952	Cobalt	7440-48-4	5.25		1.04	0.103	1
06953	Copper	7440-50-8	7.11		2.09	0.303	1
01654	Iron	7439-89-6	22,400		41.8	3.78	1
06955	Lead	7439-92-1	5.31		3.13	0.522	1
01656	Lithium	7439-93-2	27.6		4.2	0.36	1
01657	Magnesium	7439-95-4	5,290		10.4	1.75	1
06958	Manganese	7439-96-5	262		1.04	0.0867	1
06960	Molybdenum	7439-98-7	0.242	J	2.09	0.178	1
06961	Nickel	7440-02-0	12.8		2.09	0.136	1
10145	Phosphorus	7723-14-0	343		10.4	3.02	1
01662	Potassium	7440-09-7	2,050		104	8.71	1
01667	Sodium	7440-23-5	254		104	17.5	1
06969	Tin	7440-31-5	3.41	J	10.4	0.230	1
06970	Titanium	7440-32-6	1,250		1.04	0.178	1
06971	Vanadium	7440-62-2	40.9		1.04	0.136	1
06972	Zinc	7440-66-6	54.3		4.18	0.209	1
10146	Zirconium	7440-67-7	2.41	J	5.22	0.878	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.181	J	0.418	0.104	2
06142	Silver	7440-22-4	0.0504	J	0.209	0.0272	2
06144	Strontium	7440-24-6	19.5		0.418	0.0711	2
06145	Thallium	7440-28-0	0.255		0.209	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0161	U	0.0161	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.32		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.3		0.10	0.10	1

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

Sample Description: SL-537-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179322
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 10:30 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55372 SDG#: PH095-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 09:28	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13242A16A	08/30/2013 22:03	Laura M Krieger	25.83
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324132216	08/29/2013 15:25	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324132216	08/29/2013 15:25	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 19:18	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/04/2013 21:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1

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

Sample Description: SL-537-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179322
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 10:30 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55372 SDG#: PH095-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 05:20	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 00:44	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 00:44	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 00:44	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 00:44	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 09:48	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13241039401A	08/29/2013 20:54	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401B	08/31/2013 00:12	Scott W Freisher	1

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

Sample Description: SL-538-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179323
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 13:45 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55380 SDG#: PH095-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	0.43	J	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	10		1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	11		1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	22		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	9.1	J	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	4.5		1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	6.6		1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	10		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.4	J	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	12		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	4.9		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.5	J	1.7	0.69	1
12969	Pyrene	129-00-0	13		1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-538-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179323
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 13:45 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55380 SDG#: PH095-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,600		40.5	7.31	1
06944	Antimony	7440-36-0	1.01	J	4.05	0.750	1
06935	Arsenic	7440-38-2	7.69		4.05	0.709	1
06946	Barium	7440-39-3	98.3		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.647	J	1.01	0.0679	1
07914	Boron	7440-42-8	5.78	J	10.1	0.851	1
06949	Cadmium	7440-43-9	0.329	J	1.01	0.0770	1
01650	Calcium	7440-70-2	2,800		20.3	3.38	1
06951	Chromium	7440-47-3	24.0		3.04	0.162	1
06952	Cobalt	7440-48-4	8.48		1.01	0.100	1
06953	Copper	7440-50-8	12.5		2.03	0.294	1
01654	Iron	7439-89-6	21,400		40.5	3.67	1
06955	Lead	7439-92-1	7.58		3.04	0.507	1
01656	Lithium	7439-93-2	19.3		4.1	0.34	1
01657	Magnesium	7439-95-4	4,030		10.1	1.69	1
06958	Manganese	7439-96-5	325		1.01	0.0841	1
06960	Molybdenum	7439-98-7	0.404	J	2.03	0.172	1
06961	Nickel	7440-02-0	15.0		2.03	0.132	1
10145	Phosphorus	7723-14-0	234		10.1	2.93	1
01662	Potassium	7440-09-7	2,200		101	8.45	1
01667	Sodium	7440-23-5	86.6	J	101	16.9	1
06969	Tin	7440-31-5	2.94	J	10.1	0.223	1
06970	Titanium	7440-32-6	934		1.01	0.172	1
06971	Vanadium	7440-62-2	40.2		1.01	0.132	1
06972	Zinc	7440-66-6	44.1		4.05	0.203	1
10146	Zirconium	7440-67-7	1.74	J	5.07	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.145	J	0.405	0.101	2
06142	Silver	7440-22-4	0.0630	J	0.203	0.0263	2
06144	Strontium	7440-24-6	23.4		0.405	0.0689	2
06145	Thallium	7440-28-0	0.233		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0124	J	0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.73		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-538-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179323
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 13:45 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55380 SDG#: PH095-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0385	JQ	1.03	0.0259	1
11031	12378-PeCDD	40321-76-4	5.15	U	5.15	0.0327	1
11031	123478-HxCDD	39227-28-6	0.136	JBQ	5.15	0.0227	1
11031	123678-HxCDD	57653-85-7	0.710	JB	5.15	0.0234	1
11031	123789-HxCDD	19408-74-3	0.686	JB	5.15	0.0227	1
11031	1234678-HpCDD	35822-46-9	14.7	B	5.15	0.0337	1
11031	OCDD	3268-87-9	265	B	10.3	0.0293	1
11031	2378-TCDF	51207-31-9	0.0651	JQ	1.03	0.0390	1
11031	12378-PeCDF	57117-41-6	0.380	JB	5.15	0.0166	1
11031	23478-PeCDF	57117-31-4	0.114	JBQ	5.15	0.0164	1
11031	123478-HxCDF	70648-26-9	0.130	JB	5.15	0.0140	1
11031	123678-HxCDF	57117-44-9	0.122	JBQ	5.15	0.0112	1
11031	123789-HxCDF	72918-21-9	0.220	JB	5.15	0.0135	1
11031	234678-HxCDF	60851-34-5	0.132	JBQ	5.15	0.0104	1
11031	1234678-HpCDF	67562-39-4	1.58	JB	5.15	0.0103	1
11031	1234789-HpCDF	55673-89-7	0.226	JBQ	5.15	0.0151	1
11031	OCDF	39001-02-0	4.33	JB	10.3	0.0216	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.429				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	102	32 - 141
13C12-123678-HxCDD	101	28 - 130
13C12-123789-HxCDD	95	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	107	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	94	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	87	26 - 152
13C12-123678-HxCDF	103	26 - 123
13C12-234678-HxCDF	108	28 - 136
13C12-123789-HxCDF	95	29 - 147
13C12-1234678-HpCDF	105	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	92	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-538-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179323
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 13:45 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55380 SDG#: PH095-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-538-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179323
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 13:45 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55380 SDG#: PH095-08

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 10:00	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 19:37	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/04/2013 22:17	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/09/2013 16:11	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 05:24	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 00:46	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 00:46	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 00:46	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 00:46	David K Beck	2

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

Sample Description: SL-538-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179323
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 13:45 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55380 SDG#: PH095-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 09:50	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13241039401A	08/29/2013 20:54	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401B	08/31/2013 00:12	Scott W Freisher	1

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

Sample Description: SL-538-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179324
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55383 SDG#: PH095-09*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	25.25
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

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

Sample Description: SL-538-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179324
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55383 SDG#: PH095-09*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,000		41.5	7.47	1
06944	Antimony	7440-36-0	1.21	J	4.15	0.767	1
06935	Arsenic	7440-38-2	24.8		4.15	0.725	1
06946	Barium	7440-39-3	85.2		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.432	J	1.04	0.0694	1
07914	Boron	7440-42-8	4.28	J	10.4	0.870	1
06949	Cadmium	7440-43-9	0.307	J	1.04	0.0788	1
01650	Calcium	7440-70-2	2,670		20.7	3.46	1
06951	Chromium	7440-47-3	22.7		3.11	0.166	1
06952	Cobalt	7440-48-4	6.04		1.04	0.103	1
06953	Copper	7440-50-8	9.29		2.07	0.301	1
01654	Iron	7439-89-6	18,400		41.5	3.75	1
06955	Lead	7439-92-1	5.37		3.11	0.518	1
01656	Lithium	7439-93-2	29.6		4.1	0.35	1
01657	Magnesium	7439-95-4	5,860		10.4	1.73	1
06958	Manganese	7439-96-5	271		1.04	0.0860	1
06960	Molybdenum	7439-98-7	2.07	U	2.07	0.176	1
06961	Nickel	7440-02-0	18.8		2.07	0.135	1
10145	Phosphorus	7723-14-0	407		10.4	2.99	1
01662	Potassium	7440-09-7	2,540		104	8.64	1
01667	Sodium	7440-23-5	130		104	17.3	1
06969	Tin	7440-31-5	3.22	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,250		1.04	0.176	1
06971	Vanadium	7440-62-2	37.4		1.04	0.135	1
06972	Zinc	7440-66-6	56.9		4.15	0.207	1
10146	Zirconium	7440-67-7	1.79	J	5.18	0.870	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.415	U	0.415	0.104	2
06142	Silver	7440-22-4	0.207	U	0.207	0.0269	2
06144	Strontium	7440-24-6	14.4		0.415	0.0705	2
06145	Thallium	7440-28-0	0.232		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.12		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.5		0.10	0.10	1

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

Sample Description: SL-538-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179324
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55383 SDG#: PH095-09*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 10:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13242A16A	08/30/2013 22:42	Laura M Krieger	25.25
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324132216	08/29/2013 15:26	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324132216	08/29/2013 15:27	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 19:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/04/2013 22:38	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1

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

Sample Description: SL-538-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7179324
LL Group # 1415078
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 14:00 by VC

Submitted: 08/29/2013 09:15
Reported: 09/16/2013 18:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55383 SDG#: PH095-09*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 05:29	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 00:48	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 00:48	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 00:48	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 00:48	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 09:52	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13241039401A	08/29/2013 20:54	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401B	08/31/2013 00:12	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13243SLC026	Sample number(s): 7179319-7179324									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	93		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	92		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	96		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	123		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	97		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	119		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	104		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	99		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	98		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	93		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	108		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	96		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	96		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	95		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	92		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	82		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	116		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	92		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	98		79-112		
Batch number: 13243WAJ026	Sample number(s): 7179316-7179317									
Acenaphthene	0.050	U	0.050	0.010	ug/l	90	91	77-118	1	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	96	98	80-123	2	30
Anthracene	0.050	U	0.050	0.010	ug/l	89	95	78-123	6	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	86	89	73-127	3	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	82	96	72-120	17	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	93	98	79-136	5	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	75	77	70-130	3	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	86	96	64-130	11	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	87	89	73-131	3	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	74	71	40-138	5	30
Di-n-butylphthalate	0.11	J	1.0	0.050	ug/l	105	95	64-141	10	30
Chrysene	0.050	U	0.050	0.010	ug/l	95	95	76-125	1	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	88	91	58-131	3	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	92	90	64-128	3	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	87	82	23-139	6	30

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	0.061	J	1.0	0.050	ug/l	76	74	70-143	3	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	92	95	79-124	4	30
Fluorene	0.050	U	0.050	0.010	ug/l	94	96	74-115	2	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	87	89	62-130	3	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	104	105	80-126	2	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	105	107	81-124	2	30
Naphthalene	0.050	U	0.050	0.030	ug/l	106	93	75-120	13	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	65	64	36-120	1	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	63	61	57-145	3	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	87	90	75-120	4	30
Pyrene	0.050	U	0.050	0.010	ug/l	92	92	71-130	0	30
Batch number: 13242A16A	Sample number(s): 7179320,7179322,7179324									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	76		67-119		
Batch number: 13242A20A	Sample number(s): 7179316-7179318									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	99	97	75-135	2	30
Batch number: 132470014A	Sample number(s): 7179316									
2,4-D	0.50	U	0.50	0.16	ug/l	114	112	68-155	2	30
Dalapon	1.3	U	1.3	0.25	ug/l	62	69	39-115	10	30
2,4-DB	1.0	U	1.0	0.30	ug/l	128	142	50-163	10	30
Dicamba	0.30	U	0.30	0.080	ug/l	92	105	55-163	13	30
Dinoseb	0.50	U	0.50	0.12	ug/l	133	137	16-163	3	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	122	128	89-162	5	30
MCPA	200 U		200.	50	ug/l	92	98	68-154	6	30
MCPP	200 U		200.	50	ug/l	89	98	46-173	10	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	108	114	55-169	5	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	106	111	58-155	5	30
Batch number: 132430008A	Sample number(s): 7179319-7179324									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	83	78	36-106	7	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	103		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	115		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132470019A	Sample number(s): 7179316-7179317									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	80	98*	35-84	20	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	105	111	69-120	5	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	0.40	U	0.40	0.12	ug/l	126	134*	69-128	6	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132470020A	Sample number(s): 7179316									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	52*	59	55-126	14	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	61*	70	63-132	14	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	55*	62*	63-132	12	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	59*	68	68-128	14	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	64	74	62-143	15	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	54*	62	56-137	13	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	58	69	45-134	17	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	53*	60*	63-131	12	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	65	75	65-135	14	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	64	72	48-124	12	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	55	64	53-123	14	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	55*	63	60-129	15	30
Endrin	0.016	U	0.016	0.0065	ug/l	45	62	43-139	31*	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	54*	61	55-123	13	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	62	67	51-138	8	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	58	67	57-126	14	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	53*	61*	65-128	13	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	55	67	46-134	19	30
Mirex	0.20	U	0.20	0.068	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132460005A	Sample number(s): 7179319-7179324									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	105		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	108		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	111		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	104		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	89		49-107		
Batch number: 132470006A	Sample number(s): 7179316-7179317									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	83	87	70-130	5	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	90	93	70-130	4	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	90	93	70-130	4	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	127	114	70-130	11	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	67*	74	70-130	10	30
Batch number: 132410635001	Sample number(s): 7179316-7179317									
Aluminum	0.400	U	0.400	0.0828	mg/l	106	104	80-120	2	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	106	105	80-120	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	102	103	80-120	1	20
Barium	0.0100	U	0.0100	0.00033	mg/l	102	100	80-120	2	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	100	99	80-120	2	20
Boron	0.100	U	0.100	0.0084	mg/l	97	97	80-120	1	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	103	103	80-120	0	20
Calcium	0.0748	J	0.400	0.0334	mg/l	102	101	80-120	1	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	103	102	80-120	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	103	103	80-120	0	20
Copper	0.0200	U	0.0200	0.0027	mg/l	102	102	80-120	1	20
Iron	0.400	U	0.400	0.0430	mg/l	101	101	80-120	0	20
Lead	0.0300	U	0.0300	0.0047	mg/l	104	104	80-120	0	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	104	102	80-120	1	20

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Magnesium	0.200	U	0.200	0.0167	mg/l	102	102	80-120	1	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	103	102	80-120	1	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	104	104	80-120	1	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	105	105	80-120	1	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	103	102	80-120	0	20
Potassium	1.00	U	1.00	0.0980	mg/l	102	101	80-120	1	20
Sodium	2.00	U	2.00	0.167	mg/l	101	100	80-120	1	20
Tin	0.0400	U	0.0400	0.0029	mg/l	102	102	80-120	1	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	106	105	80-120	1	20
Vanadium	0.0100	U	0.0100	0.0020	mg/l	100	98	80-120	2	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	102	102	80-120	0	20
Zirconium	0.100	U	0.100	0.0084	mg/l	105	105	80-120	0	20
Batch number: 132410639001A	Sample number(s): 7179316-7179317									
Silver	0.0010	U	0.0010	0.00011	mg/l	110	103	90-115	6	20
Strontium	0.0020	U	0.0020	0.00034	mg/l	108	95	80-120	12	20
Thallium	0.0010	U	0.0010	0.00015	mg/l	104	101	80-120	3	20
Batch number: 132410639001B	Sample number(s): 7179316-7179317									
Selenium	0.0040	U	0.0040	0.00050	mg/l	107	106	80-120	0	20
Batch number: 132420637001	Sample number(s): 7179319-7179324									
Aluminum	40.0	U	40.0	7.21	mg/kg	106		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	107		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	102		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		
Calcium	9.35	J	20.0	3.34	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	105		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	106		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	104		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	105		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	106		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.64	J	10.0	0.220	mg/kg	105		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	106		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	101		80-120		
Zinc	0.416	J	4.00	0.200	mg/kg	104		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	105		80-120		
Batch number: 132420637001A	Sample number(s): 7179319-7179324									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	104		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	110		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132420637001B	Sample number(s): 7179319-7179324								
Selenium	0.400 U	0.400	0.100	mg/kg	108		80-120		
Batch number: 132420638001	Sample number(s): 7179319-7179324								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	110		85-120		
Batch number: 132425713008	Sample number(s): 7179316-7179317								
3b Mercury 7470A	0.00020 U	0.00020	0.00006 0	mg/l	101	99	90-115	2	20
Batch number: 13241006101A	Sample number(s): 7179316-7179317								
28b pH (9040B and 9040C)					99		99-103		
Batch number: 13241039401A	Sample number(s): 7179319-7179324								
15a pH by 9045D					99		95-105		
Batch number: 13242162401B	Sample number(s): 7179319-7179324								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13248003	Sample number(s): 7179319,7179321,7179323								
2378-TCDD	1.00 U	1.00	0.0486	ng/kg	99		67-158		
12378-PeCDD	0.0657 J	5.00	0.0361	ng/kg	99		70-142		
123478-HxCDD	0.0423 J	5.00	0.0239	ng/kg	100		70-164		
123678-HxCDD	0.0502 J	5.00	0.0246	ng/kg	98		76-134		
123789-HxCDD	0.0844 J	5.00	0.0236	ng/kg	99		64-162		
1234678-HpCDD	0.122 J	5.00	0.0287	ng/kg	98		70-140		
OCDD	0.464 J	10.0	0.0292	ng/kg	94		78-144		
2378-TCDF	1.00 U	1.00	0.0435	ng/kg	101		75-158		
12378-PeCDF	0.0612 J	5.00	0.0217	ng/kg	98		80-134		
23478-PeCDF	0.0677 J	5.00	0.0205	ng/kg	99		68-160		
123478-HxCDF	0.0557 J	5.00	0.0146	ng/kg	99		72-134		
123678-HxCDF	0.0251 J	5.00	0.0128	ng/kg	98		84-130		
123789-HxCDF	0.0604 J	5.00	0.0161	ng/kg	97		78-130		
234678-HxCDF	0.0455 J	5.00	0.0138	ng/kg	98		70-156		
1234678-HpCDF	0.0567 J	5.00	0.0111	ng/kg	94		82-122		
1234789-HpCDF	0.0816 J	5.00	0.0182	ng/kg	96		78-138		
OCDF	0.216 J	10.0	0.0364	ng/kg	96		63-170		
Batch number: 13248004	Sample number(s): 7179316-7179317								
2378-TCDD	2.00 U	2.00	0.325	pg/l	101		60-150		
12378-PeCDD	0.622 J	10.0	0.411	pg/l	104		60-150		
123478-HxCDD	0.461 J	10.0	0.244	pg/l	102		60-150		
123678-HxCDD	0.533 J	10.0	0.265	pg/l	102		60-150		
123789-HxCDD	0.529 J	10.0	0.248	pg/l	101		60-150		
1234678-HpCDD	0.888 J	10.0	0.394	pg/l	101		60-150		
OCDD	1.12 J	20.0	0.330	pg/l	96		60-150		
2378-TCDF	2.00 U	2.00	0.298	pg/l	108		60-150		
12378-PeCDF	0.765 J	10.0	0.195	pg/l	106		60-150		
23478-PeCDF	0.542 J	10.0	0.183	pg/l	107		60-150		
123478-HxCDF	0.471 J	10.0	0.133	pg/l	101		60-150		
123678-HxCDF	0.575 J	10.0	0.134	pg/l	101		60-150		
123789-HxCDF	0.668 J	10.0	0.149	pg/l	103		60-150		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
234678-HxCDF	0.483	J	10.0	0.128	pg/l	102		60-150		
1234678-HpCDF	0.503	J	10.0	0.108	pg/l	100		60-150		
1234789-HpCDF	0.549	J	10.0	0.132	pg/l	97		60-150		
OCDF	2.39	J	20.0	0.452	pg/l	95		60-150		
Batch number: 13248003	Sample number(s): 7179319,7179321,7179323									
TEQ WHO 2005 - EDLx0.0	0.0715				ng/kg					
Batch number: 13248004	Sample number(s): 7179316-7179317									
TEQ WHO 2005 - EDLx0.0	0.857				pg/l					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13243SLC026	Sample number(s): 7179319-7179324 UNSPK: P177750								
Acenaphthene	92	81	48-127	13	30				
Acenaphthylene	92	82	49-121	12	30				
Anthracene	96	81	52-126	17	30				
Benzo(a)anthracene	102	87	44-143	16	30				
Benzo(a)pyrene	104	87	44-140	18	30				
Benzo(b)fluoranthene	125	107	26-142	16	30				
Benzo(e)pyrene	96	82	70-130	16	30				
Benzo(g,h,i)perylene	70	58	33-141	19	30				
Benzo(k)fluoranthene	101	85	54-142	18	30				
Butylbenzylphthalate	124	106	49-151	16	30				
Di-n-butylphthalate	104	89	52-147	16	30				
Chrysene	100	86	29-148	15	30				
Dibenz(a,h)anthracene	82	69	20-137	17	30				
Diethylphthalate	93	84	43-145	11	30				
Dimethylphthalate	93	81	58-129	14	30				
Bis(2-Ethylhexyl)phthalate	120	97	39-167	22	30				
Fluoranthene	94	81	40-148	15	30				
Fluorene	95	84	51-137	13	30				
Indeno(1,2,3-cd)pyrene	80	67	17-136	18	30				
1-Methylnaphthalene	96	84	50-131	13	30				
2-Methylnaphthalene	97	86	35-152	12	30				
Naphthalene	93	83	31-148	12	30				
N-Nitrosodimethylamine	76	69	48-113	11	30				
Di-n-octylphthalate	130	112	52-162	15	30				
Phenanthrene	95	81	29-142	16	30				
Pyrene	96	83	26-143	15	30				
Batch number: 13242A16A	Sample number(s): 7179320,7179322,7179324 UNSPK: P177750								
11a TPH by EPA 8015B GRO	76	76	69-123	7	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Batch number: 132430008A	Sample number(s): 7179319-7179324 UNSPK: P177750										
PCB-1016	98	97	16-146	0	50						
PCB-1260	110	111	40-134	2	50						
Batch number: 132460005A	Sample number(s): 7179319-7179324 UNSPK: P177750										
EFH (C12-C14)	87	84	49-123	3	20						
EFH (C15-C20)	97	96	49-123	1	20						
EFH (C21-C30)	108	113	49-123	4	20						
EFH (C30-C40)	105	112	49-123	7	20						
EFH (C8-C11)	82	80	49-123	3	20						
Batch number: 132420637001	Sample number(s): 7179319-7179324 UNSPK: P180868 BKG: P180868										
Aluminum	772 (2)	769 (2)	75-125	0	20	1,970		2,600		28*	20
Antimony	111	108	75-125	1	20	3.96	U	3.96	U	0 (1)	20
Arsenic	114	118	75-125	5	20	1.96	J	1.44	J	31* (1)	20
Barium	96	95	75-125	0	20	59.1		59.0		0	20
Beryllium	95	94	75-125	1	20	0.990	U	0.990	U	0 (1)	20
Boron	103	102	75-125	1	20	4.62	J	5.07	J	9 (1)	20
Cadmium	95	94	75-125	0	20	0.109	J	0.139	J	24* (1)	20
Calcium	263 (2)	7244 (2)	75-125	7	20	356,000		344,000		4	20
Chromium	100	99	75-125	0	20	2.87	J	3.79		28* (1)	20
Cobalt	94	94	75-125	0	20	0.580	J	0.906	J	44* (1)	20
Copper	110	108	75-125	0	20	2.09	J	2.82	J	29* (1)	20
Iron	737 (2)	804 (2)	75-125	3	20	1,740		2,500		36*	20
Lead	98	100	75-125	2	20	3.45	J	2.77	J	22* (1)	20
Lithium	113	112	75-125	0	20	3.7	J	3.3	J	12 (1)	20
Magnesium	51 (2)	21 (2)	75-125	3	20	1,920		1,960		2	20
Manganese	114	114	75-125	1	20	31.7		40.7		25*	20
Molybdenum	101	100	75-125	0	20	0.339	J	0.169	J	67* (1)	20
Nickel	95	94	75-125	0	20	2.13		2.80		27* (1)	20
Phosphorus	113	86	75-125	10	20	146		141		3 (1)	20
Potassium	155*	146*	75-125	4	20	324		418		25* (1)	20
Sodium	113	111	75-125	0	20	151		145		4 (1)	20
Tin	96	96	75-125	0	20	1.83	J	1.70	J	7 (1)	20
Titanium	164*	156*	75-125	3	20	72.6		100		32*	20
Vanadium	100	100	75-125	1	20	5.24		7.00		29*	20
Zinc	114	111	75-125	1	20	6.40	J	8.49	J	28* (1)	20
Zirconium	101	102	75-125	2	20	1.26	J	1.51	J	18 (1)	20
Batch number: 132420637001A	Sample number(s): 7179319-7179324 UNSPK: P180868 BKG: P180868										
Silver	94	93	75-125	0	20	0.198	U	0.0297	J	200* (1)	20
Strontium	-469 (2)	-813 (2)	75-125	20	20	188		179		5	20
Thallium	111	102	75-125	8	20	0.198	U	0.198	U	0 (1)	20
Batch number: 132420637001B	Sample number(s): 7179319-7179324 UNSPK: P180868 BKG: P180868										
Selenium	109	106	75-125	1	20	0.396	U	0.100	J	200* (1)	20
Batch number: 132420638001	Sample number(s): 7179319-7179324 UNSPK: P180868 BKG: P180868										
3a Mercury 7471A	120	116	65-135	3	20	0.0164	U	0.0164	U	0 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13241006101A	Sample number(s): 7179316-7179317					BKG: P179136			
28b pH (9040B and 9040C)						7.6	7.6	1	3
Batch number: 13241039401A	Sample number(s): 7179319-7179324					BKG: 7179322			
15a pH by 9045D						7.32	7.32	0	3
Batch number: 13242162401B	Sample number(s): 7179319-7179324					BKG: P177754			
14a Moisture Content by 160.3						11.3	10.8	5	20
Batch number: 13248003	Sample number(s): 7179319,7179321,7179323 UNSPK: P177750								
2378-TCDD	101	100	40-135	2	20				
12378-PeCDD	101	101	40-135	1	20				
123478-HxCDD	102	102	40-135	0	20				
123678-HxCDD	102	101	40-135	1	20				
123789-HxCDD	102	102	40-135	0	20				
1234678-HpCDD	100	99	40-135	1	20				
OCDD	94	94	40-135	0	20				
2378-TCDF	101	101	40-135	0	20				
12378-PeCDF	102	101	40-135	1	20				
23478-PeCDF	103	102	40-135	1	20				
123478-HxCDF	98	102	40-135	3	20				
123678-HxCDF	99	101	40-135	2	20				
123789-HxCDF	98	99	40-135	1	20				
234678-HxCDF	99	100	40-135	0	20				
1234678-HpCDF	96	96	40-135	1	20				
1234789-HpCDF	98	99	40-135	0	20				
OCDF	94	95	40-135	0	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13243SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7179319	86	104	102
7179320	92	104	101
7179321	82	97	102
7179322	92	107	105
7179323	88	103	98
7179324	89	102	106
Blank	83	97	99
LCS	83	94	96
MS	86	100	99
MSD	74	84	89

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Surrogate Quality Control

Limits: 54-129 59-125 61-125

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13243WAJ026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7179316	93	91	103
7179317	91	95	103
Blank	81	86	95
LCS	88	85	103
LCSD	89	99	103
Limits:	44-137	62-141	51-136

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13242A16A

	Trifluorotoluene-F
7179320	72
7179322	72
7179324	73
Blank	76
LCS	76
MS	72
MSD	70
Limits:	50-142

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13242A20A

	Trifluorotoluene-F
7179316	90
7179317	88
7179318	89
Blank	89
LCS	121
LCSD	121
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132430008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7179319	115	110
7179320	114	93
7179321	98	96
7179322	112	109
7179323	112	109
7179324	110	106
Blank	116	112
LCS	112	116
LCSD	123*	120
MS	108	109

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Surrogate Quality Control

MSD	101	108
Limits:	45-120	45-120

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 132470014A

	2,4-Dichlorophenylacetic acid
7179316	56
Blank	54
LCS	73
LCSD	77
Limits:	50-150

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132470019A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7179316	115	114
7179317	121*	121*
Blank	101	103
LCS	113	113
LCSD	124*	119
Limits:	45-120	45-120

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132470020A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7179316	107	111
Blank	106	111
LCS	56*	53
LCSD	61	64
Limits:	60-140	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132460005A

	Chlorobenzene	Orthoterphenyl
7179319	92	97
7179320	94	101
7179321	86	92
7179322	88	94
7179323	89	91
7179324	90	94
Blank	94	99
LCS	98	103
MS	90	86
MSD	84	79
Limits:	37-125	66-123

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Surrogate Quality Control

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132470006A

	Chlorobenzene	Orthoterphenyl
7179316	83	91
7179317	87	94
Blank	93	94
LCS	86	91
LCSD	91	93
Limits:	45-126	69-119

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13248003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7179319	77	84	82	93	83	80
7179321	79	95	89	100	92	93
7179323	83	85	87	103	108	95
Blank	67	74	75	83	76	71
MS	73	83	83	95	87	80
MSD	70	77	83	92	85	78
OPR	76	85	84	96	87	79
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7179319	96	74	69	81	83	83
7179321	114	84	81	88	90	90
7179323	105	83	92	81	102	101
Blank	99	68	63	73	76	78
MS	114	71	69	77	84	84
MSD	106	75	71	71	79	80
OPR	120	77	70	86	89	89
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7179319	82	83	81	76	93
7179321	90	92	104	85	101
7179323	95	85	107	82	94
Blank	75	78	77	67	78
MS	82	81	86	75	90
MSD	78	81	84	74	84
OPR	90	92	93	76	93
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13248004

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7179316	74	100	89	90	89	87
7179317	75	88	70	71	70	76

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415078
Reported: 09/16/13 at 06:17 PM

Surrogate Quality Control

Blank	74	98	88	87	88	88
OPR	67	90	81	81	80	80
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7179316	84	78	70	85	77	78
7179317	67	67	44	84	75	75
Blank	85	81	75	85	78	78
OPR	79	76	70	81	73	73
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7179316	77	74	67	86	98	
7179317	75	68	54	79	87	
Blank	78	76	71	85	99	
OPR	73	71	68	78	90	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

SSFL Phase 3 Chain of Custody

13013 1415078 7179316-24

CDM Smith

DateShipped: 8/28/2013
CarrierName: FedEx
AirbillNo: 796569341835

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130828-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-082813	8/28/13 14:00	WQ	HCl	2 - 1 L Amber	10 day																				X											Subarea 5D
EB1-082813	8/28/13 14:00	WQ	None	4 - 1 L Amber	10 day									X							X															Subarea 5D
EB2-082813	8/28/13 14:30	WQ	HCl	2 - 1 L Amber	10 day																				X											Subarea 5D

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[signature]	8/28/2013	1600									
									[signature]	8-29-13	0915

COC Rev 2

COC: 20130828-01, Page 1 of 1

SSFL Phase 3 Chain of Custody

13013 1415078 7179316-24

CDM Smith

DateShipped: 8/28/2013
CarrierName: FedEx
AirbillNo: 796569341835

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130828-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB2-082813	8/28/13 14:30	WQ	None	2 - 1 L Amber	10 day									X																						Subarea 5D

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shelly Mypel	08/28/2013	1600									
										8-29-13	0910

SSFL Phase 3 Chain of Custody

13013 1415078 7179316-24

CDM Smith

DateShipped: 8/28/2013
CarrierName: FedEx
AirbillNo: 79341835

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130828-05
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-082813	8/28/13 14:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												Subarea 5D
EB1-082813	8/28/13 14:00	WQ	None	3 - 250 mL Amber	10 day							X			X						X															Subarea 5D
EB1-082813	8/28/13 14:00	WQ	None	1 - 250 mL Poly	10 day														X																	Subarea 5D
EB1-082813	8/28/13 14:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												Subarea 5D
EB2-082813	8/28/13 14:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												Subarea 5D
EB2-082813	8/28/13 14:30	WQ	None	2 - 250 mL Amber	10 day							X			X																					Subarea 5D
EB2-082813	8/28/13 14:30	WQ	None	1 - 250 mL Poly	10 day														X																	Subarea 5D
EB2-082813	8/28/13 14:30	WQ	HCl	3 - 40 mL Vial	10 day																			X												Subarea 5D

Special Instructions:

Sampler: Pat Hart

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	08/28/2013	1600									
										8-29-13	0915

13013 1415078 7179316-24

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/28/2013
CarrierName: FedEx
AirbillNo: 796569341835

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130828-07
Cooler #: 5
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB2-082813	8/28/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												Subarea 5D
SL-536-SA5D-SB-0.0-0.5	8/28/13 11:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											Subarea 5D
SL-536-SA5D-SB-0.0-0.5	8/28/13 11:00	SO	None	1 - 4 oz glass	10 day														X																Subarea 5D
SL-536-SA5D-SB-3.5-4.5	8/28/13 12:00	SO	None	2 - 16 oz glass	10 day	X	X					X			X				X						X										Subarea 5D
SL-536-SA5D-SB-3.5-4.5	8/28/13 12:00	SO	None	2 - Encore	10 day																			X											Subarea 5D
SL-537-SA5D-SB-0.0-0.5	8/28/13 10:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											Subarea 5D
SL-537-SA5D-SB-0.0-0.5	8/28/13 10:20	SO	None	1 - 4 oz glass	10 day														X																Subarea 5D
SL-537-SA5D-SB-2.5-3.5	8/28/13 10:30	SO	None	2 - 16 oz glass	10 day	X	X					X			X				X						X										Subarea 5D
SL-537-SA5D-SB-2.5-3.5	8/28/13 10:30	SO	None	2 - Encore	10 day																			X											Subarea 5D
SL-538-SA5D-SB-0.0-0.5	8/28/13 13:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											Subarea 5D
SL-538-SA5D-SB-0.0-0.5	8/28/13 13:45	SO	None	1 - 4 oz glass	10 day														X																Subarea 5D
SL-538-SA5D-SB-3.0-4.0	8/28/13 14:00	SO	None	2 - 16 oz glass	10 day	X	X					X			X				X						X										Subarea 5D
SL-538-SA5D-SB-3.0-4.0	8/28/13 14:00	SO	None	2 - Encore	10 day																			X											Subarea 5D

Special Instructions:

Sampler: V. Foster

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shey Mupel	08/28/2013	1600									
										8-29-13	0910

COC Rev 2

COC: 20130828-07, Page 1 of 1

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Environmental Sample Administration Receipt Documentation Log

1415078

Client/Project: CDM Smith

Date of Receipt: 8-29-13

Time of Receipt: 0915

Source Code: So

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT114C	1.3	TB	WI	Y	B	
2	↓	1.9	↓	↓	↓	↓	
3		0.7					
4		1.4					
5		1.5					
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 5200 **Date/Time:** 8-29-13 1200

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH098

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 13, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/30/2013
Group Number: 1415400
SDG: PH098
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-082913 Water	7180878
SL-539-SA5D-SB-0.0-0.5 Soil	7180879
SL-539-SA5D-SB-3.0-4.0 Soil	7180880
SL-526-SA5D-SB-0.0-0.5 Soil	7180881
SL-526-SA5D-SB-3.0-4.0 Soil	7180882
SL-542-SA5D-SB-0.0-0.5 Soil	7180883
SL-542-SA5D-SB-4.0-5.0 Soil	7180884
SL-543-SA5D-SB-0.0-0.5 Soil	7180885
SL-543-SA5D-SB-4.0-5.0 Soil	7180886

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

ELECTRONIC COPY TO	Eurofins Lancaster Labs Env	Attn: Natalie Luciano
ELECTRONIC COPY TO	Eurofins Lancaster Labs Env	Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-082913 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7180878
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 08:00

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB-98 SDG#: PH098-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13248A20A	09/05/2013 20:29	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13248A20A	09/05/2013 20:29	Catherine J Schwarz	1

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

Sample Description: SL-539-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180879
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 09:10 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53900 SDG#: PH098-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.36	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-539-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180879
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 09:10 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53900 SDG#: PH098-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,300		39.6	7.14	1
06944	Antimony	7440-36-0	0.851	J	3.96	0.733	1
06935	Arsenic	7440-38-2	5.49		3.96	0.693	1
06946	Barium	7440-39-3	94.2		0.990	0.0327	1
06947	Beryllium	7440-41-7	0.608	J	0.990	0.0663	1
07914	Boron	7440-42-8	5.11	J	9.90	0.832	1
06949	Cadmium	7440-43-9	0.370	J	0.990	0.0753	1
01650	Calcium	7440-70-2	2,060		19.8	3.31	1
06951	Chromium	7440-47-3	20.3		2.97	0.158	1
06952	Cobalt	7440-48-4	6.19		0.990	0.0980	1
06953	Copper	7440-50-8	10.9		1.98	0.287	1
01654	Iron	7439-89-6	19,000		39.6	3.58	1
06955	Lead	7439-92-1	6.37		2.97	0.495	1
01656	Lithium	7439-93-2	17.0		4.0	0.34	1
01657	Magnesium	7439-95-4	3,430		9.90	1.65	1
06958	Manganese	7439-96-5	318		0.990	0.0822	1
06960	Molybdenum	7439-98-7	0.369	J	1.98	0.168	1
06961	Nickel	7440-02-0	12.8		1.98	0.129	1
10145	Phosphorus	7723-14-0	271		9.90	2.86	1
01662	Potassium	7440-09-7	3,130		99.0	8.26	1
01667	Sodium	7440-23-5	85.9	J	99.0	16.5	1
06969	Tin	7440-31-5	2.58	J	9.90	0.218	1
06970	Titanium	7440-32-6	965		0.990	0.168	1
06971	Vanadium	7440-62-2	36.8		0.990	0.129	1
06972	Zinc	7440-66-6	44.0		3.96	0.198	1
10146	Zirconium	7440-67-7	4.95	U	4.95	0.832	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.163	J	0.396	0.0990	2
06142	Silver	7440-22-4	0.0291	J	0.198	0.0257	2
06144	Strontium	7440-24-6	21.0		0.396	0.0673	2
06145	Thallium	7440-28-0	0.282		0.198	0.0297	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164	U	0.0164	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.89		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-539-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180879
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 09:10 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53900 SDG#: PH098-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0290	JQ	1.02	0.0262	1
11031	12378-PeCDD	40321-76-4	0.0783	JBQ	5.12	0.0263	1
11031	123478-HxCDD	39227-28-6	0.0189	JBQ	5.12	0.0169	1
11031	123678-HxCDD	57653-85-7	0.443	JB	5.12	0.0176	1
11031	123789-HxCDD	19408-74-3	0.630	JB	5.12	0.0157	1
11031	1234678-HpCDD	35822-46-9	0.790	JB	5.12	0.0182	1
11031	OCDD	3268-87-9	10.4	B	10.2	0.0160	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0245	1
11031	12378-PeCDF	57117-41-6	0.199	JB	5.12	0.0120	1
11031	23478-PeCDF	57117-31-4	0.0367	JB	5.12	0.0118	1
11031	123478-HxCDF	70648-26-9	0.0408	JBQ	5.12	0.00927	1
11031	123678-HxCDF	57117-44-9	0.0544	JB	5.12	0.00783	1
11031	123789-HxCDF	72918-21-9	0.448	JB	5.12	0.0101	1
11031	234678-HxCDF	60851-34-5	0.0377	JB	5.12	0.00886	1
11031	1234678-HpCDF	67562-39-4	0.137	JB	5.12	0.00855	1
11031	1234789-HpCDF	55673-89-7	0.0430	JB	5.12	0.0125	1
11031	OCDF	39001-02-0	0.360	JB	10.2	0.0195	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.191				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	91	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	91	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-539-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180879
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 09:10 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53900 SDG#: PH098-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-539-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180879
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 09:10 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53900 SDG#: PH098-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13246SLG026	09/08/2013 03:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13246SLG026	09/04/2013 09:10	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 12:43	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470022A	09/07/2013 01:29	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132470022A	09/05/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/09/2013 17:08	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 19:45	John P Hook	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 05:54	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 01:02	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 01:02	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 01:02	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 01:02	David K Beck	2

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

Sample Description: SL-539-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180879
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 09:10 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53900 SDG#: PH098-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 10:19	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13242039402A	08/30/2013 20:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13248162401A	09/06/2013 21:50	Scott W Freisher	1

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

Sample Description: SL-539-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180880
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 09:20 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53930 SDG#: PH098-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	28.34
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

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

Sample Description: SL-539-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180880
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 09:20 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53930 SDG#: PH098-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,200		40.9	7.37	1
06944	Antimony	7440-36-0	1.03	J	4.09	0.757	1
06935	Arsenic	7440-38-2	70.2		4.09	0.716	1
06946	Barium	7440-39-3	62.4		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.531	J	1.02	0.0685	1
07914	Boron	7440-42-8	3.79	J	10.2	0.859	1
06949	Cadmium	7440-43-9	0.347	J	1.02	0.0777	1
01650	Calcium	7440-70-2	2,700		20.4	3.41	1
06951	Chromium	7440-47-3	18.7		3.07	0.164	1
06952	Cobalt	7440-48-4	5.25		1.02	0.101	1
06953	Copper	7440-50-8	7.32		2.04	0.296	1
01654	Iron	7439-89-6	19,500		40.9	3.70	1
06955	Lead	7439-92-1	6.70		3.07	0.511	1
01656	Lithium	7439-93-2	22.0		4.1	0.35	1
01657	Magnesium	7439-95-4	4,530		10.2	1.71	1
06958	Manganese	7439-96-5	292		1.02	0.0849	1
06960	Molybdenum	7439-98-7	2.04	U	2.04	0.174	1
06961	Nickel	7440-02-0	16.5		2.04	0.133	1
10145	Phosphorus	7723-14-0	330		10.2	2.95	1
01662	Potassium	7440-09-7	1,830		102	8.53	1
01667	Sodium	7440-23-5	110		102	17.1	1
06969	Tin	7440-31-5	3.13	J	10.2	0.225	1
06970	Titanium	7440-32-6	915		1.02	0.174	1
06971	Vanadium	7440-62-2	28.4		1.02	0.133	1
06972	Zinc	7440-66-6	48.7		4.09	0.204	1
10146	Zirconium	7440-67-7	0.908	J	5.11	0.859	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.409	U	0.409	0.102	2
06142	Silver	7440-22-4	0.204	U	0.204	0.0266	2
06144	Strontium	7440-24-6	15.0		0.409	0.0695	2
06145	Thallium	7440-28-0	0.208		0.204	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0161	U	0.0161	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.09		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.1		0.10	0.10	1

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

Sample Description: SL-539-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180880
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 09:20 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53930 SDG#: PH098-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13246SLG026	09/08/2013 05:16	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13246SLG026	09/04/2013 09:10	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16A	09/04/2013 21:50	Laura M Krieger	28.34
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324232229	08/30/2013 14:47	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324232229	08/30/2013 14:48	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 13:01	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470022A	09/07/2013 02:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132470022A	09/05/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1

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

Sample Description: SL-539-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180880
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 09:20 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53930 SDG#: PH098-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 06:06	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 01:09	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 01:09	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 01:09	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 01:09	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 10:21	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13242039402A	08/30/2013 20:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13248162401A	09/06/2013 21:50	Scott W Freisher	1

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

Sample Description: SL-526-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180881
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 14:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH098-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-526-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180881
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 14:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH098-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,700		40.8	7.36	1
06944	Antimony	7440-36-0	1.64	J	4.08	0.755	1
06935	Arsenic	7440-38-2	7.61		4.08	0.715	1
06946	Barium	7440-39-3	82.3		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.417	J	1.02	0.0684	1
07914	Boron	7440-42-8	4.42	J	10.2	0.857	1
06949	Cadmium	7440-43-9	0.370	J	1.02	0.0776	1
01650	Calcium	7440-70-2	3,560		20.4	3.41	1
06951	Chromium	7440-47-3	28.4		3.06	0.163	1
06952	Cobalt	7440-48-4	6.39		1.02	0.101	1
06953	Copper	7440-50-8	10.7		2.04	0.296	1
01654	Iron	7439-89-6	22,700		40.8	3.70	1
06955	Lead	7439-92-1	4.78		3.06	0.510	1
01656	Lithium	7439-93-2	30.8		4.1	0.35	1
01657	Magnesium	7439-95-4	6,750		10.2	1.70	1
06958	Manganese	7439-96-5	279		1.02	0.0847	1
06960	Molybdenum	7439-98-7	2.04	U	2.04	0.174	1
06961	Nickel	7440-02-0	21.6		2.04	0.133	1
10145	Phosphorus	7723-14-0	495		10.2	2.95	1
01662	Potassium	7440-09-7	2,020		102	8.51	1
01667	Sodium	7440-23-5	85.6	J	102	17.0	1
06969	Tin	7440-31-5	3.32	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,280		1.02	0.174	1
06971	Vanadium	7440-62-2	46.2		1.02	0.133	1
06972	Zinc	7440-66-6	58.5		4.08	0.204	1
10146	Zirconium	7440-67-7	2.35	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.408	U	0.408	0.102	2
06142	Silver	7440-22-4	0.204	U	0.204	0.0265	2
06144	Strontium	7440-24-6	20.5		0.408	0.0694	2
06145	Thallium	7440-28-0	0.248		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.12		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-526-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180881
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 14:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH098-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03 U	1.03	0.0376	1
11031	12378-PeCDD	40321-76-4	0.0542 JBQ	5.14	0.0281	1
11031	123478-HxCDD	39227-28-6	0.0391 JBQ	5.14	0.0180	1
11031	123678-HxCDD	57653-85-7	0.0394 JB	5.14	0.0188	1
11031	123789-HxCDD	19408-74-3	0.0565 JBQ	5.14	0.0175	1
11031	1234678-HpCDD	35822-46-9	0.119 JBQ	5.14	0.0214	1
11031	OCDD	3268-87-9	0.714 JB	10.3	0.0198	1
11031	2378-TCDF	51207-31-9	1.03 U	1.03	0.0291	1
11031	12378-PeCDF	57117-41-6	0.0512 JBQ	5.14	0.0136	1
11031	23478-PeCDF	57117-31-4	0.0471 JBQ	5.14	0.0141	1
11031	123478-HxCDF	70648-26-9	0.0425 JBQ	5.14	0.00959	1
11031	123678-HxCDF	57117-44-9	0.0328 JB	5.14	0.00773	1
11031	123789-HxCDF	72918-21-9	0.0570 JB	5.14	0.00990	1
11031	234678-HxCDF	60851-34-5	0.0326 JBQ	5.14	0.00814	1
11031	1234678-HpCDF	67562-39-4	0.0542 JBQ	5.14	0.00969	1
11031	1234789-HpCDF	55673-89-7	0.0626 JBQ	5.14	0.0146	1
11031	OCDF	39001-02-0	0.122 JBQ	10.3	0.0247	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0131			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-526-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180881
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 14:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH098-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-526-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180881
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 14:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH098-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13246SLG026	09/08/2013 05:48	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13246SLG026	09/04/2013 09:10	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 13:20	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470022A	09/07/2013 02:54	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132470022A	09/05/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/09/2013 18:04	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 06:10	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 01:12	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 01:12	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 01:12	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 01:12	David K Beck	2

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

Sample Description: SL-526-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180881
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 14:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH098-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 10:27	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13242039402A	08/30/2013 20:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13248162401A	09/06/2013 21:50	Scott W Freisher	1

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

Sample Description: SL-526-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180882
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 14:10 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52630 SDG#: PH098-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.41
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

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

Sample Description: SL-526-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180882
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 14:10 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52630 SDG#: PH098-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,800		41.9	7.55	1
06944	Antimony	7440-36-0	1.79	J	4.19	0.775	1
06935	Arsenic	7440-38-2	12.5		4.19	0.733	1
06946	Barium	7440-39-3	84.2		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.778	J	1.05	0.0702	1
07914	Boron	7440-42-8	6.08	J	10.5	0.880	1
06949	Cadmium	7440-43-9	0.457	J	1.05	0.0796	1
01650	Calcium	7440-70-2	4,660		21.0	3.50	1
06951	Chromium	7440-47-3	34.3		3.14	0.168	1
06952	Cobalt	7440-48-4	10.4		1.05	0.104	1
06953	Copper	7440-50-8	18.4		2.10	0.304	1
01654	Iron	7439-89-6	29,500		210	19.0	5
06955	Lead	7439-92-1	10.1		3.14	0.524	1
01656	Lithium	7439-93-2	36.3		4.2	0.36	1
01657	Magnesium	7439-95-4	8,360		10.5	1.75	1
06958	Manganese	7439-96-5	385		1.05	0.0870	1
06960	Molybdenum	7439-98-7	2.10	U	2.10	0.178	1
06961	Nickel	7440-02-0	27.5		2.10	0.136	1
10145	Phosphorus	7723-14-0	555		10.5	3.03	1
01662	Potassium	7440-09-7	2,780		105	8.74	1
01667	Sodium	7440-23-5	149		105	17.5	1
06969	Tin	7440-31-5	3.53	J	10.5	0.230	1
06970	Titanium	7440-32-6	1,430		1.05	0.178	1
06971	Vanadium	7440-62-2	56.5		1.05	0.136	1
06972	Zinc	7440-66-6	79.3		4.19	0.210	1
10146	Zirconium	7440-67-7	3.01	J	5.24	0.880	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.126	J	0.419	0.105	2
06142	Silver	7440-22-4	0.0375	J	0.210	0.0272	2
06144	Strontium	7440-24-6	24.2		0.419	0.0712	2
06145	Thallium	7440-28-0	0.319		0.210	0.0314	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0106	J	0.0174	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.21		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.5		0.10	0.10	1

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

Sample Description: SL-526-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180882
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 14:10 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52630 SDG#: PH098-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13246SLG026	09/08/2013 06:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13246SLG026	09/04/2013 09:10	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16A	09/04/2013 22:28	Laura M Krieger	25.41
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324232229	08/30/2013 14:49	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324232229	08/30/2013 14:49	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 13:38	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470022A	09/07/2013 03:15	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132470022A	09/05/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 19:49	John P Hook	5
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1

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

Sample Description: SL-526-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180882
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 14:10 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52630 SDG#: PH098-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 06:14	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 01:14	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 01:14	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 01:14	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 01:14	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 10:29	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13242039402A	08/30/2013 20:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13248162401A	09/06/2013 21:50	Scott W Freisher	1

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

Sample Description: SL-542-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180883
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 13:25 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54200 SDG#: PH098-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.0	J	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.2	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.4	J	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	0.98	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.5	J	1.8	0.71	1
12969	Pyrene	129-00-0	1.2	J	1.8	0.71	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

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

Sample Description: SL-542-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180883
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 13:25 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54200 SDG#: PH098-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	2.5	J	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	12		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	21		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,900		43.1	7.76	1
06944	Antimony	7440-36-0	1.86	J	4.31	0.797	1
06935	Arsenic	7440-38-2	6.18		4.31	0.753	1
06946	Barium	7440-39-3	133		1.08	0.0355	1
06947	Beryllium	7440-41-7	0.859	J	1.08	0.0721	1
07914	Boron	7440-42-8	8.67	J	10.8	0.904	1
06949	Cadmium	7440-43-9	0.694	J	1.08	0.0818	1
01650	Calcium	7440-70-2	4,250		21.5	3.60	1
06951	Chromium	7440-47-3	32.3		3.23	0.172	1
06952	Cobalt	7440-48-4	9.19		1.08	0.107	1
06953	Copper	7440-50-8	16.1		2.15	0.312	1
01654	Iron	7439-89-6	28,800		43.1	3.90	1
06955	Lead	7439-92-1	11.4		3.23	0.538	1
01656	Lithium	7439-93-2	22.5		4.3	0.37	1
01657	Magnesium	7439-95-4	5,680		10.8	1.80	1
06958	Manganese	7439-96-5	449		1.08	0.0893	1
06960	Molybdenum	7439-98-7	0.306	J	2.15	0.183	1
06961	Nickel	7440-02-0	19.8		2.15	0.140	1
10145	Phosphorus	7723-14-0	320		10.8	3.11	1
01662	Potassium	7440-09-7	5,040		108	8.98	1
01667	Sodium	7440-23-5	83.9	J	108	18.0	1
06969	Tin	7440-31-5	3.40	J	10.8	0.237	1
06970	Titanium	7440-32-6	1,150		1.08	0.183	1
06971	Vanadium	7440-62-2	55.7		1.08	0.140	1
06972	Zinc	7440-66-6	70.1		4.31	0.215	1
10146	Zirconium	7440-67-7	3.58	J	5.38	0.904	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-542-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180883
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 13:25 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54200 SDG#: PH098-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.200 J	0.431	0.108	2
06142	Silver	7440-22-4	0.0506 J	0.215	0.0280	2
06144	Strontium	7440-24-6	29.9	0.431	0.0732	2
06145	Thallium	7440-28-0	0.345	0.215	0.0323	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0142 J	0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.78	0.0100	0.0100	1
	The pH was measured in water at 21.7 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.1	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-542-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180883
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 13:25 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54200 SDG#: PH098-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0465	JQ	1.08	0.0357	1
11031	12378-PeCDD	40321-76-4	0.147	JB	5.38	0.0343	1
11031	123478-HxCDD	39227-28-6	0.109	JBQ	5.38	0.0249	1
11031	123678-HxCDD	57653-85-7	0.517	JB	5.38	0.0263	1
11031	123789-HxCDD	19408-74-3	0.603	JB	5.38	0.0243	1
11031	1234678-HpCDD	35822-46-9	3.39	JB	5.38	0.0313	1
11031	OCDD	3268-87-9	56.8	B	10.8	0.0230	1
11031	2378-TCDF	51207-31-9	0.126	JQ	1.08	0.0426	1
11031	12378-PeCDF	57117-41-6	0.313	JBQ	5.38	0.0165	1
11031	23478-PeCDF	57117-31-4	0.172	JB	5.38	0.0171	1
11031	123478-HxCDF	70648-26-9	0.107	JBQ	5.38	0.0160	1
11031	123678-HxCDF	57117-44-9	0.102	JB	5.38	0.0135	1
11031	123789-HxCDF	72918-21-9	0.777	JB	5.38	0.0172	1
11031	234678-HxCDF	60851-34-5	0.101	JB	5.38	0.0147	1
11031	1234678-HpCDF	67562-39-4	0.410	JB	5.38	0.0174	1
11031	1234789-HpCDF	55673-89-7	0.101	JBQ	5.38	0.0296	1
11031	OCDF	39001-02-0	1.04	JB	10.8	0.0284	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.464				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	55	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-542-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180883
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 13:25 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54200 SDG#: PH098-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-542-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180883
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 13:25 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54200 SDG#: PH098-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13246SLG026	09/08/2013 06:52	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13246SLG026	09/04/2013 09:10	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 13:09	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 13:57	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470022A	09/07/2013 04:19	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132470022A	09/05/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/09/2013 19:01	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 06:18	Tara L Snyder	1

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

Sample Description: SL-542-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180883
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 13:25 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54200 SDG#: PH098-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 01:16	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 01:16	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 01:16	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 01:16	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 10:31	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13242039402A	08/30/2013 20:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13248162401A	09/06/2013 21:50	Scott W Freisher	1

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

Sample Description: SL-542-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180884
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 13:35 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54240 SDG#: PH098-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		mg/kg		mg/kg	mg/kg	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.21
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.86	U	0.86	0.18	1
10590	Alpha BHC	319-84-6	0.86	U	0.86	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.86	U	0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.36	1
10590	Delta BHC	319-86-8	0.86	U	0.86	0.46	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.86	U	0.86	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.86	U	0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.86	U	0.86	0.18	1

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

Sample Description: SL-542-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180884
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 13:35 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54240 SDG#: PH098-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,600		41.6	7.50	1
06944	Antimony	7440-36-0	0.908	J	4.16	0.770	1
06935	Arsenic	7440-38-2	19.6		4.16	0.728	1
06946	Barium	7440-39-3	78.4		1.04	0.0343	1
06947	Beryllium	7440-41-7	0.424	J	1.04	0.0697	1
07914	Boron	7440-42-8	3.83	J	10.4	0.874	1
06949	Cadmium	7440-43-9	0.320	J	1.04	0.0790	1
01650	Calcium	7440-70-2	2,560		20.8	3.47	1
06951	Chromium	7440-47-3	16.2		3.12	0.166	1
06952	Cobalt	7440-48-4	4.95		1.04	0.103	1
06953	Copper	7440-50-8	6.03		2.08	0.302	1
01654	Iron	7439-89-6	17,700		41.6	3.76	1
06955	Lead	7439-92-1	4.18		3.12	0.520	1
01656	Lithium	7439-93-2	27.4		4.2	0.35	1
01657	Magnesium	7439-95-4	3,990		10.4	1.74	1
06958	Manganese	7439-96-5	248		1.04	0.0863	1
06960	Molybdenum	7439-98-7	2.08	U	2.08	0.177	1
06961	Nickel	7440-02-0	9.77		2.08	0.135	1
10145	Phosphorus	7723-14-0	374		10.4	3.01	1
01662	Potassium	7440-09-7	2,490		104	8.67	1
01667	Sodium	7440-23-5	83.0	J	104	17.4	1
06969	Tin	7440-31-5	3.35	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,060		1.04	0.177	1

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

Sample Description: SL-542-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180884
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 13:35 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54240 SDG#: PH098-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	32.3		1.04	0.135	1
06972	Zinc	7440-66-6	50.8		4.16	0.208	1
10146	Zirconium	7440-67-7	2.65	J	5.20	0.874	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.416	U	0.416	0.104	2
06142	Silver	7440-22-4	0.208	U	0.208	0.0270	2
06144	Strontium	7440-24-6	13.9		0.416	0.0707	2
06145	Thallium	7440-28-0	0.255		0.208	0.0312	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164	U	0.0164	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.71		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13246SLG026	09/08/2013 07:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13246SLG026	09/04/2013 09:10	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16A	09/04/2013 23:06	Laura M Krieger	26.21
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324232229	08/30/2013 14:50	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324232229	08/30/2013 14:50	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 13:25	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 14:15	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1

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

Sample Description: SL-542-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180884
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 13:35 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54240 SDG#: PH098-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470022A	09/07/2013 03:37	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132470022A	09/05/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 19:53	John P Hook	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 06:23	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 01:19	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 01:19	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 01:19	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 01:19	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 10:33	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13242039402A	08/30/2013 20:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13248162401A	09/06/2013 21:50	Scott W Freisher	1

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

Sample Description: SL-543-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180885
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 12:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54300 SDG#: PH098-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.6	J	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	2.6		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	6.3	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.9		1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.1	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.5	J	1.7	0.70	1
12969	Pyrene	129-00-0	1.5	J	1.7	0.70	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	34	U	34	15	1

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

Sample Description: SL-543-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180885
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 12:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54300 SDG#: PH098-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	9.3		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	18		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,900		42.0	7.57	1
06944	Antimony	7440-36-0	1.42	J	4.20	0.777	1
06935	Arsenic	7440-38-2	5.19		4.20	0.735	1
06946	Barium	7440-39-3	114		1.05	0.0347	1
06947	Beryllium	7440-41-7	0.707	J	1.05	0.0704	1
07914	Boron	7440-42-8	8.66	J	10.5	0.882	1
06949	Cadmium	7440-43-9	0.643	J	1.05	0.0798	1
01650	Calcium	7440-70-2	3,520		21.0	3.51	1
06951	Chromium	7440-47-3	28.9		3.15	0.168	1
06952	Cobalt	7440-48-4	8.72		1.05	0.104	1
06953	Copper	7440-50-8	15.0		2.10	0.305	1
01654	Iron	7439-89-6	26,000		42.0	3.80	1
06955	Lead	7439-92-1	9.51		3.15	0.525	1
01656	Lithium	7439-93-2	20.8		4.2	0.36	1
01657	Magnesium	7439-95-4	5,470		10.5	1.75	1
06958	Manganese	7439-96-5	436		1.05	0.0872	1
06960	Molybdenum	7439-98-7	0.332	J	2.10	0.179	1
06961	Nickel	7440-02-0	17.4		2.10	0.137	1
10145	Phosphorus	7723-14-0	422		10.5	3.04	1
01662	Potassium	7440-09-7	5,560		105	8.76	1
01667	Sodium	7440-23-5	79.0	J	105	17.5	1
06969	Tin	7440-31-5	3.17	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,180		1.05	0.179	1
06971	Vanadium	7440-62-2	51.4		1.05	0.137	1
06972	Zinc	7440-66-6	66.2		4.20	0.210	1
10146	Zirconium	7440-67-7	3.21	J	5.25	0.882	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-543-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180885
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 12:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54300 SDG#: PH098-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.236 J	0.420	0.105	2
06142	Silver	7440-22-4	0.0309 J	0.210	0.0273	2
06144	Strontium	7440-24-6	26.9	0.420	0.0714	2
06145	Thallium	7440-28-0	0.313	0.210	0.0315	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0109 J	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.49	0.0100	0.0100	1
	The pH was measured in water at 21.5 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.8	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-543-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180885
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 12:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54300 SDG#: PH098-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0633	JQ	1.04	0.0304	1
11031	12378-PeCDD	40321-76-4	0.313	JBQ	5.18	0.0320	1
11031	123478-HxCDD	39227-28-6	0.118	JB	5.18	0.0227	1
11031	123678-HxCDD	57653-85-7	0.734	JB	5.18	0.0239	1
11031	123789-HxCDD	19408-74-3	0.865	JB	5.18	0.0218	1
11031	1234678-HpCDD	35822-46-9	3.02	JB	5.18	0.0234	1
11031	OCDD	3268-87-9	48.6	B	10.4	0.0171	1
11031	2378-TCDF	51207-31-9	0.147	J	1.04	0.0347	1
11031	12378-PeCDF	57117-41-6	0.509	JB	5.18	0.0167	1
11031	23478-PeCDF	57117-31-4	0.249	JB	5.18	0.0167	1
11031	123478-HxCDF	70648-26-9	0.144	JBQ	5.18	0.0128	1
11031	123678-HxCDF	57117-44-9	0.173	JBQ	5.18	0.0112	1
11031	123789-HxCDF	72918-21-9	1.39	JB	5.18	0.0144	1
11031	234678-HxCDF	60851-34-5	0.0927	JB	5.18	0.0124	1
11031	1234678-HpCDF	67562-39-4	0.415	JB	5.18	0.0119	1
11031	1234789-HpCDF	55673-89-7	0.0858	JBQ	5.18	0.0171	1
11031	OCDF	39001-02-0	1.03	JB	10.4	0.0221	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.473				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-543-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180885
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 12:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54300 SDG#: PH098-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-543-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180885
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 12:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54300 SDG#: PH098-08

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13246SLG026	09/08/2013 07:57	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13246SLG026	09/04/2013 09:10	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 13:40	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 14:34	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470022A	09/07/2013 04:40	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132470022A	09/05/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/09/2013 19:57	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 06:27	Tara L Snyder	1

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

Sample Description: SL-543-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180885
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 12:00 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54300 SDG#: PH098-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 01:21	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 01:21	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 01:21	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 01:21	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 10:35	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13242039402B	08/30/2013 20:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13248162401A	09/06/2013 21:50	Scott W Freisher	1

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

Sample Description: SL-543-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180886
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 12:30 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54340 SDG#: PH098-09*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	17	J	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20.53
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.92	U	0.92	0.19	1
10590	Alpha BHC	319-84-6	0.92	U	0.92	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.92	U	0.92	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.92	U	0.92	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.92	U	0.92	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.92	U	0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.92	U	0.92	0.19	1

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

Sample Description: SL-543-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180886
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 12:30 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54340 SDG#: PH098-09*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.4	U	7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,000		44.0	7.92	1
06944	Antimony	7440-36-0	1.70	J	4.40	0.813	1
06935	Arsenic	7440-38-2	7.97		4.40	0.769	1
06946	Barium	7440-39-3	150		1.10	0.0363	1
06947	Beryllium	7440-41-7	0.986	J	1.10	0.0736	1
07914	Boron	7440-42-8	8.30	J	11.0	0.923	1
06949	Cadmium	7440-43-9	0.538	J	1.10	0.0835	1
01650	Calcium	7440-70-2	4,360		22.0	3.67	1
06951	Chromium	7440-47-3	36.0		3.30	0.176	1
06952	Cobalt	7440-48-4	9.48		1.10	0.109	1
06953	Copper	7440-50-8	15.8		2.20	0.319	1
01654	Iron	7439-89-6	34,000		220	19.9	5
06955	Lead	7439-92-1	10.2		3.30	0.549	1
01656	Lithium	7439-93-2	31.8		4.4	0.37	1
01657	Magnesium	7439-95-4	6,570		11.0	1.84	1
06958	Manganese	7439-96-5	433		1.10	0.0912	1
06960	Molybdenum	7439-98-7	0.549	J	2.20	0.187	1
06961	Nickel	7440-02-0	21.1		2.20	0.143	1
10145	Phosphorus	7723-14-0	392		11.0	3.18	1
01662	Potassium	7440-09-7	4,360		110	9.16	1
01667	Sodium	7440-23-5	143		110	18.4	1
06969	Tin	7440-31-5	3.66	J	11.0	0.242	1
06970	Titanium	7440-32-6	1,000		1.10	0.187	1

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

Sample Description: SL-543-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180886
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 12:30 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54340 SDG#: PH098-09*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	57.1	1.10	0.143	1
06972	Zinc	7440-66-6	74.8	4.40	0.220	1
10146	Zirconium	7440-67-7	2.56 J	5.49	0.923	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.111 J	0.440	0.110	2
06142	Silver	7440-22-4	0.0701 J	0.220	0.0286	2
06144	Strontium	7440-24-6	33.5	0.440	0.0747	2
06145	Thallium	7440-28-0	0.355	0.220	0.0330	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179 U	0.0179	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.5 C.	n.a.	7.49	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	9.9	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13246SLG026	09/08/2013 08:29	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13246SLG026	09/04/2013 09:10	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16A	09/04/2013 23:44	Laura M Krieger	20.53
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324232229	08/30/2013 14:53	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324232229	08/30/2013 14:54	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 13:56	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 14:52	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1

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

Sample Description: SL-543-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7180886
LL Group # 1415400
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/29/2013 12:30 by VC

Submitted: 08/30/2013 09:15
Reported: 09/13/2013 15:30

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54340 SDG#: PH098-09*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470022A	09/07/2013 03:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132470022A	09/05/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 19:57	John P Hook	5
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 06:31	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 01:23	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 01:23	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 01:23	David K Beck	2
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 01:23	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 10:37	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13242039402B	08/30/2013 20:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13248162401A	09/06/2013 21:50	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415400
Reported: 09/13/13 at 03:30 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13246SLG026	Sample number(s): 7180879-7180886									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	93		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	96		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	95		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	101		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	114		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	91		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	98		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	98		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	100		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	103		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	98		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	97		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	95		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	99		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	98		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	97		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	98		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	98		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	96		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	91		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	98		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	94		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	97		79-112		
Batch number: 13247A16A	Sample number(s): 7180880,7180882,7180884,7180886									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	88	79	67-119	12	30
Batch number: 13248A20A	Sample number(s): 7180878									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	102	75-135	4	30
Batch number: 132470010A	Sample number(s): 7180879-7180886									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	83	80	36-106	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415400
Reported: 09/13/13 at 03:30 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	109		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132480022A	Sample number(s): 7180883-7180886									
Aldrin	0.83	U	0.83	0.17	ug/kg	77		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	91		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	82		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	89		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	100		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	84		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	95		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	72		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	102		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	94		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	85		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	89		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	92		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	84		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	92		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	94		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	85		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	101		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132470022A	Sample number(s): 7180879-7180886									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	98		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	97		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	99		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	97		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	81		49-107		
Batch number: 132420637001	Sample number(s): 7180879-7180886									
Aluminum	40.0	U	40.0	7.21	mg/kg	106		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	107		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	102		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		
Calcium	9.35	J	20.0	3.34	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	105		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	106		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	104		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	105		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	106		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100	U	100.	8.34	mg/kg	102		80-120		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415400
Reported: 09/13/13 at 03:30 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.64	J	10.0	0.220	mg/kg	105		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	106		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	101		80-120		
Zinc	0.416	J	4.00	0.200	mg/kg	104		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	105		80-120		
Batch number: 132420637001A	Sample number(s): 7180879-7180886									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	104		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	110		80-120		
Batch number: 132420637001B	Sample number(s): 7180879-7180886									
Selenium	0.400	U	0.400	0.100	mg/kg	108		80-120		
Batch number: 132420638001	Sample number(s): 7180879-7180886									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	110		85-120		
Batch number: 13242039402A	Sample number(s): 7180879-7180884									
15a pH by 9045D						100		95-105		
Batch number: 13242039402B	Sample number(s): 7180885-7180886									
15a pH by 9045D						100		95-105		
Batch number: 13248162401A	Sample number(s): 7180879-7180886									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13248003	Sample number(s): 7180879,7180881,7180883,7180885									
2378-TCDD	1.00	U	1.00	0.0486	ng/kg	99		67-158		
12378-PeCDD	0.0657	J	5.00	0.0361	ng/kg	99		70-142		
123478-HxCDD	0.0423	J	5.00	0.0239	ng/kg	100		70-164		
123678-HxCDD	0.0502	J	5.00	0.0246	ng/kg	98		76-134		
123789-HxCDD	0.0844	J	5.00	0.0236	ng/kg	99		64-162		
1234678-HpCDD	0.122	J	5.00	0.0287	ng/kg	98		70-140		
OCDD	0.464	J	10.0	0.0292	ng/kg	94		78-144		
2378-TCDF	1.00	U	1.00	0.0435	ng/kg	101		75-158		
12378-PeCDF	0.0612	J	5.00	0.0217	ng/kg	98		80-134		
23478-PeCDF	0.0677	J	5.00	0.0205	ng/kg	99		68-160		
123478-HxCDF	0.0557	J	5.00	0.0146	ng/kg	99		72-134		
123678-HxCDF	0.0251	J	5.00	0.0128	ng/kg	98		84-130		
123789-HxCDF	0.0604	J	5.00	0.0161	ng/kg	97		78-130		
234678-HxCDF	0.0455	J	5.00	0.0138	ng/kg	98		70-156		
1234678-HpCDF	0.0567	J	5.00	0.0111	ng/kg	94		82-122		
1234789-HpCDF	0.0816	J	5.00	0.0182	ng/kg	96		78-138		
OCDF	0.216	J	10.0	0.0364	ng/kg	96		63-170		
TEQ WHO 2005 - EDLx0.0	0.0715				ng/kg					

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415400
Reported: 09/13/13 at 03:30 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13246SLG026	Sample number(s): 7180879-7180886 UNSPK: 7180879								
Acenaphthene	96	90	48-127	6	30				
Acenaphthylene	95	89	49-121	5	30				
Anthracene	96	89	52-126	6	30				
Benzo(a)anthracene	98	94	44-143	3	30				
Benzo(a)pyrene	95	91	44-140	4	30				
Benzo(b)fluoranthene	109	101	26-142	6	30				
Benzo(e)pyrene	89	85	70-130	4	30				
Benzo(g,h,i)perylene	97	92	33-141	4	30				
Benzo(k)fluoranthene	92	90	54-142	2	30				
Butylbenzylphthalate	104	97	49-151	6	30				
Di-n-butylphthalate	107	96	52-147	10	30				
Chrysene	96	91	29-148	4	30				
Dibenz(a,h)anthracene	98	92	20-137	6	30				
Diethylphthalate	103	93	43-145	10	30				
Dimethylphthalate	93	89	58-129	3	30				
Bis(2-Ethylhexyl)phthalate	113	107	39-167	5	30				
Fluoranthene	93	89	40-148	3	30				
Fluorene	94	88	51-137	6	30				
Indeno(1,2,3-cd)pyrene	97	93	17-136	4	30				
1-Methylnaphthalene	98	92	50-131	5	30				
2-Methylnaphthalene	95	91	35-152	3	30				
Naphthalene	94	91	31-148	2	30				
N-Nitrosodimethylamine	90	85	48-113	4	30				
Di-n-octylphthalate	106	101	52-162	4	30				
Phenanthrene	94	88	29-142	6	30				
Pyrene	94	89	26-143	5	30				
Batch number: 132470010A	Sample number(s): 7180879-7180886 UNSPK: P182118								
PCB-1016	91	96	16-146	6	50				
PCB-1260	104	113	40-134	9	50				
Batch number: 132480022A	Sample number(s): 7180883-7180886 UNSPK: P182118								
Aldrin	82	88	16-126	7	50				
Alpha BHC	94	102	14-140	8	50				
Beta BHC	86	92	42-133	7	50				
Gamma BHC - Lindane	93	101	30-137	8	50				
p,p-DDD	106	114	43-149	7	50				
p,p-DDE	88	95	35-152	8	50				
p,p-DDT	103	109	12-193	6	50				
Delta BHC	87	93	13-153	7	50				
Dieldrin	107	116	41-153	8	50				
Endosulfan I	99	107	26-146	7	50				
Endosulfan II	85	90	34-141	7	50				
Endosulfan Sulfate	95	100	10-181	6	50				
Endrin	100	106	30-152	6	50				
Endrin Aldehyde	85	91	23-138	7	35				
Endrin Ketone	93	99	30-148	5	50				

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415400
Reported: 09/13/13 at 03:30 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Heptachlor	100	108	16-152	8	50				
Heptachlor Epoxide	89	95	33-144	7	50				
Methoxychlor	105	109	41-161	4	50				
Batch number: 132470022A	Sample number(s): 7180879-7180886 UNSPK: 7180879								
EFH (C12-C14)	96	95	49-123	1	20				
EFH (C15-C20)	117	114	49-123	3	20				
EFH (C21-C30)	123	121	49-123	2	20				
EFH (C30-C40)	116	119	49-123	2	20				
EFH (C8-C11)	86	84	49-123	2	20				
Batch number: 132420637001	Sample number(s): 7180879-7180886 UNSPK: P180868 BKG: P180868								
Aluminum	772 (2)	769 (2)	75-125	0	20	1,970	2,600	28*	20
Antimony	111	108	75-125	1	20	3.96 U	3.96 U	0 (1)	20
Arsenic	114	118	75-125	5	20	1.96 J	1.44 J	31* (1)	20
Barium	96	95	75-125	0	20	59.1	59.0	0	20
Beryllium	95	94	75-125	1	20	0.990 U	0.990 U	0 (1)	20
Boron	103	102	75-125	1	20	4.62 J	5.07 J	9 (1)	20
Cadmium	95	94	75-125	0	20	0.109 J	0.139 J	24* (1)	20
Calcium	263 (2)	7244 (2)	75-125	7	20	356,000	344,000	4	20
Chromium	100	99	75-125	0	20	2.87 J	3.79	28* (1)	20
Cobalt	94	94	75-125	0	20	0.580 J	0.906 J	44* (1)	20
Copper	110	108	75-125	0	20	2.09 J	2.82 J	29* (1)	20
Iron	737 (2)	804 (2)	75-125	3	20	1,740	2,500	36*	20
Lead	98	100	75-125	2	20	3.45 J	2.77 J	22* (1)	20
Lithium	113	112	75-125	0	20	3.7 J	3.3 J	12 (1)	20
Magnesium	51 (2)	21 (2)	75-125	3	20	1,920	1,960	2	20
Manganese	114	114	75-125	1	20	31.7	40.7	25*	20
Molybdenum	101	100	75-125	0	20	0.339 J	0.169 J	67* (1)	20
Nickel	95	94	75-125	0	20	2.13	2.80	27* (1)	20
Phosphorus	113	86	75-125	10	20	146	141	3 (1)	20
Potassium	155*	146*	75-125	4	20	324	418	25* (1)	20
Sodium	113	111	75-125	0	20	151	145	4 (1)	20
Tin	96	96	75-125	0	20	1.83 J	1.70 J	7 (1)	20
Titanium	164*	156*	75-125	3	20	72.6	100	32*	20
Vanadium	100	100	75-125	1	20	5.24	7.00	29*	20
Zinc	114	111	75-125	1	20	6.40 J	8.49 J	28* (1)	20
Zirconium	101	102	75-125	2	20	1.26 J	1.51 J	18 (1)	20
Batch number: 132420637001A	Sample number(s): 7180879-7180886 UNSPK: P180868 BKG: P180868								
Silver	94	93	75-125	0	20	0.198 U	0.0297 J	200* (1)	20
Strontium	-469 (2)	-813 (2)	75-125	20	20	188	179	5	20
Thallium	111	102	75-125	8	20	0.198 U	0.198 U	0 (1)	20
Batch number: 132420637001B	Sample number(s): 7180879-7180886 UNSPK: P180868 BKG: P180868								
Selenium	109	106	75-125	1	20	0.396 U	0.100 J	200* (1)	20
Batch number: 132420638001	Sample number(s): 7180879-7180886 UNSPK: P180868 BKG: P180868								
3a Mercury 7471A	120	116	65-135	3	20	0.0164 U	0.0164 U	0 (1)	20

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415400
Reported: 09/13/13 at 03:30 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13242039402A	Sample number(s): 7180879-7180884					BKG: P180868			
15a pH by 9045D						7.88	7.80	1	3
Batch number: 13242039402B	Sample number(s): 7180885-7180886					BKG: 7180886			
15a pH by 9045D						7.49	7.48	0	3
Batch number: 13248162401A	Sample number(s): 7180879-7180886					BKG: P180868			
14a Moisture Content by 160.3						0.60	0.56	6	20
Batch number: 13248003	Sample number(s): 7180879,7180881,7180883,7180885 UNSPK: P177750								
2378-TCDD	101	100	40-135	2	20				
12378-PeCDD	101	101	40-135	1	20				
123478-HxCDD	102	102	40-135	0	20				
123678-HxCDD	102	101	40-135	1	20				
123789-HxCDD	102	102	40-135	0	20				
1234678-HpCDD	100	99	40-135	1	20				
OCDD	94	94	40-135	0	20				
2378-TCDF	101	101	40-135	0	20				
12378-PeCDF	102	101	40-135	1	20				
23478-PeCDF	103	102	40-135	1	20				
123478-HxCDF	98	102	40-135	3	20				
123678-HxCDF	99	101	40-135	2	20				
123789-HxCDF	98	99	40-135	1	20				
234678-HxCDF	99	100	40-135	0	20				
1234678-HpCDF	96	96	40-135	1	20				
1234789-HpCDF	98	99	40-135	0	20				
OCDF	94	95	40-135	0	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13246SLG026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7180879	74	79	81
7180880	85	91	93
7180881	86	91	91
7180882	82	86	92
7180883	81	82	91
7180884	88	94	97
7180885	81	78	93
7180886	82	88	95
Blank	80	88	92
LCS	87	94	98
MS	87	93	96

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415400
Reported: 09/13/13 at 03:30 PM

Surrogate Quality Control

MSD	84	89	94
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13247A16A

	Trifluorotoluene-F
7180880	73
7180882	74
7180884	82
7180886	67
Blank	81
LCS	82
LCSD	73
Limits:	50-142

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13248A20A

	Trifluorotoluene-F
7180878	89
Blank	88
LCS	125
LCSD	125
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132470010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7180879	93	94
7180880	101	110
7180881	105	107
7180882	103	105
7180883	97	101
7180884	105	103
7180885	100	101
7180886	103	101
Blank	103	102
LCS	102	102
LCSD	102	109
MS	95	103
MSD	100	106
Limits:	45-120	45-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132480022A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7180883	80	93
7180884	81	103
7180885	77	94

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415400
Reported: 09/13/13 at 03:30 PM

Surrogate Quality Control

7180886	81	96
Blank	80	101
LCS	80	100
MS	80	100
MSD	88	103
Limits:	50-130	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132470022A

	Chlorobenzene	Orthoterphenyl
7180879	92	96
7180880	93	97
7180881	88	94
7180882	87	93
7180883	91	93
7180884	94	99
7180885	88	94
7180886	87	85
Blank	86	91
LCS	95	100
MS	94	95
MSD	95	99
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13248003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7180879	77	85	78	91	79	75
7180881	61	68	66	79	72	70
7180883	64	72	70	80	72	66
7180885	69	80	77	84	75	72
Blank	67	74	75	83	76	71
MS	73	83	83	95	87	80
MSD	70	77	83	92	85	78
OPR	76	85	84	96	87	79
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7180879	89	68	67	80	79	78
7180881	87	65	59	67	75	73
7180883	93	61	55	70	74	75
7180885	91	68	64	78	76	74
Blank	99	68	63	73	76	78
MS	114	71	69	77	84	84
MSD	106	75	71	71	79	80
OPR	120	77	70	86	89	89
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415400
Reported: 09/13/13 at 03:30 PM

Surrogate Quality Control

7180879	78	74	81	74	91
7180881	73	71	76	62	76
7180883	75	75	74	66	82
7180885	75	79	83	73	85
Blank	75	78	77	67	78
MS	82	81	86	75	90
MSD	78	81	84	74	84
OPR	90	92	93	76	93
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1415400 7180878-86

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/29/2013
CarrierName: FedEx
AirbillNo: 796579709926

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130829-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9040 (Water)	pH 9045 (Soil)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-082913	8/29/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-539-SA5D-SB-0.0-0.5	8/29/13 09:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-539-SA5D-SB-0.0-0.5	8/29/13 09:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-539-SA5D-SB-3.0-4.0	8/29/13 09:20	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											
SL-539-SA5D-SB-3.0-4.0	8/29/13 09:20	SO	None	2 - Encore	10 day																			X												
SL-526-SA5D-SB-0.0-0.5	8/29/13 14:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-526-SA5D-SB-0.0-0.5	8/29/13 14:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-526-SA5D-SB-3.0-4.0	8/29/13 14:10	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											
SL-526-SA5D-SB-3.0-4.0	8/29/13 14:10	SO	None	2 - Encore	10 day																			X												
SL-542-SA5D-SB-0.0-0.5	8/29/13 13:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X			X											
SL-542-SA5D-SB-0.0-0.5	8/29/13 13:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-542-SA5D-SB-4.0-5.0	8/29/13 13:35	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X				X			X											
SL-542-SA5D-SB-4.0-5.0	8/29/13 13:35	SO	None	2 - Encore	10 day																			X												
SL-543-SA5D-SB-0.0-0.5	8/29/13 12:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X			X											
SL-543-SA5D-SB-0.0-0.5	8/29/13 12:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-543-SA5D-SB-4.0-5.0	8/29/13 12:30	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X				X			X											
SL-543-SA5D-SB-4.0-5.0	8/29/13 12:30	SO	None	2 - Encore	10 day																			X												

13013 1415400 7180878 -86

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/29/2013
CarrierName: FedEx
AirbillNo: 796579709926

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130829-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[signature]	08/29/2013	1600									
									[signature]	8-30-13	0915

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1415400

Client/Project: DM Smith

Date of Receipt: 8-30-13

Time of Receipt: 0915

Source Code: 5

Shipping Container Sealed: (YES) NO

Custody Seal Present * : YES (NO)

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	D(131	1.1	TB	WI	Y	B	
2	↓	1.7	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 3200 **Date/Time:** 8-30-13 1025

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH099

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 23, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/31/2013
Group Number: 1415626
SDG: PH099
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-083013 Water	7182115
SL-534-SA5D-SB-0.0-0.5 Soil	7182116
SL-534-SA5D-SB-6.5-7.5 Soil	7182117
SL-535-SA5D-SB-0.0-0.5 Soil	7182118
SL-535-SA5D-SB-0.0-0.5MS Soil	7182119
SL-535-SA5D-SB-0.0-0.5MSD Soil	7182120
SL-535-SA5D-SB-0.0-0.5DUP Soil	7182121
SL-835-SA5D-SB-0.0-0.5 Soil	7182122
SL-535-SA5D-SB-2.0-3.0 Soil	7182123
SL-533-SA5D-SB-0.0-0.5 Soil	7182124
SL-533-SA5D-SB-2.5-3.5 Soil	7182125
SL-530-SA5D-SB-0.0-0.5 Soil	7182126
SL-530-SA5D-SB-2.5-3.5 Soil	7182127
SL-531-SA5D-SB-0.0-0.5 Soil	7182128
SL-532-SA5D-SB-0.0-0.5 Soil	7182129
SL-532-SA5D-SB-2.5-3.5 Soil	7182130

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

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-083013 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7182115
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:00

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB830 SDG#: PH099-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13248A20A	09/05/2013 20:51	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13248A20A	09/05/2013 20:51	Catherine J Schwarz	1

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

Sample Description: SL-534-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182116
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 09:00 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

534-0 SDG#: PH099-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.59	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	0.80	J	1.7	0.69	1
12969	Naphthalene	91-20-3	1.3	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	

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

Sample Description: SL-534-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182116
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 09:00 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

534-0 SDG#: PH099-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,300		40.7	7.33	1
06944	Antimony	7440-36-0	1.73	J	4.07	0.753	1
06935	Arsenic	7440-38-2	6.04		4.07	0.712	1
06946	Barium	7440-39-3	103		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.658	J	1.02	0.0681	1
07914	Boron	7440-42-8	6.26	J	10.2	0.854	1
06949	Cadmium	7440-43-9	0.473	J	1.02	0.0773	1
01650	Calcium	7440-70-2	2,520		20.3	3.40	1
06951	Chromium	7440-47-3	25.1		3.05	0.163	1
06952	Cobalt	7440-48-4	6.53		1.02	0.101	1
06953	Copper	7440-50-8	12.1		2.03	0.295	1
01654	Iron	7439-89-6	22,500		40.7	3.68	1
06955	Lead	7439-92-1	7.09		3.05	0.509	1
01656	Lithium	7439-93-2	21.5		4.1	0.35	1
01657	Magnesium	7439-95-4	4,320		10.2	1.70	1
06958	Manganese	7439-96-5	354		1.02	0.0844	1
06960	Molybdenum	7439-98-7	0.607	J	2.03	0.173	1
06961	Nickel	7440-02-0	15.5		2.03	0.132	1
10145	Phosphorus	7723-14-0	440		10.2	2.94	1
01662	Potassium	7440-09-7	3,560		102	8.48	1
01667	Sodium	7440-23-5	135		102	17.0	1
06969	Tin	7440-31-5	3.49	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,250		1.02	0.173	1
06971	Vanadium	7440-62-2	41.3		1.02	0.132	1
06972	Zinc	7440-66-6	55.8		4.07	0.203	1
10146	Zirconium	7440-67-7	2.28	J	5.09	0.854	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.174	J	0.407	0.102	2
06142	Silver	7440-22-4	0.0598	J	0.203	0.0264	2
06144	Strontium	7440-24-6	20.7		0.407	0.0692	2
06145	Thallium	7440-28-0	0.268		0.203	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0128	J	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.87		0.0100	0.0100	1
	The pH was measured in water at 21 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-534-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182116
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 09:00 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

534-0 SDG#: PH099-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0701	1
11031	12378-PeCDD	40321-76-4	0.326	JQ	5.14	0.0483	1
11031	123478-HxCDD	39227-28-6	0.145	J	5.14	0.0445	1
11031	123678-HxCDD	57653-85-7	0.889	J	5.14	0.0467	1
11031	123789-HxCDD	19408-74-3	1.11	JB	5.14	0.0448	1
11031	1234678-HpCDD	35822-46-9	10.4	B	5.14	0.0424	1
11031	OCDD	3268-87-9	151	B	10.3	0.0329	1
11031	2378-TCDF	51207-31-9	0.0672	JQ	1.03	0.0624	1
11031	12378-PeCDF	57117-41-6	0.206	JBQ	5.14	0.0262	1
11031	23478-PeCDF	57117-31-4	5.14	U	5.14	0.0270	1
11031	123478-HxCDF	70648-26-9	0.0932	JB	5.14	0.0275	1
11031	123678-HxCDF	57117-44-9	0.0981	JBQ	5.14	0.0225	1
11031	123789-HxCDF	72918-21-9	0.438	JB	5.14	0.0280	1
11031	234678-HxCDF	60851-34-5	0.121	JQ	5.14	0.0252	1
11031	1234678-HpCDF	67562-39-4	1.65	J	5.14	0.0137	1
11031	1234789-HpCDF	55673-89-7	0.133	JB	5.14	0.0230	1
11031	OCDF	39001-02-0	5.14	JB	10.3	0.0416	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.435				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	57	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-534-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182116
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 09:00 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

534-0 SDG#: PH099-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-534-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182116
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 09:00 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

534-0 SDG#: PH099-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 09:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 15:11	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 05:37	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 01:46	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 15:41	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:33	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:33	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:32	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:33	David K Beck	2

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

Sample Description: SL-534-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182116
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 09:00 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

534-0 SDG#: PH099-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 10:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401A	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-534-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182117
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 09:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

534-6 SDG#: PH099-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.56
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

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

Sample Description: SL-534-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182117
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 09:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

534-6 SDG#: PH099-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,000		42.1	7.59	1
06944	Antimony	7440-36-0	1.69	J	4.21	0.779	1
06935	Arsenic	7440-38-2	6.61		4.21	0.737	1
06946	Barium	7440-39-3	63.7		1.05	0.0348	1
06947	Beryllium	7440-41-7	0.354	J	1.05	0.0706	1
07914	Boron	7440-42-8	4.43	J	10.5	0.885	1
06949	Cadmium	7440-43-9	0.313	J	1.05	0.0801	1
01650	Calcium	7440-70-2	3,080		21.1	3.52	1
06951	Chromium	7440-47-3	20.8		3.16	0.169	1
06952	Cobalt	7440-48-4	5.35		1.05	0.104	1
06953	Copper	7440-50-8	7.56		2.11	0.305	1
01654	Iron	7439-89-6	19,200		42.1	3.81	1
06955	Lead	7439-92-1	4.35		3.16	0.527	1
01656	Lithium	7439-93-2	25.3		4.2	0.36	1
01657	Magnesium	7439-95-4	4,790		10.5	1.76	1
06958	Manganese	7439-96-5	228		1.05	0.0874	1
06960	Molybdenum	7439-98-7	0.408	J	2.11	0.179	1
06961	Nickel	7440-02-0	15.0		2.11	0.137	1
10145	Phosphorus	7723-14-0	419		10.5	3.04	1
01662	Potassium	7440-09-7	2,150		105	8.78	1
01667	Sodium	7440-23-5	138		105	17.6	1
06969	Tin	7440-31-5	3.50	J	10.5	0.232	1
06970	Titanium	7440-32-6	1,290		1.05	0.179	1
06971	Vanadium	7440-62-2	39.7		1.05	0.137	1
06972	Zinc	7440-66-6	53.2		4.21	0.211	1
10146	Zirconium	7440-67-7	1.86	J	5.27	0.885	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.120	J	0.421	0.105	2
06142	Silver	7440-22-4	0.211	U	0.211	0.0274	2
06144	Strontium	7440-24-6	14.6		0.421	0.0716	2
06145	Thallium	7440-28-0	0.179	J	0.211	0.0316	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.67		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.0		0.10	0.10	1

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

Sample Description: SL-534-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182117
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 09:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

534-6 SDG#: PH099-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 10:10	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16A	09/05/2013 00:22	Laura M Krieger	24.56
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324332241	08/31/2013 17:47	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324332241	08/31/2013 17:48	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 15:29	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 05:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1

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

Sample Description: SL-534-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182117
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 09:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

534-6 SDG#: PH099-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 15:45	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:35	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:35	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:34	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:35	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 10:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401B	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182118
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.34	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.36	1
10590	Delta BHC	319-86-8	0.85	U	0.85	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.23	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.85	U	0.85	0.17	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182118
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		40.7	7.34	1
06944	Antimony	7440-36-0	2.02	J	4.07	0.753	1
06935	Arsenic	7440-38-2	8.27		4.07	0.713	1
06946	Barium	7440-39-3	124		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.804	J	1.02	0.0682	1
07914	Boron	7440-42-8	7.59	J	10.2	0.855	1
06949	Cadmium	7440-43-9	0.485	J	1.02	0.0774	1
01650	Calcium	7440-70-2	3,560		20.4	3.40	1
06951	Chromium	7440-47-3	25.5		3.05	0.163	1
06952	Cobalt	7440-48-4	8.97		1.02	0.101	1
06953	Copper	7440-50-8	14.3		2.04	0.295	1
01654	Iron	7439-89-6	31,600		81.4	7.37	2
06955	Lead	7439-92-1	9.60		3.05	0.509	1
01656	Lithium	7439-93-2	39.6		4.1	0.35	1
01657	Magnesium	7439-95-4	5,960		10.2	1.70	1
06958	Manganese	7439-96-5	418		1.02	0.0845	1
06960	Molybdenum	7439-98-7	0.596	J	2.04	0.173	1
06961	Nickel	7440-02-0	16.2		2.04	0.132	1
10145	Phosphorus	7723-14-0	534		10.2	2.94	1
01662	Potassium	7440-09-7	2,860		102	8.49	1
01667	Sodium	7440-23-5	160		102	17.0	1
06969	Tin	7440-31-5	4.23	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,620		1.02	0.173	1
06971	Vanadium	7440-62-2	49.7		1.02	0.132	1
06972	Zinc	7440-66-6	77.4		4.07	0.204	1
10146	Zirconium	7440-67-7	2.11	J	5.09	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-535-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182118
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.193 J	0.407	0.102	2
06142	Silver	7440-22-4	0.204 U	0.204	0.0265	2
06144	Strontium	7440-24-6	21.7	0.407	0.0692	2
06145	Thallium	7440-28-0	0.318	0.204	0.0305	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172 U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.34	0.0100	0.0100	1
	The pH was measured in water at 21.5 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.7	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-535-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182118
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.994	U	0.994	0.129	1
11031	12378-PeCDD	40321-76-4	4.97	U	4.97	0.0792	1
11031	123478-HxCDD	39227-28-6	0.0481	JQ	4.97	0.0332	1
11031	123678-HxCDD	57653-85-7	0.0385	J	4.97	0.0348	1
11031	123789-HxCDD	19408-74-3	0.0744	JBQ	4.97	0.0342	1
11031	1234678-HpCDD	35822-46-9	0.132	JBQ	4.97	0.0403	1
11031	OCDD	3268-87-9	1.32	JBQ	9.94	0.0370	1
11031	2378-TCDF	51207-31-9	0.994	U	0.994	0.0791	1
11031	12378-PeCDF	57117-41-6	0.0547	JBQ	4.97	0.0353	1
11031	23478-PeCDF	57117-31-4	4.97	U	4.97	0.0369	1
11031	123478-HxCDF	70648-26-9	0.0645	JB	4.97	0.0279	1
11031	123678-HxCDF	57117-44-9	0.0349	JBQ	4.97	0.0231	1
11031	123789-HxCDF	72918-21-9	0.0339	JBQ	4.97	0.0295	1
11031	234678-HxCDF	60851-34-5	4.97	U	4.97	0.0262	1
11031	1234678-HpCDF	67562-39-4	0.0152	JQ	4.97	0.0123	1
11031	1234789-HpCDF	55673-89-7	0.0721	JBQ	4.97	0.0226	1
11031	OCDF	39001-02-0	0.0918	JBQ	9.94	0.0551	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0103				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	58	28 - 136
13C12-123789-HxCDF	52	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-535-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182118
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-535-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182118
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 07:55	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 14:11	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 15:48	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 06:19	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 02:42	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/06/2013 05:10	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 15:16	Eric L Eby	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182118
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:19	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:19	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:21	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:19	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 10:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401A	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182119
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	32		1.7	0.69	1
12969	Acenaphthylene	208-96-8	34		1.7	0.35	1
12969	Anthracene	120-12-7	34		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	33		1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	34		1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	35		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	30		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	30		1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	36		1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	38		19	6.2	1
12969	Di-n-butylphthalate	84-74-2	39		19	6.2	1
12969	Chrysene	218-01-9	33		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	34		1.7	0.69	1
12969	Diethylphthalate	84-66-2	36		19	6.2	1
12969	Dimethylphthalate	131-11-3	34		19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	37		19	6.2	1
12969	Fluoranthene	206-44-0	34		1.7	0.69	1
12969	Fluorene	86-73-7	33		1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	33		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	34		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	35		1.7	0.69	1
12969	Naphthalene	91-20-3	35		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	38		1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	38		19	6.2	1
12969	Phenanthrene	85-01-8	33		1.7	0.69	1
12969	Pyrene	129-00-0	31		1.7	0.69	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	2.9		0.86	0.18	1
10590	Alpha BHC	319-84-6	3.3		0.86	0.18	1
10590	Beta BHC	319-85-7	3.0		2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	3.3		0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	7.9		1.8	0.34	1
10590	p,p-DDE	72-55-9	6.1		1.8	0.34	1
10590	p,p-DDT	50-29-3	7.6		1.8	0.36	1
10590	Delta BHC	319-86-8	3.1		0.86	0.47	1
10590	Dieldrin	60-57-1	7.8		1.8	0.34	1
10590	Endosulfan I	959-98-8	3.6		0.86	0.23	1
10590	Endosulfan II	33213-65-9	5.9		1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	6.5		1.8	0.34	1
10590	Endrin	72-20-8	7.5		1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	6.1		1.8	0.34	1
10590	Endrin Ketone	53494-70-5	6.6		1.9	0.62	1
10590	Heptachlor	76-44-8	3.6		0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	3.1		0.86	0.18	1
10590	Methoxychlor	72-43-5	39		6.9	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182119
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	160		18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	180		18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	3.0	J	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	4.8	J	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	5.0	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,900		40.7	7.34	1
06944	Antimony	7440-36-0	39.0		4.07	0.753	1
06935	Arsenic	7440-38-2	22.6		4.07	0.713	1
06946	Barium	7440-39-3	335		1.02	0.0336	1
06947	Beryllium	7440-41-7	5.91		1.02	0.0682	1
07914	Boron	7440-42-8	203		10.2	0.855	1
06949	Cadmium	7440-43-9	5.33		1.02	0.0774	1
01650	Calcium	7440-70-2	4,290		20.4	3.40	1
06951	Chromium	7440-47-3	46.6		3.05	0.163	1
06952	Cobalt	7440-48-4	57.2		1.02	0.101	1
06953	Copper	7440-50-8	39.8		2.04	0.295	1
01654	Iron	7439-89-6	32,900		81.4	7.37	2
06955	Lead	7439-92-1	23.5		3.05	0.509	1
01656	Lithium	7439-93-2	144		4.1	0.35	1
01657	Magnesium	7439-95-4	6,390		10.2	1.70	1
06958	Manganese	7439-96-5	449		1.02	0.0845	1
06960	Molybdenum	7439-98-7	198		2.04	0.173	1
06961	Nickel	7440-02-0	65.0		2.04	0.132	1
10145	Phosphorus	7723-14-0	638		10.2	2.94	1
01662	Potassium	7440-09-7	4,460		102	8.49	1
01667	Sodium	7440-23-5	1,180		102	17.0	1
06969	Tin	7440-31-5	378		10.2	0.224	1
06970	Titanium	7440-32-6	2,070		5.09	0.865	5
06971	Vanadium	7440-62-2	101		1.02	0.132	1
06972	Zinc	7440-66-6	127		4.07	0.204	1
10146	Zirconium	7440-67-7	105		5.09	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182119
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.22	0.407	0.102	2
06142	Silver	7440-22-4	10.3	0.204	0.0265	2
06144	Strontium	7440-24-6	29.6	0.407	0.0692	2
06145	Thallium	7440-28-0	0.701	0.204	0.0305	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.197	0.0166	0.0099	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.7	0.10	0.10	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182119
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.6		1.04	0.0879	1
11031	12378-PeCDD	40321-76-4	105		5.19	0.0720	1
11031	123478-HxCDD	39227-28-6	101		5.19	0.0471	1
11031	123678-HxCDD	57653-85-7	99.9		5.19	0.0487	1
11031	123789-HxCDD	19408-74-3	98.8	B	5.19	0.0499	1
11031	1234678-HpCDD	35822-46-9	99.0	B	5.19	0.0560	1
11031	OCDD	3268-87-9	204	B	10.4	0.0398	1
11031	2378-TCDF	51207-31-9	19.2		1.04	0.0788	1
11031	12378-PeCDF	57117-41-6	93.0	B	5.19	0.0485	1
11031	23478-PeCDF	57117-31-4	91.6	B	5.19	0.0525	1
11031	123478-HxCDF	70648-26-9	93.5	B	5.19	0.0457	1
11031	123678-HxCDF	57117-44-9	91.5	B	5.19	0.0377	1
11031	123789-HxCDF	72918-21-9	93.0	B	5.19	0.0474	1
11031	234678-HxCDF	60851-34-5	94.0		5.19	0.0399	1
11031	1234678-HpCDF	67562-39-4	90.6		5.19	0.0283	1
11031	1234789-HpCDF	55673-89-7	91.6	B	5.19	0.0486	1
11031	OCDF	39001-02-0	184	B	10.4	0.0512	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182119
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 08:29	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 14:26	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 16:06	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 06:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 03:39	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/06/2013 05:22	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/07/2013 00:57	John W Yanzuk II	5
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 15:29	Eric L Eby	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182119
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:26	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:26	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:27	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:26	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 10:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182120
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	33		1.7	0.69	1
12969	Acenaphthylene	208-96-8	34		1.7	0.34	1
12969	Anthracene	120-12-7	35		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	33		1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	34		1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	35		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	30		18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	30		1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	35		1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	38		19	6.2	1
12969	Di-n-butylphthalate	84-74-2	39		19	6.2	1
12969	Chrysene	218-01-9	32		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	34		1.7	0.69	1
12969	Diethylphthalate	84-66-2	40		19	6.2	1
12969	Dimethylphthalate	131-11-3	34		19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	39		19	6.2	1
12969	Fluoranthene	206-44-0	34		1.7	0.69	1
12969	Fluorene	86-73-7	33		1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	32		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	34		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	33		1.7	0.69	1
12969	Naphthalene	91-20-3	33		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	37		1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	38		19	6.2	1
12969	Phenanthrene	85-01-8	33		1.7	0.69	1
12969	Pyrene	129-00-0	31		1.7	0.69	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	3.1		0.86	0.18	1
10590	Alpha BHC	319-84-6	3.6		0.86	0.18	1
10590	Beta BHC	319-85-7	3.2		2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	3.6		0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	8.5		1.8	0.34	1
10590	p,p-DDE	72-55-9	6.6		1.8	0.34	1
10590	p,p-DDT	50-29-3	8.1		1.8	0.36	1
10590	Delta BHC	319-86-8	3.3		0.86	0.47	1
10590	Dieldrin	60-57-1	8.5		1.8	0.34	1
10590	Endosulfan I	959-98-8	3.9		0.86	0.23	1
10590	Endosulfan II	33213-65-9	6.3		1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	6.9		1.8	0.34	1
10590	Endrin	72-20-8	8.0		1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	6.6		1.8	0.34	1
10590	Endrin Ketone	53494-70-5	6.9		1.9	0.62	1
10590	Heptachlor	76-44-8	3.9		0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	3.3		0.86	0.18	1
10590	Methoxychlor	72-43-5	41		6.9	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182120
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	170		18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	200		18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.7	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	4.4	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	5.0	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,500		40.7	7.34	1
06944	Antimony	7440-36-0	38.0		4.07	0.753	1
06935	Arsenic	7440-38-2	22.7		4.07	0.713	1
06946	Barium	7440-39-3	326		1.02	0.0336	1
06947	Beryllium	7440-41-7	5.81		1.02	0.0682	1
07914	Boron	7440-42-8	203		10.2	0.855	1
06949	Cadmium	7440-43-9	5.31		1.02	0.0774	1
01650	Calcium	7440-70-2	4,190		20.4	3.40	1
06951	Chromium	7440-47-3	45.8		3.05	0.163	1
06952	Cobalt	7440-48-4	56.7		1.02	0.101	1
06953	Copper	7440-50-8	39.8		2.04	0.295	1
01654	Iron	7439-89-6	31,700		81.4	7.37	2
06955	Lead	7439-92-1	23.6		3.05	0.509	1
01656	Lithium	7439-93-2	141		4.1	0.35	1
01657	Magnesium	7439-95-4	6,300		10.2	1.70	1
06958	Manganese	7439-96-5	457		1.02	0.0845	1
06960	Molybdenum	7439-98-7	196		2.04	0.173	1
06961	Nickel	7440-02-0	64.6		2.04	0.132	1
10145	Phosphorus	7723-14-0	648		10.2	2.94	1
01662	Potassium	7440-09-7	4,410		102	8.49	1
01667	Sodium	7440-23-5	1,150		102	17.0	1
06969	Tin	7440-31-5	374		10.2	0.224	1
06970	Titanium	7440-32-6	2,100		5.09	0.865	5
06971	Vanadium	7440-62-2	99.5		1.02	0.132	1
06972	Zinc	7440-66-6	127		4.07	0.204	1
10146	Zirconium	7440-67-7	104		5.09	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182120
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.19	0.407	0.102	2
06142	Silver	7440-22-4	10.1	0.204	0.0265	2
06144	Strontium	7440-24-6	30.0	0.407	0.0692	2
06145	Thallium	7440-28-0	0.735	0.204	0.0305	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.199	0.0170	0.0102	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.7	0.10	0.10	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182120
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.1		1.02	0.118	1
11031	12378-PeCDD	40321-76-4	103		5.12	0.0884	1
11031	123478-HxCDD	39227-28-6	99.3		5.12	0.0492	1
11031	123678-HxCDD	57653-85-7	98.4		5.12	0.0514	1
11031	123789-HxCDD	19408-74-3	101	B	5.12	0.0490	1
11031	1234678-HpCDD	35822-46-9	98.6	B	5.12	0.0639	1
11031	OCDD	3268-87-9	196	B	10.2	0.0367	1
11031	2378-TCDF	51207-31-9	20.8		1.02	0.0922	1
11031	12378-PeCDF	57117-41-6	91.2	B	5.12	0.0526	1
11031	23478-PeCDF	57117-31-4	92.6	B	5.12	0.0534	1
11031	123478-HxCDF	70648-26-9	90.5	B	5.12	0.0521	1
11031	123678-HxCDF	57117-44-9	92.0	B	5.12	0.0447	1
11031	123789-HxCDF	72918-21-9	90.4	B	5.12	0.0590	1
11031	234678-HxCDF	60851-34-5	90.3		5.12	0.0456	1
11031	1234678-HpCDF	67562-39-4	89.4		5.12	0.0403	1
11031	1234789-HpCDF	55673-89-7	92.2	B	5.12	0.0669	1
11031	OCDF	39001-02-0	178	B	10.2	0.0458	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	145	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	100	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	105	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182120
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 09:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 14:41	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 16:25	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 07:02	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 04:35	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/06/2013 05:25	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/07/2013 01:01	John W Yanzuk II	5
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 15:33	Eric L Eby	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182120
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:28	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:28	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:29	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:28	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 10:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-535-SA5D-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182121
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,700		40.7	7.34	1
06944	Antimony	7440-36-0	2.18	J	4.07	0.753	1
06935	Arsenic	7440-38-2	7.97		4.07	0.713	1
06946	Barium	7440-39-3	119		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.768	J	1.02	0.0682	1
07914	Boron	7440-42-8	5.87	J	10.2	0.855	1
06949	Cadmium	7440-43-9	0.444	J	1.02	0.0774	1
01650	Calcium	7440-70-2	3,560		20.4	3.40	1
06951	Chromium	7440-47-3	23.9		3.05	0.163	1
06952	Cobalt	7440-48-4	8.69		1.02	0.101	1
06953	Copper	7440-50-8	13.9		2.04	0.295	1
01654	Iron	7439-89-6	30,200		81.4	7.37	2
06955	Lead	7439-92-1	9.02		3.05	0.509	1
01656	Lithium	7439-93-2	39.3		4.1	0.35	1
01657	Magnesium	7439-95-4	5,890		10.2	1.70	1
06958	Manganese	7439-96-5	401		1.02	0.0845	1
06960	Molybdenum	7439-98-7	0.332	J	2.04	0.173	1
06961	Nickel	7440-02-0	15.9		2.04	0.132	1
10145	Phosphorus	7723-14-0	541		10.2	2.94	1
01662	Potassium	7440-09-7	2,880		102	8.49	1
01667	Sodium	7440-23-5	157		102	17.0	1
06969	Tin	7440-31-5	4.27	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,590		1.02	0.173	1
06971	Vanadium	7440-62-2	47.6		1.02	0.132	1
06972	Zinc	7440-66-6	76.0		4.07	0.204	1
10146	Zirconium	7440-67-7	4.09	J	5.09	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.240	J	0.407	0.102	2
06142	Silver	7440-22-4	0.204	U	0.204	0.0265	2
06144	Strontium	7440-24-6	21.5		0.407	0.0692	2
06145	Thallium	7440-28-0	0.310		0.204	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.31		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.7		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	3.4		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

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

Sample Description: SL-535-SA5D-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182121
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:10 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-0 SDG#: PH099-04DUP

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/06/2013 05:18	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 15:24	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:23	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:23	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:25	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:23	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 10:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401A	08/31/2013 11:30	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-835-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182122
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

835-0 SDG#: PH099-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.63	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	0.85	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.1	J	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.9		1.7	0.68	1
12969	Naphthalene	91-20-3	1.3	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.74	J	1.7	0.68	1
12969	Pyrene	129-00-0	0.81	J	1.7	0.68	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.33	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.35	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1

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

Sample Description: SL-835-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182122
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

835-0 SDG#: PH099-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	4.7	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	9.0	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,000		40.1	7.24	1
06944	Antimony	7440-36-0	1.78	J	4.01	0.743	1
06935	Arsenic	7440-38-2	5.91		4.01	0.702	1
06946	Barium	7440-39-3	116		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.711	J	1.00	0.0672	1
07914	Boron	7440-42-8	7.00	J	10.0	0.843	1
06949	Cadmium	7440-43-9	0.513	J	1.00	0.0763	1
01650	Calcium	7440-70-2	2,860		20.1	3.35	1
06951	Chromium	7440-47-3	25.3		3.01	0.161	1
06952	Cobalt	7440-48-4	7.13		1.00	0.0993	1
06953	Copper	7440-50-8	13.4		2.01	0.291	1
01654	Iron	7439-89-6	25,000		40.1	3.63	1
06955	Lead	7439-92-1	7.49		3.01	0.502	1
01656	Lithium	7439-93-2	24.3		4.0	0.34	1
01657	Magnesium	7439-95-4	4,690		10.0	1.68	1
06958	Manganese	7439-96-5	381		1.00	0.0833	1
06960	Molybdenum	7439-98-7	0.420	J	2.01	0.171	1
06961	Nickel	7440-02-0	15.4		2.01	0.130	1
10145	Phosphorus	7723-14-0	415		10.0	2.90	1
01662	Potassium	7440-09-7	3,970		100	8.37	1
01667	Sodium	7440-23-5	90.8	J	100	16.8	1
06969	Tin	7440-31-5	3.62	J	10.0	0.221	1
06970	Titanium	7440-32-6	1,370		1.00	0.171	1
06971	Vanadium	7440-62-2	46.0		1.00	0.130	1
06972	Zinc	7440-66-6	61.6		4.01	0.201	1
10146	Zirconium	7440-67-7	5.02	U	5.02	0.843	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-835-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182122
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

835-0 SDG#: PH099-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.219 J	0.401	0.100	2
06142	Silver	7440-22-4	0.201 U	0.201	0.0261	2
06144	Strontium	7440-24-6	22.2	0.401	0.0682	2
06145	Thallium	7440-28-0	0.282	0.201	0.0301	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169 U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.44	0.0100	0.0100	1
	The pH was measured in water at 21.5 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.3	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-835-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182122
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

835-0 SDG#: PH099-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.114	J	0.989	0.0786	1
11031	12378-PeCDD	40321-76-4	0.332	JQ	4.94	0.0523	1
11031	123478-HxCDD	39227-28-6	0.169	J	4.94	0.0388	1
11031	123678-HxCDD	57653-85-7	0.597	JQ	4.94	0.0389	1
11031	123789-HxCDD	19408-74-3	0.996	JB	4.94	0.0366	1
11031	1234678-HpCDD	35822-46-9	6.88	B	4.94	0.0350	1
11031	OCDD	3268-87-9	111	B	9.89	0.0290	1
11031	2378-TCDF	51207-31-9	0.989	U	0.989	0.0628	1
11031	12378-PeCDF	57117-41-6	0.218	JBQ	4.94	0.0265	1
11031	23478-PeCDF	57117-31-4	0.101	JBQ	4.94	0.0245	1
11031	123478-HxCDF	70648-26-9	0.0873	JBQ	4.94	0.0234	1
11031	123678-HxCDF	57117-44-9	0.118	JBQ	4.94	0.0211	1
11031	123789-HxCDF	72918-21-9	0.502	JB	4.94	0.0240	1
11031	234678-HxCDF	60851-34-5	0.103	J	4.94	0.0205	1
11031	1234678-HpCDF	67562-39-4	0.465	J	4.94	0.0117	1
11031	1234789-HpCDF	55673-89-7	0.0821	JB	4.94	0.0185	1
11031	OCDF	39001-02-0	1.33	JB	9.89	0.0349	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.398				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	102	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	63	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	56	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-835-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182122
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

835-0 SDG#: PH099-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-835-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182122
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

835-0 SDG#: PH099-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 10:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 14:57	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 16:43	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 09:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 05:32	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 15:57	Eric L Eby	1

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

Sample Description: SL-835-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182122
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

835-0 SDG#: PH099-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:42	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:42	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:39	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:42	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 11:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401B	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-535-SA5D-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182123
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-2 SDG#: PH099-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.83
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1

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

Sample Description: SL-535-SA5D-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182123
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-2 SDG#: PH099-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	34	U	34	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,400		41.0	7.39	1
06944	Antimony	7440-36-0	1.32	J	4.10	0.758	1
06935	Arsenic	7440-38-2	5.51		4.10	0.717	1
06946	Barium	7440-39-3	108		1.02	0.0338	1
06947	Beryllium	7440-41-7	0.706	J	1.02	0.0686	1
07914	Boron	7440-42-8	4.81	J	10.2	0.861	1
06949	Cadmium	7440-43-9	1.50		1.02	0.0779	1
01650	Calcium	7440-70-2	5,210		20.5	3.42	1
06951	Chromium	7440-47-3	24.3		3.07	0.164	1
06952	Cobalt	7440-48-4	6.67		1.02	0.101	1
06953	Copper	7440-50-8	14.8		2.05	0.297	1
01654	Iron	7439-89-6	33,400		82.0	7.42	2
06955	Lead	7439-92-1	8.82		3.07	0.512	1
01656	Lithium	7439-93-2	46.2		4.1	0.35	1
01657	Magnesium	7439-95-4	6,450		10.2	1.71	1
06958	Manganese	7439-96-5	375		1.02	0.0850	1
06960	Molybdenum	7439-98-7	2.05	U	2.05	0.174	1
06961	Nickel	7440-02-0	21.5		2.05	0.133	1
10145	Phosphorus	7723-14-0	699		10.2	2.96	1
01662	Potassium	7440-09-7	3,100		102	8.54	1
01667	Sodium	7440-23-5	327		102	17.1	1
06969	Tin	7440-31-5	4.08	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,760		1.02	0.174	1

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

Sample Description: SL-535-SA5D-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182123
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-2 SDG#: PH099-06

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06971	Vanadium		7440-62-2	51.0		1.02	0.133	1
06972	Zinc		7440-66-6	85.6		4.10	0.205	1
10146	Zirconium		7440-67-7	1.62	J	5.12	0.861	1
		SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium		7782-49-2	0.164	J	0.410	0.102	2
06142	Silver		7440-22-4	0.0508	J	0.205	0.0266	2
06144	Strontium		7440-24-6	27.9		0.410	0.0697	2
06145	Thallium		7440-28-0	0.274		0.205	0.0307	2
		SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A		7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry		**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D		n.a.	7.36		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.							
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3		n.a.	4.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 11:18	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16A	09/05/2013 01:00	Laura M Krieger	25.83
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324332241	08/31/2013 17:48	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324332241	08/31/2013 17:49	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 15:12	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 17:02	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1

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

Sample Description: SL-535-SA5D-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182123
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 08:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

535-2 SDG#: PH099-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 07:23	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/06/2013 05:33	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/06/2013 05:33	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/06/2013 05:37	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132460637003	09/06/2013 05:33	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/06/2013 05:33	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 16:01	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:44	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:44	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:40	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:44	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 11:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401B	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-533-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182124
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-0 SDG#: PH099-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.1	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.5	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	3.2		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.99	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.2	J	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.2	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.2	1
12969	Chrysene	218-01-9	6.3		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.2	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.7	J	18	6.2	1
12969	Fluoranthene	206-44-0	3.8		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.85	J	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.1	J	1.7	0.68	1
12969	Naphthalene	91-20-3	1.6	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.2	1
12969	Phenanthrene	85-01-8	2.5		1.7	0.68	1
12969	Pyrene	129-00-0	2.9		1.7	0.68	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	2.5		1.7	0.34	1
10590	p,p-DDT	50-29-3	0.86	J	1.7	0.36	1
10590	Delta BHC	319-86-8	0.85	U	0.85	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.23	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.85	U	0.85	0.17	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1

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

Sample Description: SL-533-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182124
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-0 SDG#: PH099-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	6.6	J	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,300		40.3	7.26	1
06944	Antimony	7440-36-0	1.51	J	4.03	0.745	1
06935	Arsenic	7440-38-2	4.62		4.03	0.705	1
06946	Barium	7440-39-3	105		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.652	J	1.01	0.0674	1
07914	Boron	7440-42-8	6.78	J	10.1	0.846	1
06949	Cadmium	7440-43-9	0.754	J	1.01	0.0765	1
01650	Calcium	7440-70-2	2,750		20.1	3.36	1
06951	Chromium	7440-47-3	24.8		3.02	0.161	1
06952	Cobalt	7440-48-4	6.12		1.01	0.0996	1
06953	Copper	7440-50-8	13.5		2.01	0.292	1
01654	Iron	7439-89-6	21,800		40.3	3.64	1
06955	Lead	7439-92-1	16.4		3.02	0.503	1
01656	Lithium	7439-93-2	19.6		4.0	0.34	1
01657	Magnesium	7439-95-4	4,200		10.1	1.68	1
06958	Manganese	7439-96-5	315		1.01	0.0835	1
06960	Molybdenum	7439-98-7	0.628	J	2.01	0.171	1
06961	Nickel	7440-02-0	14.7		2.01	0.131	1
10145	Phosphorus	7723-14-0	441		10.1	2.91	1
01662	Potassium	7440-09-7	4,110		101	8.39	1
01667	Sodium	7440-23-5	104		101	16.8	1
06969	Tin	7440-31-5	3.43	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,160		1.01	0.171	1
06971	Vanadium	7440-62-2	40.3		1.01	0.131	1
06972	Zinc	7440-66-6	78.5		4.03	0.201	1
10146	Zirconium	7440-67-7	1.80	J	5.03	0.846	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-533-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182124
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-0 SDG#: PH099-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.165 J	0.403	0.101	2
06142	Silver	7440-22-4	0.0525 J	0.201	0.0262	2
06144	Strontium	7440-24-6	25.6	0.403	0.0684	2
06145	Thallium	7440-28-0	0.272	0.201	0.0302	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0831	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21 C.	n.a.	7.02	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.6	0.10	0.10	1

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

Sample Description: SL-533-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182124
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-0 SDG#: PH099-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.981	U	0.981	0.0976	1
11031	12378-PeCDD	40321-76-4	1.13	J	4.90	0.0792	1
11031	123478-HxCDD	39227-28-6	1.26	J	4.90	0.0570	1
11031	123678-HxCDD	57653-85-7	4.75	J	4.90	0.0598	1
11031	123789-HxCDD	19408-74-3	3.94	JB	4.90	0.0557	1
11031	1234678-HpCDD	35822-46-9	119	B	4.90	0.109	1
11031	OCDD	3268-87-9	1,880	B	9.81	0.0780	1
11031	2378-TCDF	51207-31-9	0.225	JQ	0.981	0.114	1
11031	12378-PeCDF	57117-41-6	0.549	JBQ	4.90	0.0505	1
11031	23478-PeCDF	57117-31-4	0.582	JBQ	4.90	0.0466	1
11031	123478-HxCDF	70648-26-9	0.418	JB	4.90	0.0430	1
11031	123678-HxCDF	57117-44-9	0.553	JB	4.90	0.0380	1
11031	123789-HxCDF	72918-21-9	0.723	JB	4.90	0.0484	1
11031	234678-HxCDF	60851-34-5	0.755	J	4.90	0.0394	1
11031	1234678-HpCDF	67562-39-4	10.7		4.90	0.0247	1
11031	1234789-HpCDF	55673-89-7	0.809	JB	4.90	0.0363	1
11031	OCDF	39001-02-0	33.1	B	9.81	0.0529	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	4.25				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	99	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-533-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182124
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-0 SDG#: PH099-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-533-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182124
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:15 by VC

Submitted: 08/31/2013 09:30
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-0 SDG#: PH099-07

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 14:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 15:27	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 17:20	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 07:44	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 09:26	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 16:05	Eric L Eby	1

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

Sample Description: SL-533-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182124
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-0 SDG#: PH099-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:47	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:47	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:42	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:47	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 11:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401A	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-533-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182125
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-2 SDG#: PH099-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		mg/kg		mg/kg	mg/kg	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.51
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.90	U	0.90	0.18	1
10590	Alpha BHC	319-84-6	0.90	U	0.90	0.18	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.90	U	0.90	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.36	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.36	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.90	U	0.90	0.49	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.36	1
10590	Endosulfan I	959-98-8	0.90	U	0.90	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.36	1
10590	Endrin	72-20-8	1.8	U	1.8	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.65	1
10590	Heptachlor	76-44-8	0.90	U	0.90	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.90	U	0.90	0.18	1

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

Sample Description: SL-533-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182125
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-2 SDG#: PH099-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,800		42.4	7.65	1
06944	Antimony	7440-36-0	3.50	J	4.24	0.785	1
06935	Arsenic	7440-38-2	14.3		4.24	0.743	1
06946	Barium	7440-39-3	194		1.06	0.0350	1
06947	Beryllium	7440-41-7	1.38		1.06	0.0711	1
07914	Boron	7440-42-8	6.60	J	10.6	0.891	1
06949	Cadmium	7440-43-9	0.702	J	1.06	0.0806	1
01650	Calcium	7440-70-2	16,900		21.2	3.54	1
06951	Chromium	7440-47-3	39.3		3.18	0.170	1
06952	Cobalt	7440-48-4	11.9		1.06	0.105	1
06953	Copper	7440-50-8	25.4		2.12	0.308	1
01654	Iron	7439-89-6	51,800		84.9	7.68	2
06955	Lead	7439-92-1	14.9		3.18	0.531	1
01656	Lithium	7439-93-2	57.7		4.2	0.36	1
01657	Magnesium	7439-95-4	10,500		10.6	1.77	1
06958	Manganese	7439-96-5	558		1.06	0.0881	1
06960	Molybdenum	7439-98-7	0.277	J	2.12	0.180	1
06961	Nickel	7440-02-0	28.4		2.12	0.138	1
10145	Phosphorus	7723-14-0	792		10.6	3.07	1
01662	Potassium	7440-09-7	4,450		106	8.85	1
01667	Sodium	7440-23-5	504		106	17.7	1
06969	Tin	7440-31-5	5.08	J	10.6	0.233	1
06970	Titanium	7440-32-6	2,650		5.31	0.902	5

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

Sample Description: SL-533-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182125
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-2 SDG#: PH099-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	71.3		1.06	0.138	1
06972	Zinc	7440-66-6	129		4.24	0.212	1
10146	Zirconium	7440-67-7	1.15	J	5.31	0.891	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.227	J	0.424	0.106	2
06142	Silver	7440-22-4	0.160	J	0.212	0.0276	2
06144	Strontium	7440-24-6	51.4		0.424	0.0722	2
06145	Thallium	7440-28-0	0.413		0.212	0.0318	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182		0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.62		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-533-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182125
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-2 SDG#: PH099-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0977	1
11031	12378-PeCDD	40321-76-4	0.0627	JQ	5.41	0.0565	1
11031	123478-HxCDD	39227-28-6	0.0454	JQ	5.41	0.0301	1
11031	123678-HxCDD	57653-85-7	0.0475	J	5.41	0.0322	1
11031	123789-HxCDD	19408-74-3	0.160	JBQ	5.41	0.0298	1
11031	1234678-HpCDD	35822-46-9	0.156	JB	5.41	0.0367	1
11031	OCDD	3268-87-9	1.09	JB	10.8	0.0261	1
11031	2378-TCDF	51207-31-9	0.0803	JQ	1.08	0.0669	1
11031	12378-PeCDF	57117-41-6	0.0976	JBQ	5.41	0.0317	1
11031	23478-PeCDF	57117-31-4	0.0758	JBQ	5.41	0.0318	1
11031	123478-HxCDF	70648-26-9	0.0650	JB	5.41	0.0201	1
11031	123678-HxCDF	57117-44-9	0.0513	JBQ	5.41	0.0163	1
11031	123789-HxCDF	72918-21-9	0.0792	JB	5.41	0.0210	1
11031	234678-HxCDF	60851-34-5	0.0583	J	5.41	0.0168	1
11031	1234678-HpCDF	67562-39-4	0.0531	JQ	5.41	0.0199	1
11031	1234789-HpCDF	55673-89-7	0.0604	JBQ	5.41	0.0384	1
11031	OCDF	39001-02-0	0.239	JBQ	10.8	0.0492	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0267				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	65	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	53	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-533-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182125
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-2 SDG#: PH099-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-533-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182125
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-2 SDG#: PH099-08

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 11:52	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16A	09/05/2013 01:38	Laura M Krieger	24.51
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324332241	08/31/2013 17:50	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324332241	08/31/2013 17:50	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 15:43	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 18:53	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 08:05	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 10:23	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/06/2013 05:44	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1

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

Sample Description: SL-533-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182125
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 10:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

533-2 SDG#: PH099-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132460637003	09/07/2013 01:05	John W Yanzuk II	5
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 16:09	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:49	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:49	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:44	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:49	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 11:07	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401A	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-530-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182126
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-0 SDG#: PH099-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.54	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	8.8		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	8.9		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	17		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	7.3	J	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	4.2		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	5.9		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	11		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.4	J	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	15		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	4.4		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	3.3		1.7	0.68	1
12969	Pyrene	129-00-0	13		1.7	0.68	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.0	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	2.4		1.7	0.33	1
10590	p,p-DDT	50-29-3	0.43	J	1.7	0.35	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.45	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1

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

Sample Description: SL-530-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182126
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-0 SDG#: PH099-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.5		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	14		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,600		40.3	7.26	1
06944	Antimony	7440-36-0	1.68	J	4.03	0.745	1
06935	Arsenic	7440-38-2	4.90		4.03	0.705	1
06946	Barium	7440-39-3	104		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.542	J	1.01	0.0675	1
07914	Boron	7440-42-8	5.27	J	10.1	0.846	1
06949	Cadmium	7440-43-9	0.430	J	1.01	0.0765	1
01650	Calcium	7440-70-2	2,610		20.1	3.36	1
06951	Chromium	7440-47-3	19.1		3.02	0.161	1
06952	Cobalt	7440-48-4	5.80		1.01	0.0997	1
06953	Copper	7440-50-8	10.4		2.01	0.292	1
01654	Iron	7439-89-6	21,500		40.3	3.65	1
06955	Lead	7439-92-1	6.96		3.02	0.504	1
01656	Lithium	7439-93-2	23.2		4.0	0.34	1
01657	Magnesium	7439-95-4	4,640		10.1	1.68	1
06958	Manganese	7439-96-5	336		1.01	0.0836	1
06960	Molybdenum	7439-98-7	0.336	J	2.01	0.171	1
06961	Nickel	7440-02-0	12.5		2.01	0.131	1
10145	Phosphorus	7723-14-0	432		10.1	2.91	1
01662	Potassium	7440-09-7	3,680		101	8.40	1
01667	Sodium	7440-23-5	111		101	16.8	1
06969	Tin	7440-31-5	3.39	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,420		1.01	0.171	1
06971	Vanadium	7440-62-2	37.6		1.01	0.131	1
06972	Zinc	7440-66-6	61.0		4.03	0.201	1
10146	Zirconium	7440-67-7	1.27	J	5.04	0.846	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-530-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182126
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-0 SDG#: PH099-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.109 J	0.403	0.101	2
06142	Silver	7440-22-4	0.0272 J	0.201	0.0262	2
06144	Strontium	7440-24-6	18.3	0.403	0.0685	2
06145	Thallium	7440-28-0	0.262	0.201	0.0302	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0187	0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.54	0.0100	0.0100	1
	The pH was measured in water at 20.8 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.7	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-530-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182126
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-0 SDG#: PH099-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0781	1
11031	12378-PeCDD	40321-76-4	0.423	JQ	5.08	0.0557	1
11031	123478-HxCDD	39227-28-6	0.565	JQ	5.08	0.0454	1
11031	123678-HxCDD	57653-85-7	1.50	J	5.08	0.0475	1
11031	123789-HxCDD	19408-74-3	1.42	JB	5.08	0.0453	1
11031	1234678-HpCDD	35822-46-9	31.5	B	5.08	0.0632	1
11031	OCDD	3268-87-9	478	B	10.2	0.0504	1
11031	2378-TCDF	51207-31-9	0.160	JQ	1.02	0.0711	1
11031	12378-PeCDF	57117-41-6	0.457	JBQ	5.08	0.0304	1
11031	23478-PeCDF	57117-31-4	0.316	JBQ	5.08	0.0318	1
11031	123478-HxCDF	70648-26-9	0.226	JB	5.08	0.0270	1
11031	123678-HxCDF	57117-44-9	0.243	JB	5.08	0.0237	1
11031	123789-HxCDF	72918-21-9	0.315	JBQ	5.08	0.0288	1
11031	234678-HxCDF	60851-34-5	0.263	J	5.08	0.0257	1
11031	1234678-HpCDF	67562-39-4	2.18	J	5.08	0.0138	1
11031	1234789-HpCDF	55673-89-7	0.238	JB	5.08	0.0235	1
11031	OCDF	39001-02-0	5.73	JB	10.2	0.0402	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.850				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-530-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182126
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-0 SDG#: PH099-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-530-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182126
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:15 by VC

Submitted: 08/31/2013 09:30
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-0 SDG#: PH099-09

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 12:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 15:58	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 19:11	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 09:52	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 11:19	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 16:14	Eric L Eby	1

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

Sample Description: SL-530-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182126
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:15 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-0 SDG#: PH099-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:52	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:52	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:46	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:52	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 11:09	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401A	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-530-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182127
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-2 SDG#: PH099-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.6
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.86	U	0.86	0.18	1
10590	Alpha BHC	319-84-6	0.86	U	0.86	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.86	U	0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.36	1
10590	Delta BHC	319-86-8	0.86	U	0.86	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.86	U	0.86	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.86	U	0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.86	U	0.86	0.18	1

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

Sample Description: SL-530-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182127
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-2 SDG#: PH099-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,100		40.8	7.36	1
06944	Antimony	7440-36-0	1.61	J	4.08	0.755	1
06935	Arsenic	7440-38-2	6.20		4.08	0.714	1
06946	Barium	7440-39-3	88.9		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.571	J	1.02	0.0684	1
07914	Boron	7440-42-8	4.56	J	10.2	0.857	1
06949	Cadmium	7440-43-9	0.305	J	1.02	0.0775	1
01650	Calcium	7440-70-2	2,920		20.4	3.41	1
06951	Chromium	7440-47-3	16.9		3.06	0.163	1
06952	Cobalt	7440-48-4	5.11		1.02	0.101	1
06953	Copper	7440-50-8	7.25		2.04	0.296	1
01654	Iron	7439-89-6	21,800		40.8	3.69	1
06955	Lead	7439-92-1	4.30		3.06	0.510	1
01656	Lithium	7439-93-2	28.6		4.1	0.35	1
01657	Magnesium	7439-95-4	4,600		10.2	1.70	1
06958	Manganese	7439-96-5	231		1.02	0.0847	1
06960	Molybdenum	7439-98-7	2.04	U	2.04	0.173	1
06961	Nickel	7440-02-0	10.2		2.04	0.133	1
10145	Phosphorus	7723-14-0	407		10.2	2.95	1
01662	Potassium	7440-09-7	2,360		102	8.51	1
01667	Sodium	7440-23-5	311		102	17.0	1
06969	Tin	7440-31-5	3.59	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,470		1.02	0.173	1

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

Sample Description: SL-530-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182127
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-2 SDG#: PH099-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	37.2	1.02	0.133	1
06972	Zinc	7440-66-6	56.1	4.08	0.204	1
10146	Zirconium	7440-67-7	1.35 J	5.10	0.857	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.408 U	0.408	0.102	2
06142	Silver	7440-22-4	0.0620 J	0.204	0.0265	2
06144	Strontium	7440-24-6	17.9	0.408	0.0694	2
06145	Thallium	7440-28-0	0.220	0.204	0.0306	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0163 U	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.77	0.0100	0.0100	1
	The pH was measured in water at 20.7 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.9	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-530-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182127
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-2 SDG#: PH099-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0969	JQ	1.02	0.0699	1
11031	12378-PeCDD	40321-76-4	0.350	J	5.08	0.0436	1
11031	123478-HxCDD	39227-28-6	0.110	JQ	5.08	0.0274	1
11031	123678-HxCDD	57653-85-7	0.128	JQ	5.08	0.0288	1
11031	123789-HxCDD	19408-74-3	0.132	JB	5.08	0.0280	1
11031	1234678-HpCDD	35822-46-9	0.145	JBQ	5.08	0.0277	1
11031	OCDD	3268-87-9	0.517	JB	10.2	0.0183	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0525	1
11031	12378-PeCDF	57117-41-6	0.314	JBQ	5.08	0.0246	1
11031	23478-PeCDF	57117-31-4	0.266	JB	5.08	0.0249	1
11031	123478-HxCDF	70648-26-9	0.199	JB	5.08	0.0184	1
11031	123678-HxCDF	57117-44-9	0.184	JBQ	5.08	0.0152	1
11031	123789-HxCDF	72918-21-9	0.124	JB	5.08	0.0219	1
11031	234678-HxCDF	60851-34-5	0.120	JQ	5.08	0.0170	1
11031	1234678-HpCDF	67562-39-4	0.0634	JQ	5.08	0.0113	1
11031	1234789-HpCDF	55673-89-7	0.0809	JBQ	5.08	0.0208	1
11031	OCDF	39001-02-0	0.134	JBQ	10.2	0.0356	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.476				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	97	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	56	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-530-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182127
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-2 SDG#: PH099-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-530-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182127
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-2 SDG#: PH099-10

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 12:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16A	09/05/2013 02:16	Laura M Krieger	26.6
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324332241	08/31/2013 17:51	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324332241	08/31/2013 17:51	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 16:14	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 19:30	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 08:26	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 12:16	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1

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

Sample Description: SL-530-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182127
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 13:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-2 SDG#: PH099-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 16:18	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:54	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:54	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:47	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:54	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 11:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401A	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-531-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182128
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:50 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

531-0 SDG#: PH099-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.86	U	0.86	0.18	1
10590	Alpha BHC	319-84-6	0.86	U	0.86	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.86	U	0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.36	1
10590	Delta BHC	319-86-8	0.86	U	0.86	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.86	U	0.86	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.86	U	0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.86	U	0.86	0.18	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1

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

Sample Description: SL-531-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182128
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:50 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

531-0 SDG#: PH099-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,400		40.8	7.36	1
06944	Antimony	7440-36-0	1.36	J	4.08	0.755	1
06935	Arsenic	7440-38-2	5.92		4.08	0.714	1
06946	Barium	7440-39-3	98.8		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.568	J	1.02	0.0684	1
07914	Boron	7440-42-8	4.78	J	10.2	0.857	1
06949	Cadmium	7440-43-9	0.339	J	1.02	0.0775	1
01650	Calcium	7440-70-2	2,640		20.4	3.41	1
06951	Chromium	7440-47-3	17.5		3.06	0.163	1
06952	Cobalt	7440-48-4	5.35		1.02	0.101	1
06953	Copper	7440-50-8	6.56		2.04	0.296	1
01654	Iron	7439-89-6	22,600		40.8	3.69	1
06955	Lead	7439-92-1	4.94		3.06	0.510	1
01656	Lithium	7439-93-2	27.0		4.1	0.35	1
01657	Magnesium	7439-95-4	4,970		10.2	1.70	1
06958	Manganese	7439-96-5	321		1.02	0.0847	1
06960	Molybdenum	7439-98-7	0.244	J	2.04	0.173	1
06961	Nickel	7440-02-0	11.2		2.04	0.133	1
10145	Phosphorus	7723-14-0	483		10.2	2.95	1
01662	Potassium	7440-09-7	2,940		102	8.51	1
01667	Sodium	7440-23-5	184		102	17.0	1
06969	Tin	7440-31-5	3.52	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,440		1.02	0.173	1
06971	Vanadium	7440-62-2	38.3		1.02	0.133	1
06972	Zinc	7440-66-6	57.1		4.08	0.204	1
10146	Zirconium	7440-67-7	1.27	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-531-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182128
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:50 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

531-0 SDG#: PH099-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.408 U	0.408	0.102	2
06142	Silver	7440-22-4	0.0269 J	0.204	0.0265	2
06144	Strontium	7440-24-6	17.3	0.408	0.0694	2
06145	Thallium	7440-28-0	0.216	0.204	0.0306	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169 U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.54	0.0100	0.0100	1
	The pH was measured in water at 21.1 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.9	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-531-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182128
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:50 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

531-0 SDG#: PH099-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.137	JQ	1.04	0.106	1
11031	12378-PeCDD	40321-76-4	0.370	JQ	5.19	0.0621	1
11031	123478-HxCDD	39227-28-6	0.122	JQ	5.19	0.0379	1
11031	123678-HxCDD	57653-85-7	0.175	JQ	5.19	0.0403	1
11031	123789-HxCDD	19408-74-3	0.174	JBQ	5.19	0.0375	1
11031	1234678-HpCDD	35822-46-9	0.765	JB	5.19	0.0431	1
11031	OCDD	3268-87-9	9.70	JB	10.4	0.0291	1
11031	2378-TCDF	51207-31-9	0.0843	JQ	1.04	0.0680	1
11031	12378-PeCDF	57117-41-6	0.430	JBQ	5.19	0.0322	1
11031	23478-PeCDF	57117-31-4	0.305	JBQ	5.19	0.0302	1
11031	123478-HxCDF	70648-26-9	0.143	JB	5.19	0.0233	1
11031	123678-HxCDF	57117-44-9	0.149	JBQ	5.19	0.0209	1
11031	123789-HxCDF	72918-21-9	0.111	JBQ	5.19	0.0245	1
11031	234678-HxCDF	60851-34-5	0.145	JQ	5.19	0.0213	1
11031	1234678-HpCDF	67562-39-4	0.0874	J	5.19	0.0153	1
11031	1234789-HpCDF	55673-89-7	0.0795	JB	5.19	0.0214	1
11031	OCDF	39001-02-0	0.255	JBQ	10.4	0.0405	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0265				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	93	23 - 140
13C12-OCDD	106	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	86	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	106	28 - 143
13C12-1234789-HpCDF	82	26 - 138
13C12-OCDF	89	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-531-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182128
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:50 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

531-0 SDG#: PH099-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-531-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182128
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:50 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

531-0 SDG#: PH099-11

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 13:33	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 16:29	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 19:48	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 08:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 13:13	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 16:22	Eric L Eby	1

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

Sample Description: SL-531-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182128
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:50 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

531-0 SDG#: PH099-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:56	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:56	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:49	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:56	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 11:18	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401A	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-532-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182129
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-0 SDG#: PH099-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.46	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	2.3		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	3.2		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	6.2		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	3.7	J	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	2.4		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	15		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.7	J	18	6.1	1
12969	Fluoranthene	206-44-0	7.7		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.6	J	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	0.93	J	1.7	0.68	1
12969	Naphthalene	91-20-3	1.3	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	4.7		1.7	0.68	1
12969	Pyrene	129-00-0	6.5		1.7	0.68	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.0	1
10590	p,p-DDD	72-54-8	0.54	J	1.7	0.33	1
10590	p,p-DDE	72-55-9	9.1		1.7	0.33	1
10590	p,p-DDT	50-29-3	2.7		1.7	0.35	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.45	1
10590	Dieldrin	60-57-1	0.69	J	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.26	J	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1

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

Sample Description: SL-532-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182129
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-0 SDG#: PH099-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	9.5		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	45		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,700		40.2	7.25	1
06944	Antimony	7440-36-0	1.22	J	4.02	0.744	1
06935	Arsenic	7440-38-2	4.64		4.02	0.704	1
06946	Barium	7440-39-3	102		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.606	J	1.01	0.0673	1
07914	Boron	7440-42-8	6.52	J	10.1	0.844	1
06949	Cadmium	7440-43-9	0.653	J	1.01	0.0764	1
01650	Calcium	7440-70-2	2,580		20.1	3.36	1
06951	Chromium	7440-47-3	22.6		3.02	0.161	1
06952	Cobalt	7440-48-4	5.99		1.01	0.0995	1
06953	Copper	7440-50-8	12.8		2.01	0.292	1
01654	Iron	7439-89-6	20,200		40.2	3.64	1
06955	Lead	7439-92-1	15.1		3.02	0.503	1
01656	Lithium	7439-93-2	18.7		4.0	0.34	1
01657	Magnesium	7439-95-4	3,960		10.1	1.68	1
06958	Manganese	7439-96-5	357		1.01	0.0834	1
06960	Molybdenum	7439-98-7	0.704	J	2.01	0.171	1
06961	Nickel	7440-02-0	13.8		2.01	0.131	1
10145	Phosphorus	7723-14-0	350		10.1	2.90	1
01662	Potassium	7440-09-7	3,630		101	8.38	1
01667	Sodium	7440-23-5	92.5	J	101	16.8	1
06969	Tin	7440-31-5	3.51	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,160		1.01	0.171	1
06971	Vanadium	7440-62-2	39.1		1.01	0.131	1
06972	Zinc	7440-66-6	67.6		4.02	0.201	1
10146	Zirconium	7440-67-7	1.96	J	5.03	0.844	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-532-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182129
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-0 SDG#: PH099-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.190 J	0.402	0.101	2
06142	Silver	7440-22-4	0.0406 J	0.201	0.0261	2
06144	Strontium	7440-24-6	25.8	0.402	0.0684	2
06145	Thallium	7440-28-0	0.247	0.201	0.0302	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0997	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.18	0.0100	0.0100	1
	The pH was measured in water at 21.3 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.5	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-532-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182129
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-0 SDG#: PH099-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.135	JQ	0.997	0.0644	1
11031	12378-PeCDD	40321-76-4	1.37	JQ	4.99	0.0637	1
11031	123478-HxCDD	39227-28-6	1.81	J	4.99	0.0410	1
11031	123678-HxCDD	57653-85-7	6.78		4.99	0.0418	1
11031	123789-HxCDD	19408-74-3	4.32	JB	4.99	0.0403	1
11031	1234678-HpCDD	35822-46-9	185	B	4.99	0.0948	1
11031	OCDD	3268-87-9	2,690	B	9.97	0.0801	1
11031	2378-TCDF	51207-31-9	0.549	J	0.997	0.103	1
11031	12378-PeCDF	57117-41-6	0.916	JB	4.99	0.0410	1
11031	23478-PeCDF	57117-31-4	1.23	JB	4.99	0.0400	1
11031	123478-HxCDF	70648-26-9	0.717	JB	4.99	0.0332	1
11031	123678-HxCDF	57117-44-9	0.773	JB	4.99	0.0308	1
11031	123789-HxCDF	72918-21-9	0.626	JB	4.99	0.0348	1
11031	234678-HxCDF	60851-34-5	1.11	J	4.99	0.0323	1
11031	1234678-HpCDF	67562-39-4	16.9		4.99	0.0227	1
11031	1234789-HpCDF	55673-89-7	1.25	JB	4.99	0.0294	1
11031	OCDF	39001-02-0	57.0	B	9.97	0.0399	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	4.91				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	102	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	92	24 - 185
13C12-23478-PeCDF	87	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	82	26 - 138
13C12-OCDF	85	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-532-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182129
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-0 SDG#: PH099-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-532-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182129
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:20 by VC

Submitted: 08/31/2013 09:30
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-0 SDG#: PH099-12

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/13/2013 03:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 16:44	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 20:06	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 10:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 14:09	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 16:26	Eric L Eby	1

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

Sample Description: SL-532-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182129
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:20 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-0 SDG#: PH099-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 22:59	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 22:59	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:51	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 22:59	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 11:20	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401A	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-532-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182130
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-2 SDG#: PH099-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of:
naphthalene .74 ug/kg
was detected in the re-analysis

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1

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

Sample Description: SL-532-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182130
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-2 SDG#: PH099-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	34	U	34	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,500		41.1	7.40	1
06944	Antimony	7440-36-0	1.26	J	4.11	0.760	1
06935	Arsenic	7440-38-2	5.42		4.11	0.719	1
06946	Barium	7440-39-3	105		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.376	J	1.03	0.0688	1
07914	Boron	7440-42-8	4.20	J	10.3	0.862	1
06949	Cadmium	7440-43-9	0.327	J	1.03	0.0780	1
01650	Calcium	7440-70-2	2,570		20.5	3.43	1
06951	Chromium	7440-47-3	14.5		3.08	0.164	1
06952	Cobalt	7440-48-4	4.76		1.03	0.102	1
06953	Copper	7440-50-8	5.25		2.05	0.298	1
01654	Iron	7439-89-6	19,600		41.1	3.72	1
06955	Lead	7439-92-1	4.02		3.08	0.513	1
01656	Lithium	7439-93-2	24.5		4.1	0.35	1

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

Sample Description: SL-532-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182130
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-2 SDG#: PH099-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,410		10.3	1.71	1
06958	Manganese	7439-96-5	308		1.03	0.0852	1
06960	Molybdenum	7439-98-7	0.193	J	2.05	0.175	1
06961	Nickel	7440-02-0	9.80		2.05	0.133	1
10145	Phosphorus	7723-14-0	424		10.3	2.97	1
01662	Potassium	7440-09-7	2,350		103	8.56	1
01667	Sodium	7440-23-5	198		103	17.1	1
06969	Tin	7440-31-5	3.35	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,360		1.03	0.175	1
06971	Vanadium	7440-62-2	33.2		1.03	0.133	1
06972	Zinc	7440-66-6	52.8		4.11	0.205	1
10146	Zirconium	7440-67-7	5.13	U	5.13	0.862	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.411	U	0.411	0.103	2
06142	Silver	7440-22-4	0.205	U	0.205	0.0267	2
06144	Strontium	7440-24-6	13.7		0.411	0.0698	2
06145	Thallium	7440-28-0	0.209		0.205	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.88		0.0100	0.0100	1
	The pH was measured in water at 20.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-532-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182130
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-2 SDG#: PH099-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0701	1
11031	12378-PeCDD	40321-76-4	0.0995	JQ	5.23	0.0382	1
11031	123478-HxCDD	39227-28-6	5.23	U	5.23	0.0234	1
11031	123678-HxCDD	57653-85-7	0.0336	JQ	5.23	0.0243	1
11031	123789-HxCDD	19408-74-3	0.0540	JBQ	5.23	0.0232	1
11031	1234678-HpCDD	35822-46-9	0.229	JB	5.23	0.0316	1
11031	OCDD	3268-87-9	1.34	JB	10.5	0.0235	1
11031	2378-TCDF	51207-31-9	1.05	U	1.05	0.0448	1
11031	12378-PeCDF	57117-41-6	0.0718	JB	5.23	0.0229	1
11031	23478-PeCDF	57117-31-4	0.0594	JBQ	5.23	0.0225	1
11031	123478-HxCDF	70648-26-9	0.0733	JBQ	5.23	0.0159	1
11031	123678-HxCDF	57117-44-9	0.0313	JBQ	5.23	0.0134	1
11031	123789-HxCDF	72918-21-9	0.0354	JBQ	5.23	0.0174	1
11031	234678-HxCDF	60851-34-5	0.0647	J	5.23	0.0148	1
11031	1234678-HpCDF	67562-39-4	0.0468	JQ	5.23	0.0150	1
11031	1234789-HpCDF	55673-89-7	0.0465	JB	5.23	0.0257	1
11031	OCDF	39001-02-0	0.176	JB	10.5	0.0359	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0119				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	98	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	111	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-532-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182130
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-2 SDG#: PH099-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-532-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182130
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-2 SDG#: PH099-13*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLF026	09/12/2013 14:07	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLF026	09/09/2013 11:45	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16A	09/05/2013 02:54	Laura M Krieger	26.1
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324332241	08/31/2013 17:52	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 17:00	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132470010A	09/05/2013 20:25	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132470010A	09/04/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132490038A	09/10/2013 09:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132490038A	09/09/2013 11:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13253001	09/13/2013 15:06	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13253001	09/10/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1

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

Sample Description: SL-532-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7182130
LL Group # 1415626
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/30/2013 12:30 by VC

Submitted: 08/31/2013 09:30
Reported: 09/23/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

532-2 SDG#: PH099-13*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06971	Vanadium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132460637003	09/04/2013 16:30	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132460637003B	09/04/2013 23:01	David K Beck	2
06142	Silver	SW-846 6020A	1	132460637003A	09/04/2013 23:01	David K Beck	2
06144	Strontium	SW-846 6020A	1	132460637003A	09/11/2013 01:52	David K Beck	2
06145	Thallium	SW-846 6020A	1	132460637003A	09/04/2013 23:01	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132460638001	09/04/2013 11:22	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132460637003	09/03/2013 22:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132460638001	09/04/2013 03:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13243039401A	08/31/2013 11:30	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401A	09/10/2013 22:35	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415626
Reported: 09/23/13 at 02:13 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13249SLF026	Sample number(s): 7182116-7182120,7182122-7182130									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	105		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	106		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	112		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	104		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	116		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	118		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	108		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	111		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	108		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	108		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	106		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	106		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	105		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	105		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	123		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	118		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	102		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	97		79-112		
Batch number: 13247A16A	Sample number(s): 7182117,7182123,7182125,7182127,7182130									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	88	79	67-119	12	30
Batch number: 13248A20A	Sample number(s): 7182115									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	102	75-135	4	30
Batch number: 132470010A	Sample number(s): 7182116-7182120,7182122-7182130									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	83	80	36-106	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415626
Reported: 09/23/13 at 02:13 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	109		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132480022A	Sample number(s): 7182118-7182120,7182122-7182130									
Aldrin	0.83	U	0.83	0.17	ug/kg	77		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	91		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	82		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	89		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	100		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	84		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	95		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	72		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	102		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	94		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	85		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	89		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	92		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	84		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	92		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	94		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	85		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	101		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132490038A	Sample number(s): 7182116-7182120,7182122-7182130									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	94		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	99		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	99		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	103		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 132460637003	Sample number(s): 7182116-7182130									
Aluminum	7.58	J	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	108		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	102		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	1.08	J	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		
Calcium	14.9	J	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	104		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	103		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	104		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	103		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	106		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	107		80-120		
Potassium	100	U	100.	8.34	mg/kg	103		80-120		

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415626
Reported: 09/23/13 at 02:13 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.96	J	10.0	0.220	mg/kg	104		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	106		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	100		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	106		80-120		
Batch number: 132460637003A	Sample number(s): 7182116-7182130									
Silver	0.200	U	0.200	0.0260	mg/kg	102		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	101		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	103		80-120		
Batch number: 132460637003B	Sample number(s): 7182116-7182130									
Selenium	0.400	U	0.400	0.100	mg/kg	106		80-120		
Batch number: 132460638001	Sample number(s): 7182116-7182130									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	109		85-120		
Batch number: 13243039401A	Sample number(s): 7182116,7182118,7182121,7182124-7182130									
15a pH by 9045D						100		95-105		
Batch number: 13243039401B	Sample number(s): 7182117,7182122-7182123									
15a pH by 9045D						100		95-105		
Batch number: 13253162401A	Sample number(s): 7182116-7182130									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13253001	Sample number(s): 7182116,7182118-7182120,7182122,7182124-7182130									
2378-TCDD	1.00	U	1.00	0.0769	ng/kg	98		67-158		
12378-PeCDD	5.00	U	5.00	0.0472	ng/kg	90		70-142		
123478-HxCDD	5.00	U	5.00	0.0244	ng/kg	91		70-164		
123678-HxCDD	5.00	U	5.00	0.0253	ng/kg	90		76-134		
123789-HxCDD	0.0431	J	5.00	0.0240	ng/kg	90		64-162		
1234678-HpCDD	0.0813	J	5.00	0.0252	ng/kg	92		70-140		
OCDD	0.222	J	10.0	0.0229	ng/kg	89		78-144		
2378-TCDF	1.00	U	1.00	0.0565	ng/kg	89		75-158		
12378-PeCDF	0.0725	J	5.00	0.0268	ng/kg	86		80-134		
23478-PeCDF	0.0532	J	5.00	0.0278	ng/kg	87		68-160		
123478-HxCDF	0.0547	J	5.00	0.0179	ng/kg	88		72-134		
123678-HxCDF	0.0479	J	5.00	0.0154	ng/kg	89		84-130		
123789-HxCDF	0.0751	J	5.00	0.0209	ng/kg	87		78-130		
234678-HxCDF	5.00	U	5.00	0.0164	ng/kg	88		70-156		
1234678-HpCDF	5.00	U	5.00	0.00820	ng/kg	85		82-122		
1234789-HpCDF	0.0735	J	5.00	0.0142	ng/kg	85		78-138		
OCDF	0.141	J	10.0	0.0437	ng/kg	87		63-170		
TEQ WHO 2005 - EDLx0.0	0.000800				ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415626
Reported: 09/23/13 at 02:13 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13249SLF026	Sample number(s): 7182116-7182120,7182122-7182130 UNSPK: 7182118								
Acenaphthene	93	95	48-127	1	30				
Acenaphthylene	99	98	49-121	0	30				
Anthracene	99	100	52-126	1	30				
Benzo(a)anthracene	96	96	44-143	0	30				
Benzo(a)pyrene	98	98	44-140	0	30				
Benzo(b)fluoranthene	100	102	26-142	1	30				
Benzo(e)pyrene	88	88	70-130	0	30				
Benzo(g,h,i)perylene	88	87	33-141	2	30				
Benzo(k)fluoranthene	103	101	54-142	2	30				
Butylbenzylphthalate	110	110	49-151	0	30				
Di-n-butylphthalate	111	114	52-147	2	30				
Chrysene	94	93	29-148	2	30				
Dibenz(a,h)anthracene	99	97	20-137	2	30				
Diethylphthalate	104	115	43-145	10	30				
Dimethylphthalate	100	100	58-129	0	30				
Bis(2-Ethylhexyl)phthalate	106	112	39-167	6	30				
Fluoranthene	99	99	40-148	0	30				
Fluorene	95	96	51-137	1	30				
Indeno(1,2,3-cd)pyrene	95	94	17-136	2	30				
1-Methylnaphthalene	99	97	50-131	3	30				
2-Methylnaphthalene	101	96	35-152	6	30				
Naphthalene	102	96	31-148	7	30				
N-Nitrosodimethylamine	111	108	48-113	3	30				
Di-n-octylphthalate	110	111	52-162	1	30				
Phenanthrene	95	96	29-142	1	30				
Pyrene	89	88	26-143	1	30				
Batch number: 132470010A	Sample number(s): 7182116-7182120,7182122-7182130 UNSPK: 7182118								
PCB-1016	91	96	16-146	6	50				
PCB-1260	104	113	40-134	9	50				
Batch number: 132480022A	Sample number(s): 7182118-7182120,7182122-7182130 UNSPK: 7182118								
Aldrin	82	88	16-126	7	50				
Alpha BHC	94	102	14-140	8	50				
Beta BHC	86	92	42-133	7	50				
Gamma BHC - Lindane	93	101	30-137	8	50				
p,p-DDD	106	114	43-149	7	50				
p,p-DDE	88	95	35-152	8	50				
p,p-DDT	103	109	12-193	6	50				
Delta BHC	87	93	13-153	7	50				
Dieldrin	107	116	41-153	8	50				
Endosulfan I	99	107	26-146	7	50				
Endosulfan II	85	90	34-141	7	50				
Endosulfan Sulfate	95	100	10-181	6	50				

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415626
Reported: 09/23/13 at 02:13 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Endrin	100	106	30-152	6	50				
Endrin Aldehyde	85	91	23-138	7	35				
Endrin Ketone	93	99	30-148	5	50				
Heptachlor	100	108	16-152	8	50				
Heptachlor Epoxide	89	95	33-144	7	50				
Methoxychlor	105	109	41-161	4	50				
Batch number: 132490038A	Sample number(s): 7182116-7182120,7182122-7182130 UNSPK: 7182118								
EFH (C12-C14)	93	88	49-123	5	20				
EFH (C15-C20)	115	103	49-123	10	20				
EFH (C21-C30)	113	102	49-123	9	20				
EFH (C30-C40)	98	97	49-123	0	20				
EFH (C8-C11)	82	76	49-123	6	20				
Batch number: 132460637003	Sample number(s): 7182116-7182130 UNSPK: 7182118 BKG: 7182118								
Aluminum	1928 (2)	1251 (2)	75-125	7	20	16,300	16,100	1	20
Antimony	73*	71*	75-125	3	20	1.94 J	2.10 J	8 (1)	20
Arsenic	94	94	75-125	0	20	7.97	7.67	4 (1)	20
Barium	104	99	75-125	3	20	120	115	4	20
Beryllium	100	98	75-125	2	20	0.775 J	0.739 J	5 (1)	20
Boron	96	96	75-125	0	20	7.31 J	5.66 J	26* (1)	20
Cadmium	95	95	75-125	0	20	0.467 J	0.427 J	9 (1)	20
Calcium	179 (2)	154 (2)	75-125	2	20	3,430	3,430	0	20
Chromium	104	100	75-125	2	20	24.5	23.0	6	20
Cobalt	95	94	75-125	1	20	8.64	8.37	3	20
Copper	100	100	75-125	0	20	13.8	13.4	3	20
Iron	1217 (2)	101 (2)	75-125	4	20	30,500	29,100	5	20
Lead	91	92	75-125	1	20	9.25	8.68	6 (1)	20
Lithium	103	99	75-125	2	20	38.1	37.8	1	20
Magnesium	214 (2)	170 (2)	75-125	1	20	5,740	5,670	1	20
Manganese	61 (2)	75 (2)	75-125	2	20	403	387	4	20
Molybdenum	97	96	75-125	1	20	0.574 J	0.320 J	57* (1)	20
Nickel	96	95	75-125	1	20	15.6	15.4	2	20
Phosphorus	102 (2)	112 (2)	75-125	2	20	514	521	1	20
Potassium	156*	151*	75-125	1	20	2,760	2,770	0	20
Sodium	100	97	75-125	2	20	154	151	2 (1)	20
Tin	92	91	75-125	1	20	4.08 J	4.11 J	1 (1)	20
Titanium	449 (2)	474 (2)	75-125	1	20	1,560	1,530	1	20
Vanadium	100	98	75-125	1	20	47.8	45.8	4	20
Zinc	97	97	75-125	0	20	74.6	73.2	2	20
Zirconium	101	100	75-125	1	20	2.03 J	3.94 J	64* (1)	20
Batch number: 132460637003A	Sample number(s): 7182116-7182130 UNSPK: 7182118 BKG: 7182118								
Silver	101	100	75-125	1	20	0.196 U	0.196 U	0 (1)	20
Strontium	96	102	75-125	2	20	20.9	20.7	1	20
Thallium	94	102	75-125	5	20	0.306	0.299	3 (1)	20
Batch number: 132460637003B	Sample number(s): 7182116-7182130 UNSPK: 7182118 BKG: 7182118								
Selenium	99	98	75-125	1	20	0.186 J	0.231 J	22* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415626
Reported: 09/23/13 at 02:13 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132460638001	Sample number(s): 7182116-7182130 UNSPK: 7182118 BKG: 7182118								
3a Mercury 7471A	119	117	65-135	1	20	0.0166 U	0.0163 U	0 (1)	20
Batch number: 13243039401A	Sample number(s): 7182116,7182118,7182121,7182124-7182130 BKG: 7182118								
15a pH by 9045D						6.34	6.31	0	3
Batch number: 13243039401B	Sample number(s): 7182117,7182122-7182123 BKG: 7182117								
15a pH by 9045D						7.67	7.62	1	3
Batch number: 13253162401A	Sample number(s): 7182116-7182130 BKG: 7182118								
14a Moisture Content by 160.3						3.7	3.4	10	20
14a Moisture Content by 160.3						3.7	3.4	10	20
14a Moisture Content by 160.3						3.7	3.4	10	20
Batch number: 13253001	Sample number(s): 7182116,7182118-7182120,7182122,7182124-7182130 UNSPK: 7182118								
2378-TCDD	94	103	40-135	7	20				
12378-PeCDD	101	100	40-135	2	20				
123478-HxCDD	97	97	40-135	1	20				
123678-HxCDD	96	96	40-135	1	20				
123789-HxCDD	95	99	40-135	2	20				
1234678-HpCDD	95	96	40-135	0	20				
OCDD	98	95	40-135	4	20				
2378-TCDF	93	102	40-135	8	20				
12378-PeCDF	90	89	40-135	2	20				
23478-PeCDF	88	90	40-135	1	20				
123478-HxCDF	90	88	40-135	3	20				
123678-HxCDF	88	90	40-135	1	20				
123789-HxCDF	90	88	40-135	3	20				
234678-HxCDF	91	88	40-135	4	20				
1234678-HpCDF	87	87	40-135	1	20				
1234789-HpCDF	88	90	40-135	1	20				
OCDF	89	87	40-135	3	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13249SLF026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7182116	89	95	100
7182117	82	89	92
7182118	86	93	95
7182119	89	96	96
7182120	89	95	95
7182122	77	81	85

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415626
Reported: 09/23/13 at 02:13 PM

Surrogate Quality Control

7182123	87	97	100
7182124	88	87	99
7182125	61	68	68
7182126	92	93	100
7182127	87	94	100
7182128	87	96	97
7182129	79	81	89
7182130	71	34*	96
Blank	91	100	98
LCS	93	103	104
MS	89	96	96
MSD	89	95	95
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13247A16A

	Trifluorotoluene-F
7182117	66
7182123	65
7182125	78
7182127	70
7182130	70
Blank	81
LCS	82
LCSD	73
Limits:	50-142

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13248A20A

	Trifluorotoluene-F
7182115	88
Blank	88
LCS	125
LCSD	125
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132470010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7182116	97	96
7182117	104	106
7182118	107	108
7182119	95	103
7182120	100	106
7182122	101	102
7182123	103	106
7182124	97	96
7182125	102	104
7182126	100	104
7182127	104	107

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415626
Reported: 09/23/13 at 02:13 PM

Surrogate Quality Control

7182128	110	111
7182129	101	99
7182130	107	109
Blank	103	102
LCS	102	102
LCSD	102	109
MS	95	103
MSD	100	106
Limits:	45-120	45-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132480022A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7182118	85	103
7182119	80	100
7182120	88	103
7182122	83	101
7182123	82	101
7182124	80	96
7182125	86	99
7182126	90	104
7182127	87	101
7182128	87	106
7182129	81	92
7182130	87	98
Blank	80	101
LCS	80	100
MS	80	100
MSD	88	103
Limits:	50-130	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132490038A

	Chlorobenzene	Orthoterphenyl
7182116	110	96
7182117	110	91
7182118	106	95
7182119	110	93
7182120	103	90
7182122	105	92
7182123	112	95
7182124	107	92
7182125	107	92
7182126	105	93
7182127	110	95
7182128	107	95
7182129	93	85
7182130	109	97
Blank	109	98
LCS	106	95
MS	110	93
MSD	103	90

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415626
Reported: 09/23/13 at 02:13 PM

Surrogate Quality Control

Limits: 37-125 66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13253001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7182116	68	72	61	70	61	57
7182118	57	65	56	64	58	52
7182119	60	71	63	72	68	63
7182120	58	71	64	73	67	58
7182122	64	78	58	63	61	56
7182124	68	80	69	75	69	61
7182125	58	68	56	65	61	53
7182126	62	72	64	71	66	62
7182127	64	74	63	74	65	56
7182128	66	86	74	80	74	68
7182129	72	87	76	79	77	74
7182130	65	79	69	79	73	65
Blank	66	70	62	71	66	57
MS	60	71	63	72	68	63
MSD	58	71	64	73	67	58
OPR	59	60	58	63	61	55
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7182116	94	63	65	74	74	75
7182118	96	59	64	66	68	69
7182119	95	64	72	71	73	73
7182120	100	66	105	72	75	76
7182122	101	68	72	75	76	78
7182124	99	73	75	78	76	74
7182125	102	61	63	71	75	73
7182126	98	65	69	69	69	70
7182127	98	59	69	76	76	76
7182128	106	82	89	82	81	78
7182129	94	82	85	79	78	78
7182130	111	69	72	82	78	79
Blank	102	67	70	74	81	81
MS	95	64	72	71	73	73
MSD	100	66	105	72	75	76
OPR	85	59	64	73	73	74
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7182116	73	84	94	62	80
7182118	67	80	94	58	75
7182119	72	82	95	59	77
7182120	74	87	145	59	78
7182122	76	88	102	67	84
7182124	74	89	99	68	84
7182125	74	86	95	56	75

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415626
Reported: 09/23/13 at 02:13 PM

Surrogate Quality Control

7182126	71	78	90	61	80
7182127	75	84	97	62	82
7182128	78	93	106	68	89
7182129	78	90	102	79	92
7182130	78	85	98	67	87
Blank	81	94	103	62	79
MS	72	82	95	59	77
MSD	74	87	145	59	78
OPR	73	79	91	54	63
Limits:	28-130	23-140	17-157	24-169	24-185

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(2) The unspiked result was more than four times the spike added.

acct# 13013 Cap# 1415626 Sample# 7182115-30

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/30/2013
CarrierName: FedEx
AirbillNo: 796590040023

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130830-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-083013	8/30/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-534-SA5D-SB-0.0-0.5	8/30/13 09:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-534-SA5D-SB-0.0-0.5	8/30/13 09:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-534-SA5D-SB-6.5-7.5	8/30/13 09:20	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											
SL-534-SA5D-SB-6.5-7.5	8/30/13 09:20	SO	None	2 - Encore	10 day																			X												
SL-535-SA5D-SB-0.0-0.5MS	8/30/13 08:10	SO	None	6 - SS-Sleeve	10 day	X	X					X		X	X							X			X											MS/MSD
SL-535-SA5D-SB-0.0-0.5MS	8/30/13 08:10	SO	None	1 - 8 oz glass	10 day													X																		MS/MSD
SL-835-SA5D-SB-0.0-0.5	8/30/13 08:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X			X											
SL-835-SA5D-SB-0.0-0.5	8/30/13 08:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-535-SA5D-SB-2.0-3.0	8/30/13 08:30	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X				X			X											
SL-535-SA5D-SB-2.0-3.0	8/30/13 08:30	SO	None	2 - Encore	10 day																			X												
SL-533-SA5D-SB-0.0-0.5	8/30/13 10:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X			X											
SL-533-SA5D-SB-0.0-0.5	8/30/13 10:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-533-SA5D-SB-2.5-3.5	8/30/13 10:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X				X			X											
SL-533-SA5D-SB-2.5-3.5	8/30/13 10:30	SO	None	2 - Encore	10 day																			X												
SL-530-SA5D-SB-2.5-3.5	8/30/13 13:30	SO	None	2 - Encore	10 day																			X												
SL-532-SA5D-SB-2.5-3.5	8/30/13 12:30	SO	None	2 - Encore	10 day																			X												

acct# 13013 Gp# 1415626 Sample# 7182115-30

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped:	8/30/2013	Contact Name:	Pam Hartman	COC No:	20130830-01
CarrierName:	FedEx	Contact Phone:	(818)466-8007	Cooler #:	1
AirbillNo:	796590040023			Lab:	Lancaster
				Lab Phone:	717-556-7259
				Lab Address	2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Joe Myers	08/30/2013	1600									
										8-31-13	0930

COC Rev 2

COC: 20130830-01, Page 2 of 2

acct# 13013 Gp# 1415626 sample# 7182115-30

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/30/2013
CarrierName: FedEx
AirbillNo: 796590040023

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130830-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-530-SA5D-SB-0.0-0.5	8/30/13 13:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X				X											
SL-530-SA5D-SB-0.0-0.5	8/30/13 13:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-530-SA5D-SB-2.5-3.5	8/30/13 13:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X			X				X											
SL-531-SA5D-SB-0.0-0.5	8/30/13 12:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X				X											
SL-531-SA5D-SB-0.0-0.5	8/30/13 12:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-532-SA5D-SB-0.0-0.5	8/30/13 12:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X				X											
SL-532-SA5D-SB-0.0-0.5	8/30/13 12:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-532-SA5D-SB-2.5-3.5	8/30/13 12:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X			X				X											

Special Instructions:

Sampler: V. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[signature]	8/30/2013	1600									
									[signature]	8/31/13	0930

COC Rev 2

COC: 20130830-02, Page 1 of 1

eurofins | Lancaster Laboratories

C# 1415626

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 8-31-13

Time of Receipt: 0930

Source Code: 5

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT(B)	1.0	TB	WI	Y	B	
2	↓	1.4	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: _____

Paperwork Discrepancy/Unpacking Problems:

SL-532-SA5D-SB-2.5-3.5 is labeled SL-552-SA5D-SB-2.5-3.5

Unpacker Signature/Emp#: 5200 **Date/Time:** 8-31-13 1045

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH100

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 24, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/04/2013
Group Number: 1416159
SDG: PH100
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-090313 Water	7184683
SL-525-SA5D-SB-0.0-0.5 Soil	7184684
SL-525-SA5D-SB-2.5-3.5 Soil	7184685
SL-527-SA5D-SB-0.0-0.5 Soil	7184686
SL-527-SA5D-SB-4.0-5.0 Soil	7184687
SL-528-SA5D-SB-0.0-0.5 Soil	7184688
SL-528-SA5D-SB-2.5-3.5 Soil	7184689
SL-540-SA5D-SB-0.0-0.5 Soil	7184690
SL-540-SA5D-SB-5.0-6.0 Soil	7184691
SL-541-SA5D-SB-0.0-0.5 Soil	7184692
SL-541-SA5D-SB-2.5-3.5 Soil	7184693
SL-545-SA5D-SB-0.0-0.5 Soil	7184694
SL-545-SA5D-SB-6.0-7.0 Soil	7184695

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

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-090313 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7184683
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 08:00

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB100 SDG#: PH100-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13248A20A	09/05/2013 21:56	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13248A20A	09/05/2013 21:56	Catherine J Schwarz	1

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

Sample Description: SL-525-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184684
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:15 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH100-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	17	U	17	7.0	10
12969	Acenaphthylene	208-96-8	17	U	17	3.5	10
12969	Anthracene	120-12-7	17	U	17	3.5	10
12969	Benzo(a)anthracene	56-55-3	17	U	17	7.0	10
12969	Benzo(a)pyrene	50-32-8	17	U	17	7.0	10
12969	Benzo(b)fluoranthene	205-99-2	17	U	17	7.0	10
12969	Benzo(e)pyrene	192-97-2	180	U	180	35	10
12969	Benzo(g,h,i)perylene	191-24-2	17	U	17	7.0	10
12969	Benzo(k)fluoranthene	207-08-9	17	U	17	7.0	10
12969	Butylbenzylphthalate	85-68-7	190	U	190	63	10
12969	Di-n-butylphthalate	84-74-2	190	U	190	63	10
12969	Chrysene	218-01-9	15	J	17	3.5	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	7.0	10
12969	Diethylphthalate	84-66-2	190	U	190	63	10
12969	Dimethylphthalate	131-11-3	190	U	190	63	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	63	10
12969	Fluoranthene	206-44-0	17	U	17	7.0	10
12969	Fluorene	86-73-7	17	U	17	7.0	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	7.0	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	7.0	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	7.0	10
12969	Naphthalene	91-20-3	17	U	17	7.0	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	7.0	10
12969	Di-n-octylphthalate	117-84-0	190	U	190	63	10
12969	Phenanthrene	85-01-8	17	U	17	7.0	10
12969	Pyrene	129-00-0	17	U	17	7.0	10
Reporting limits were raised due to interference from the sample matrix.							
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.86	U	0.86	0.18	1
10590	Alpha BHC	319-84-6	0.86	U	0.86	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.86	U	0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.36	1
10590	Delta BHC	319-86-8	0.86	U	0.86	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.86	U	0.86	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.86	U	0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.86	U	0.86	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	15	1

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

Sample Description: SL-525-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184684
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:15 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH100-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	6.1		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	21		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,600		41.8	7.53	1
06944	Antimony	7440-36-0	1.86	J	4.18	0.772	1
06935	Arsenic	7440-38-2	5.26		4.18	0.731	1
06946	Barium	7440-39-3	112		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.743	J	1.04	0.0699	1
07914	Boron	7440-42-8	8.04	J	10.4	0.877	1
06949	Cadmium	7440-43-9	0.547	J	1.04	0.0793	1
01650	Calcium	7440-70-2	3,070		20.9	3.49	1
06951	Chromium	7440-47-3	24.1		3.13	0.167	1
06952	Cobalt	7440-48-4	7.12		1.04	0.103	1
06953	Copper	7440-50-8	12.7		2.09	0.303	1
01654	Iron	7439-89-6	22,700		41.8	3.78	1
06955	Lead	7439-92-1	6.91		3.13	0.522	1
01656	Lithium	7439-93-2	20.1		4.2	0.35	1
01657	Magnesium	7439-95-4	4,320		10.4	1.74	1
06958	Manganese	7439-96-5	352		1.04	0.0866	1
06960	Molybdenum	7439-98-7	0.467	J	2.09	0.177	1
06961	Nickel	7440-02-0	15.3		2.09	0.136	1
10145	Phosphorus	7723-14-0	300		10.4	3.02	1
01662	Potassium	7440-09-7	3,760		104	8.71	1
01667	Sodium	7440-23-5	95.0	J	104	17.4	1
06969	Tin	7440-31-5	3.37	J	10.4	0.230	1
06970	Titanium	7440-32-6	1,210		1.04	0.177	1
06971	Vanadium	7440-62-2	43.3		1.04	0.136	1
06972	Zinc	7440-66-6	53.3		4.18	0.209	1
10146	Zirconium	7440-67-7	2.73	J	5.22	0.877	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-525-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184684
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:15 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH100-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.189 J	0.418	0.104	2
06142	Silver	7440-22-4	0.0277 J	0.209	0.0271	2
06144	Strontium	7440-24-6	25.6	0.418	0.0710	2
06145	Thallium	7440-28-0	0.305	0.209	0.0313	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167 U	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.32	0.0100	0.0100	1
	The pH was measured in water at 21.5 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-525-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184684
LL Group # 1416159
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH100-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.996	U	0.996	0.0534	1
11031	12378-PeCDD	40321-76-4	0.212	JQ	4.98	0.0497	1
11031	123478-HxCDD	39227-28-6	0.201	JBQ	4.98	0.0541	1
11031	123678-HxCDD	57653-85-7	1.27	J	4.98	0.0556	1
11031	123789-HxCDD	19408-74-3	1.42	JB	4.98	0.0524	1
11031	1234678-HpCDD	35822-46-9	11.7	B	4.98	0.0571	1
11031	OCDD	3268-87-9	197	B	9.96	0.0471	1
11031	2378-TCDF	51207-31-9	0.153	JQ	0.996	0.0796	1
11031	12378-PeCDF	57117-41-6	0.578	JB	4.98	0.0361	1
11031	23478-PeCDF	57117-31-4	0.543	JB	4.98	0.0341	1
11031	123478-HxCDF	70648-26-9	0.199	JBQ	4.98	0.0304	1
11031	123678-HxCDF	57117-44-9	0.271	JB	4.98	0.0287	1
11031	123789-HxCDF	72918-21-9	0.827	JBQ	4.98	0.0316	1
11031	234678-HxCDF	60851-34-5	0.260	JB	4.98	0.0279	1
11031	1234678-HpCDF	67562-39-4	1.74	JB	4.98	0.0215	1
11031	1234789-HpCDF	55673-89-7	0.249	JBQ	4.98	0.0257	1
11031	OCDF	39001-02-0	4.47	JB	9.96	0.0467	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.696				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	101	17 - 157
13C12-2378-TCDF	88	24 - 169
13C12-12378-PeCDF	93	24 - 185
13C12-23478-PeCDF	93	21 - 178
13C12-123478-HxCDF	95	26 - 152
13C12-123678-HxCDF	97	26 - 123
13C12-234678-HxCDF	96	28 - 136
13C12-123789-HxCDF	95	29 - 147
13C12-1234678-HpCDF	103	28 - 143
13C12-1234789-HpCDF	100	26 - 138
13C12-OCDF	111	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-525-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184684
LL Group # 1416159
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH100-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-525-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184684
LL Group # 1416159
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Project Name: SSFL Phase 3 Sampling

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3201 Jermantown Road
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Fairfax VA 22030

52500 SDG#: PH100-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 07:27	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 17:15	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/10/2013 21:18	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 21:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/14/2013 09:17	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 05:21	Tara L Snyder	1

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

Sample Description: SL-525-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184684
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:15 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH100-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:30	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:30	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:30	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:30	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 08:38	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401A	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-525-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184685
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:25 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52525 SDG#: PH100-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.8
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1

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

Sample Description: SL-525-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184685
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:25 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52525 SDG#: PH100-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,400		42.0	7.56	1
06944	Antimony	7440-36-0	1.34	J	4.20	0.776	1
06935	Arsenic	7440-38-2	6.29		4.20	0.734	1
06946	Barium	7440-39-3	69.2		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.380	J	1.05	0.0703	1
07914	Boron	7440-42-8	4.74	J	10.5	0.881	1
06949	Cadmium	7440-43-9	0.344	J	1.05	0.0797	1
01650	Calcium	7440-70-2	2,920		21.0	3.50	1
06951	Chromium	7440-47-3	18.5		3.15	0.168	1
06952	Cobalt	7440-48-4	4.99		1.05	0.104	1
06953	Copper	7440-50-8	6.20		2.10	0.304	1
01654	Iron	7439-89-6	18,300		42.0	3.80	1
06955	Lead	7439-92-1	3.21		3.15	0.524	1
01656	Lithium	7439-93-2	21.3		4.2	0.36	1
01657	Magnesium	7439-95-4	4,440		10.5	1.75	1
06958	Manganese	7439-96-5	265		1.05	0.0871	1
06960	Molybdenum	7439-98-7	0.258	J	2.10	0.178	1
06961	Nickel	7440-02-0	13.7		2.10	0.136	1
10145	Phosphorus	7723-14-0	374		10.5	3.03	1
01662	Potassium	7440-09-7	2,130		105	8.75	1
01667	Sodium	7440-23-5	141		105	17.5	1
06969	Tin	7440-31-5	3.27	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,140		1.05	0.178	1

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

Sample Description: SL-525-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184685
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:25 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52525 SDG#: PH100-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	33.5		1.05	0.136	1
06972	Zinc	7440-66-6	50.5		4.20	0.210	1
10146	Zirconium	7440-67-7	2.08	J	5.24	0.881	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.420	U	0.420	0.105	2
06142	Silver	7440-22-4	0.210	U	0.210	0.0273	2
06144	Strontium	7440-24-6	18.2		0.420	0.0713	2
06145	Thallium	7440-28-0	0.249		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175	U	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.35		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 01:23	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16B	09/05/2013 19:29	Marie D Beamenderfer	24.8
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324732250	09/04/2013 20:27	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324732250	09/04/2013 20:27	Lisa J Cooke	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/10/2013 17:30	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/10/2013 22:14	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1

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

Sample Description: SL-525-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184685
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:25 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52525 SDG#: PH100-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 16:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 05:25	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:32	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:32	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:32	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:32	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 08:40	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401A	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-527-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184686
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 08:20 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH100-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.80	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	0.71	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.6	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.91	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	0.73	J	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	4.0		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	2.7		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	0.85	J	1.7	0.68	1
12969	Naphthalene	91-20-3	1.2	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.8		1.7	0.68	1
12969	Pyrene	129-00-0	2.1		1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	4.7	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	12		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-527-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184686
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 08:20 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH100-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,000		40.5	7.30	1
06944	Antimony	7440-36-0	1.23	J	4.05	0.750	1
06935	Arsenic	7440-38-2	7.24		4.05	0.709	1
06946	Barium	7440-39-3	94.7		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.580	J	1.01	0.0679	1
07914	Boron	7440-42-8	7.47	J	10.1	0.851	1
06949	Cadmium	7440-43-9	0.583	J	1.01	0.0770	1
01650	Calcium	7440-70-2	2,800		20.3	3.38	1
06951	Chromium	7440-47-3	21.2		3.04	0.162	1
06952	Cobalt	7440-48-4	6.00		1.01	0.100	1
06953	Copper	7440-50-8	11.1		2.03	0.294	1
01654	Iron	7439-89-6	19,400		40.5	3.67	1
06955	Lead	7439-92-1	10.9		3.04	0.507	1
01656	Lithium	7439-93-2	19.5		4.1	0.34	1
01657	Magnesium	7439-95-4	4,040		10.1	1.69	1
06958	Manganese	7439-96-5	321		1.01	0.0841	1
06960	Molybdenum	7439-98-7	0.391	J	2.03	0.172	1
06961	Nickel	7440-02-0	14.0		2.03	0.132	1
10145	Phosphorus	7723-14-0	532		10.1	2.93	1
01662	Potassium	7440-09-7	4,130		101	8.45	1
01667	Sodium	7440-23-5	63.4	J	101	16.9	1
06969	Tin	7440-31-5	2.89	J	10.1	0.223	1
06970	Titanium	7440-32-6	948		1.01	0.172	1
06971	Vanadium	7440-62-2	35.2		1.01	0.132	1
06972	Zinc	7440-66-6	58.3		4.05	0.203	1
10146	Zirconium	7440-67-7	2.19	J	5.07	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.405	U	0.405	0.101	2
06142	Silver	7440-22-4	0.0461	J	0.203	0.0263	2
06144	Strontium	7440-24-6	21.7		0.405	0.0689	2
06145	Thallium	7440-28-0	0.265		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0196		0.0161	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.93		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-527-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184686
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 08:20 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH100-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.999	U	0.999	0.0688	1
11031	12378-PeCDD	40321-76-4	0.454	JQ	5.00	0.0600	1
11031	123478-HxCDD	39227-28-6	0.366	JBQ	5.00	0.0604	1
11031	123678-HxCDD	57653-85-7	1.55	J	5.00	0.0620	1
11031	123789-HxCDD	19408-74-3	1.21	JBQ	5.00	0.0603	1
11031	1234678-HpCDD	35822-46-9	29.4	B	5.00	0.0721	1
11031	OCDD	3268-87-9	509	B	9.99	0.0670	1
11031	2378-TCDF	51207-31-9	0.283	JQ	0.999	0.0908	1
11031	12378-PeCDF	57117-41-6	0.433	JB	5.00	0.0361	1
11031	23478-PeCDF	57117-31-4	5.00	U	5.00	0.0343	1
11031	123478-HxCDF	70648-26-9	0.280	JBQ	5.00	0.0314	1
11031	123678-HxCDF	57117-44-9	0.288	JB	5.00	0.0274	1
11031	123789-HxCDF	72918-21-9	0.529	JBQ	5.00	0.0316	1
11031	234678-HxCDF	60851-34-5	0.331	JB	5.00	0.0266	1
11031	1234678-HpCDF	67562-39-4	3.32	JB	5.00	0.0212	1
11031	1234789-HpCDF	55673-89-7	0.323	JB	5.00	0.0331	1
11031	OCDF	39001-02-0	9.29	JB	9.99	0.0479	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.716				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	98	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	91	21 - 178
13C12-123478-HxCDF	88	26 - 152
13C12-123678-HxCDF	97	26 - 123
13C12-234678-HxCDF	93	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	117	28 - 143
13C12-1234789-HpCDF	89	26 - 138
13C12-OCDF	91	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-527-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184686
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 08:20 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH100-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-527-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184686
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 08:20 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH100-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 01:56	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/10/2013 22:32	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 19:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/14/2013 10:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 05:37	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:39	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:39	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:39	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:39	David K Beck	2

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

Sample Description: SL-527-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184686
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 08:20 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH100-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 08:42	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401A	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-527-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184687
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 08:35 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52740 SDG#: PH100-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.81
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

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

Sample Description: SL-527-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184687
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 08:35 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52740 SDG#: PH100-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,400		43.6	7.85	1
06944	Antimony	7440-36-0	2.74	J	4.36	0.806	1
06935	Arsenic	7440-38-2	40.6		4.36	0.762	1
06946	Barium	7440-39-3	156		1.09	0.0359	1
06947	Beryllium	7440-41-7	1.57		1.09	0.0730	1
07914	Boron	7440-42-8	9.66	J	10.9	0.915	1
06949	Cadmium	7440-43-9	0.640	J	1.09	0.0828	1
01650	Calcium	7440-70-2	6,970		21.8	3.64	1
06951	Chromium	7440-47-3	52.1		3.27	0.174	1
06952	Cobalt	7440-48-4	13.4		1.09	0.108	1
06953	Copper	7440-50-8	31.2		2.18	0.316	1
01654	Iron	7439-89-6	43,100		87.1	7.89	2
06955	Lead	7439-92-1	16.3		3.27	0.545	1
01656	Lithium	7439-93-2	53.5		4.4	0.37	1
01657	Magnesium	7439-95-4	11,600		10.9	1.82	1
06958	Manganese	7439-96-5	500		1.09	0.0904	1
06960	Molybdenum	7439-98-7	2.18	U	2.18	0.185	1
06961	Nickel	7440-02-0	46.9		2.18	0.142	1
10145	Phosphorus	7723-14-0	701		10.9	3.15	1
01662	Potassium	7440-09-7	3,040		109	9.08	1
01667	Sodium	7440-23-5	221		109	18.2	1
06969	Tin	7440-31-5	4.69	J	10.9	0.240	1
06970	Titanium	7440-32-6	1,870		1.09	0.185	1
06971	Vanadium	7440-62-2	75.0		1.09	0.142	1
06972	Zinc	7440-66-6	114		4.36	0.218	1
10146	Zirconium	7440-67-7	3.26	J	5.45	0.915	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.258	J	0.436	0.109	2
06142	Silver	7440-22-4	0.199	J	0.218	0.0283	2
06144	Strontium	7440-24-6	47.5		0.436	0.0741	2
06145	Thallium	7440-28-0	0.459		0.218	0.0327	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0155	J	0.0181	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.80		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.1		0.10	0.10	1

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

Sample Description: SL-527-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184687
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 08:35 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52740 SDG#: PH100-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 02:29	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16B	09/05/2013 20:07	Marie D Beamenderfer	23.81
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324732250	09/04/2013 20:26	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324732250	09/04/2013 20:26	Lisa J Cooke	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/10/2013 22:51	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 17:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/07/2013 01:09	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1

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

Sample Description: SL-527-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184687
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 08:35 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52740 SDG#: PH100-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 05:41	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:42	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:42	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:42	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:42	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 08:44	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401A	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-528-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184688
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:55 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52800 SDG#: PH100-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.2	J	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.2	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	2.7		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.95	J	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.2	J	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	4.3		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.5	J	18	6.1	1
12969	Fluoranthene	206-44-0	4.3		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	J	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.2	J	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7		1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	2.5		1.7	0.67	1
12969	Pyrene	129-00-0	3.0		1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	6.3	J	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	4.9	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	13		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-528-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184688
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:55 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52800 SDG#: PH100-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,300		39.7	7.16	1
06944	Antimony	7440-36-0	1.49	J	3.97	0.735	1
06935	Arsenic	7440-38-2	4.71		3.97	0.695	1
06946	Barium	7440-39-3	110		0.993	0.0328	1
06947	Beryllium	7440-41-7	0.707	J	0.993	0.0665	1
07914	Boron	7440-42-8	8.15	J	9.93	0.834	1
06949	Cadmium	7440-43-9	0.549	J	0.993	0.0754	1
01650	Calcium	7440-70-2	3,160		19.9	3.32	1
06951	Chromium	7440-47-3	24.6		2.98	0.159	1
06952	Cobalt	7440-48-4	6.14		0.993	0.0983	1
06953	Copper	7440-50-8	12.5		1.99	0.288	1
01654	Iron	7439-89-6	22,600		39.7	3.59	1
06955	Lead	7439-92-1	14.3		2.98	0.496	1
01656	Lithium	7439-93-2	20.0		4.0	0.34	1
01657	Magnesium	7439-95-4	4,320		9.93	1.66	1
06958	Manganese	7439-96-5	317		0.993	0.0824	1
06960	Molybdenum	7439-98-7	0.408	J	1.99	0.169	1
06961	Nickel	7440-02-0	15.2		1.99	0.129	1
10145	Phosphorus	7723-14-0	436		9.93	2.87	1
01662	Potassium	7440-09-7	3,900		99.3	8.28	1
01667	Sodium	7440-23-5	91.0	J	99.3	16.6	1
06969	Tin	7440-31-5	3.29	J	9.93	0.218	1
06970	Titanium	7440-32-6	1,100		0.993	0.169	1
06971	Vanadium	7440-62-2	42.5		0.993	0.129	1
06972	Zinc	7440-66-6	62.1		3.97	0.199	1
10146	Zirconium	7440-67-7	2.95	J	4.96	0.834	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.130	J	0.397	0.0993	2
06142	Silver	7440-22-4	0.0473	J	0.199	0.0258	2
06144	Strontium	7440-24-6	22.9		0.397	0.0675	2
06145	Thallium	7440-28-0	0.281		0.199	0.0298	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0300		0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.29		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-528-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184688
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:55 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52800 SDG#: PH100-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0972	1
11031	12378-PeCDD	40321-76-4	0.351	J	5.09	0.0717	1
11031	123478-HxCDD	39227-28-6	0.452	JB	5.09	0.0640	1
11031	123678-HxCDD	57653-85-7	2.18	J	5.09	0.0668	1
11031	123789-HxCDD	19408-74-3	2.15	JB	5.09	0.0630	1
11031	1234678-HpCDD	35822-46-9	37.4	B	5.09	0.0756	1
11031	OCDD	3268-87-9	491	B	10.2	0.0759	1
11031	2378-TCDF	51207-31-9	0.204	J	1.02	0.119	1
11031	12378-PeCDF	57117-41-6	0.466	JBQ	5.09	0.0496	1
11031	23478-PeCDF	57117-31-4	5.09	U	5.09	0.0458	1
11031	123478-HxCDF	70648-26-9	0.300	JB	5.09	0.0396	1
11031	123678-HxCDF	57117-44-9	0.300	JB	5.09	0.0345	1
11031	123789-HxCDF	72918-21-9	0.679	JBQ	5.09	0.0412	1
11031	234678-HxCDF	60851-34-5	0.349	JBQ	5.09	0.0378	1
11031	1234678-HpCDF	67562-39-4	3.61	JB	5.09	0.0219	1
11031	1234789-HpCDF	55673-89-7	0.294	JBQ	5.09	0.0332	1
11031	OCDF	39001-02-0	8.74	JB	10.2	0.0434	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.47				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	105	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	82	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-528-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184688
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:55 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52800 SDG#: PH100-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-528-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184688
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:55 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52800 SDG#: PH100-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 03:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/10/2013 23:09	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 19:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/14/2013 11:10	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 05:45	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:44	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:44	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:44	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:44	David K Beck	2

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

Sample Description: SL-528-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184688
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 09:55 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52800 SDG#: PH100-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 08:46	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401A	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-528-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184689
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 10:05 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52825 SDG#: PH100-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	0.91	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	0.69	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.15
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1

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

Sample Description: SL-528-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184689
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 10:05 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52825 SDG#: PH100-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,900		42.9	7.73	1
06944	Antimony	7440-36-0	1.98	J	4.29	0.794	1
06935	Arsenic	7440-38-2	8.66		4.29	0.751	1
06946	Barium	7440-39-3	92.7		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.659	J	1.07	0.0719	1
07914	Boron	7440-42-8	6.50	J	10.7	0.901	1
06949	Cadmium	7440-43-9	0.473	J	1.07	0.0815	1
01650	Calcium	7440-70-2	4,280		21.5	3.58	1
06951	Chromium	7440-47-3	30.6		3.22	0.172	1
06952	Cobalt	7440-48-4	7.87		1.07	0.106	1
06953	Copper	7440-50-8	16.7		2.15	0.311	1
01654	Iron	7439-89-6	28,000		42.9	3.88	1
06955	Lead	7439-92-1	6.60		3.22	0.536	1
01656	Lithium	7439-93-2	35.0		4.3	0.36	1
01657	Magnesium	7439-95-4	6,930		10.7	1.79	1
06958	Manganese	7439-96-5	380		1.07	0.0890	1
06960	Molybdenum	7439-98-7	2.15	U	2.15	0.182	1
06961	Nickel	7440-02-0	24.3		2.15	0.139	1
10145	Phosphorus	7723-14-0	511		10.7	3.10	1
01662	Potassium	7440-09-7	2,280		107	8.95	1
01667	Sodium	7440-23-5	229		107	17.9	1
06969	Tin	7440-31-5	3.59	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,350		1.07	0.182	1
06971	Vanadium	7440-62-2	46.9		1.07	0.139	1
06972	Zinc	7440-66-6	67.9		4.29	0.215	1
10146	Zirconium	7440-67-7	2.03	J	5.36	0.901	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.429	U	0.429	0.107	2
06142	Silver	7440-22-4	0.215	U	0.215	0.0279	2
06144	Strontium	7440-24-6	24.3		0.429	0.0729	2
06145	Thallium	7440-28-0	0.316		0.215	0.0322	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0119	J	0.0176	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.88		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.7		0.10	0.10	1

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

Sample Description: SL-528-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184689
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 10:05 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52825 SDG#: PH100-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 03:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16B	09/05/2013 20:45	Marie D Beamenderfer	23.15
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324732250	09/04/2013 20:25	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324732250	09/04/2013 20:25	Lisa J Cooke	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/10/2013 23:28	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 17:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1

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

Sample Description: SL-528-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184689
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 10:05 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52825 SDG#: PH100-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 05:49	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:47	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:47	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:47	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:47	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 08:48	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401A	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-540-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184690
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:00 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH100-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	0.37	J	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.1	J	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	0.78	J	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	2.5		1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	0.88	J	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	19		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	2.8		1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	0.99	J	1.8	0.71	1
12969	Naphthalene	91-20-3	1.5	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	2.0		1.8	0.71	1
12969	Pyrene	129-00-0	2.1		1.8	0.71	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	0.55	J	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

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

Sample Description: SL-540-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184690
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:00 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH100-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	15		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	30		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,900		42.9	7.73	1
06944	Antimony	7440-36-0	1.76	J	4.29	0.793	1
06935	Arsenic	7440-38-2	6.11		4.29	0.750	1
06946	Barium	7440-39-3	127		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.929	J	1.07	0.0718	1
07914	Boron	7440-42-8	12.9		10.7	0.900	1
06949	Cadmium	7440-43-9	0.759	J	1.07	0.0814	1
01650	Calcium	7440-70-2	5,740		21.4	3.58	1
06951	Chromium	7440-47-3	36.0		3.21	0.171	1
06952	Cobalt	7440-48-4	9.54		1.07	0.106	1
06953	Copper	7440-50-8	18.2		2.14	0.311	1
01654	Iron	7439-89-6	31,800		85.7	7.76	2
06955	Lead	7439-92-1	9.05		3.21	0.536	1
01656	Lithium	7439-93-2	24.1		4.3	0.36	1
01657	Magnesium	7439-95-4	6,820		10.7	1.79	1
06958	Manganese	7439-96-5	472		1.07	0.0889	1
06960	Molybdenum	7439-98-7	1.05	J	2.14	0.182	1
06961	Nickel	7440-02-0	21.1		2.14	0.139	1
10145	Phosphorus	7723-14-0	390		10.7	3.10	1
01662	Potassium	7440-09-7	5,650		107	8.94	1
01667	Sodium	7440-23-5	93.1	J	107	17.9	1
06969	Tin	7440-31-5	3.91	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,240		1.07	0.182	1
06971	Vanadium	7440-62-2	64.1		1.07	0.139	1
06972	Zinc	7440-66-6	72.3		4.29	0.214	1
10146	Zirconium	7440-67-7	3.88	J	5.36	0.900	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-540-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184690
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:00 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH100-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.241 J	0.429	0.107	2
06142	Silver	7440-22-4	0.0478 J	0.214	0.0279	2
06144	Strontium	7440-24-6	29.1	0.429	0.0729	2
06145	Thallium	7440-28-0	0.350	0.214	0.0321	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169 U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.58	0.0100	0.0100	1
	The pH was measured in water at 21.5 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.6	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-540-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184690
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:00 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH100-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0763	1
11031	12378-PeCDD	40321-76-4	0.0960	JQ	5.36	0.0583	1
11031	123478-HxCDD	39227-28-6	0.0604	JBQ	5.36	0.0432	1
11031	123678-HxCDD	57653-85-7	0.445	J	5.36	0.0465	1
11031	123789-HxCDD	19408-74-3	0.629	JBQ	5.36	0.0431	1
11031	1234678-HpCDD	35822-46-9	1.76	JB	5.36	0.0418	1
11031	OCDD	3268-87-9	23.9	B	10.7	0.0334	1
11031	2378-TCDF	51207-31-9	1.07	U	1.07	0.0585	1
11031	12378-PeCDF	57117-41-6	0.270	JBQ	5.36	0.0268	1
11031	23478-PeCDF	57117-31-4	5.36	U	5.36	0.0242	1
11031	123478-HxCDF	70648-26-9	0.0907	JB	5.36	0.0203	1
11031	123678-HxCDF	57117-44-9	0.0726	JBQ	5.36	0.0179	1
11031	123789-HxCDF	72918-21-9	1.16	JB	5.36	0.0211	1
11031	234678-HxCDF	60851-34-5	0.0930	JBQ	5.36	0.0183	1
11031	1234678-HpCDF	67562-39-4	0.308	JBQ	5.36	0.0160	1
11031	1234789-HpCDF	55673-89-7	0.0742	JBQ	5.36	0.0237	1
11031	OCDF	39001-02-0	1.13	JB	10.7	0.0311	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.195				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	107	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	84	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-540-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184690
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:00 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH100-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-540-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184690
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:00 by VC

Submitted: 09/04/2013 09:50
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH100-08

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 04:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/12/2013 06:59	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/10/2013 23:46	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 20:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/14/2013 12:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/07/2013 01:13	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 05:53	Tara L Snyder	1

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

Sample Description: SL-540-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184690
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:00 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH100-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:49	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:49	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:49	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:49	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 08:50	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401A	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-540-SA5D-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184691
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:10 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54050 SDG#: PH100-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.54
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.88	U	0.88	0.18	1
10590	Alpha BHC	319-84-6	0.88	U	0.88	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.88	U	0.88	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.88	U	0.88	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.88	U	0.88	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.88	U	0.88	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.88	U	0.88	0.18	1

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

Sample Description: SL-540-SA5D-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184691
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:10 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54050 SDG#: PH100-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.1	U	7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,500		42.9	7.74	1
06944	Antimony	7440-36-0	2.15	J	4.29	0.794	1
06935	Arsenic	7440-38-2	9.31		4.29	0.751	1
06946	Barium	7440-39-3	130		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.733	J	1.07	0.0719	1
07914	Boron	7440-42-8	7.45	J	10.7	0.901	1
06949	Cadmium	7440-43-9	0.592	J	1.07	0.0815	1
01650	Calcium	7440-70-2	16,300		21.5	3.58	1
06951	Chromium	7440-47-3	26.8		3.22	0.172	1
06952	Cobalt	7440-48-4	8.86		1.07	0.106	1
06953	Copper	7440-50-8	13.6		2.15	0.311	1
01654	Iron	7439-89-6	32,400		85.8	7.77	2
06955	Lead	7439-92-1	5.72		3.22	0.536	1
01656	Lithium	7439-93-2	31.6		4.3	0.36	1
01657	Magnesium	7439-95-4	7,050		10.7	1.79	1
06958	Manganese	7439-96-5	465		1.07	0.0891	1
06960	Molybdenum	7439-98-7	2.15	U	2.15	0.182	1
06961	Nickel	7440-02-0	17.1		2.15	0.139	1
10145	Phosphorus	7723-14-0	661		10.7	3.10	1
01662	Potassium	7440-09-7	3,250		107	8.95	1
01667	Sodium	7440-23-5	240		107	17.9	1
06969	Tin	7440-31-5	3.80	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,720		1.07	0.182	1

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

Sample Description: SL-540-SA5D-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184691
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:10 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54050 SDG#: PH100-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	58.0	1.07	0.139	1
06972	Zinc	7440-66-6	84.1	4.29	0.215	1
10146	Zirconium	7440-67-7	5.36 U	5.36	0.901	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.429 U	0.429	0.107	2
06142	Silver	7440-22-4	0.0363 J	0.215	0.0279	2
06144	Strontium	7440-24-6	36.8	0.429	0.0730	2
06145	Thallium	7440-28-0	0.310	0.215	0.0322	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175 U	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.56	0.0100	0.0100	1
	The pH was measured in water at 21.7 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.8	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 04:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16B	09/05/2013 21:23	Marie D Beamenderfer	23.54
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324732250	09/04/2013 20:24	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324732250	09/04/2013 20:24	Lisa J Cooke	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132480022A	09/12/2013 07:15	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/11/2013 00:05	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132480022A	09/07/2013 08:45	Roman Kuropatkin	1

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

Sample Description: SL-540-SA5D-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184691
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:10 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54050 SDG#: PH100-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 18:02	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/07/2013 01:17	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 05:58	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:52	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:52	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:52	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:52	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 08:52	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401A	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-541-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184692
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:35 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH100-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	0.95	J	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.81	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.3	U	5.3	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	3.5	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	8.0	J	11	4.2	1

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

Sample Description: SL-541-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184692
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:35 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH100-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,300		42.0	7.57	1
06944	Antimony	7440-36-0	1.79	J	4.20	0.777	1
06935	Arsenic	7440-38-2	5.14		4.20	0.735	1
06946	Barium	7440-39-3	121		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.750	J	1.05	0.0703	1
07914	Boron	7440-42-8	7.68	J	10.5	0.882	1
06949	Cadmium	7440-43-9	0.607	J	1.05	0.0798	1
01650	Calcium	7440-70-2	3,050		21.0	3.51	1
06951	Chromium	7440-47-3	26.0		3.15	0.168	1
06952	Cobalt	7440-48-4	8.13		1.05	0.104	1
06953	Copper	7440-50-8	14.1		2.10	0.304	1
01654	Iron	7439-89-6	24,300		42.0	3.80	1
06955	Lead	7439-92-1	6.94		3.15	0.525	1
01656	Lithium	7439-93-2	18.7		4.2	0.36	1
01657	Magnesium	7439-95-4	4,660		10.5	1.75	1
06958	Manganese	7439-96-5	445		1.05	0.0871	1
06960	Molybdenum	7439-98-7	0.311	J	2.10	0.178	1
06961	Nickel	7440-02-0	17.3		2.10	0.136	1
10145	Phosphorus	7723-14-0	284		10.5	3.03	1
01662	Potassium	7440-09-7	4,210		105	8.76	1
01667	Sodium	7440-23-5	78.1	J	105	17.5	1
06969	Tin	7440-31-5	3.42	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,060		1.05	0.178	1
06971	Vanadium	7440-62-2	45.4		1.05	0.136	1
06972	Zinc	7440-66-6	56.5		4.20	0.210	1
10146	Zirconium	7440-67-7	2.83	J	5.25	0.882	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.150	J	0.420	0.105	2
06142	Silver	7440-22-4	0.0278	J	0.210	0.0273	2
06144	Strontium	7440-24-6	25.3		0.420	0.0714	2
06145	Thallium	7440-28-0	0.293		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173	U	0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.5 C.	n.a.	6.74		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.7		0.10	0.10	1

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

Sample Description: SL-541-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184692
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:35 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH100-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

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

Sample Description: SL-541-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184692
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:35 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH100-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0738	1
11031	12378-PeCDD	40321-76-4	0.186	JQ	5.23	0.0557	1
11031	123478-HxCDD	39227-28-6	5.23	U	5.23	0.0405	1
11031	123678-HxCDD	57653-85-7	0.556	JQ	5.23	0.0419	1
11031	123789-HxCDD	19408-74-3	0.782	JB	5.23	0.0390	1
11031	1234678-HpCDD	35822-46-9	0.924	JB	5.23	0.0340	1
11031	OCDD	3268-87-9	12.0	B	10.5	0.0294	1
11031	2378-TCDF	51207-31-9	1.05	U	1.05	0.0558	1
11031	12378-PeCDF	57117-41-6	0.238	JB	5.23	0.0275	1
11031	23478-PeCDF	57117-31-4	0.0782	JBQ	5.23	0.0252	1
11031	123478-HxCDF	70648-26-9	0.0218	JBQ	5.23	0.0163	1
11031	123678-HxCDF	57117-44-9	0.0549	JB	5.23	0.0143	1
11031	123789-HxCDF	72918-21-9	0.933	JB	5.23	0.0165	1
11031	234678-HxCDF	60851-34-5	0.0398	JBQ	5.23	0.0151	1
11031	1234678-HpCDF	67562-39-4	0.0771	JBQ	5.23	0.0131	1
11031	1234789-HpCDF	55673-89-7	0.0551	JBQ	5.23	0.0183	1
11031	OCDF	39001-02-0	0.289	JBQ	10.5	0.0314	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.197				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	111	28 - 143
13C12-1234789-HpCDF	82	26 - 138
13C12-OCDF	89	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-541-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184692
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:35 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH100-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-541-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184692
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:35 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH100-10

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 05:15	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132520019A	09/10/2013 19:23	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/11/2013 00:23	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132520019A	09/10/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 19:08	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/14/2013 13:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 06:02	Tara L Snyder	1

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

Sample Description: SL-541-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184692
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:35 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH100-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:54	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:54	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:54	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:54	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 08:58	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401A	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-541-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184693
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:45 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54125 SDG#: PH100-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.21
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.2	U	5.2	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1

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

Sample Description: SL-541-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184693
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:45 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54125 SDG#: PH100-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,500		41.4	7.46	1
06944	Antimony	7440-36-0	1.93	J	4.14	0.766	1
06935	Arsenic	7440-38-2	5.87		4.14	0.725	1
06946	Barium	7440-39-3	91.5		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.523	J	1.04	0.0694	1
07914	Boron	7440-42-8	6.34	J	10.4	0.870	1
06949	Cadmium	7440-43-9	0.423	J	1.04	0.0787	1
01650	Calcium	7440-70-2	3,600		20.7	3.46	1
06951	Chromium	7440-47-3	27.8		3.11	0.166	1
06952	Cobalt	7440-48-4	6.72		1.04	0.102	1
06953	Copper	7440-50-8	10.5		2.07	0.300	1
01654	Iron	7439-89-6	22,900		41.4	3.75	1
06955	Lead	7439-92-1	4.61		3.11	0.518	1
01656	Lithium	7439-93-2	32.8		4.1	0.35	1
01657	Magnesium	7439-95-4	6,780		10.4	1.73	1
06958	Manganese	7439-96-5	329		1.04	0.0859	1
06960	Molybdenum	7439-98-7	0.421	J	2.07	0.176	1
06961	Nickel	7440-02-0	24.9		2.07	0.135	1
10145	Phosphorus	7723-14-0	523		10.4	2.99	1
01662	Potassium	7440-09-7	2,160		104	8.63	1
01667	Sodium	7440-23-5	110		104	17.3	1
06969	Tin	7440-31-5	3.81	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,390		1.04	0.176	1
06971	Vanadium	7440-62-2	47.9		1.04	0.135	1
06972	Zinc	7440-66-6	59.5		4.14	0.207	1
10146	Zirconium	7440-67-7	3.10	J	5.18	0.870	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.414	U	0.414	0.104	2
06142	Silver	7440-22-4	0.207	U	0.207	0.0269	2
06144	Strontium	7440-24-6	19.8		0.414	0.0704	2
06145	Thallium	7440-28-0	0.253		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.87		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						

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

Sample Description: SL-541-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184693
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:45 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54125 SDG#: PH100-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	3.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 05:48	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16B	09/05/2013 22:01	Marie D Beamenderfer	26.21
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324732250	09/04/2013 20:23	Lisa J Cooke	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132520019A	09/10/2013 19:36	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/11/2013 00:41	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132520019A	09/10/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 18:26	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1

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

Sample Description: SL-541-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184693
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:45 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54125 SDG#: PH100-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 04:56	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:16	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:16	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:16	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:16	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 09:00	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401B	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-545-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184694
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:50 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54500 SDG#: PH100-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	J	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	3.0		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.1	J	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.0	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	0.88	J	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	8.9		5.4	2.1	1
12952	EFH (C30-C40)	n.a.	23		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-545-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184694
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:50 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54500 SDG#: PH100-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,700		42.4	7.65	1
06944	Antimony	7440-36-0	2.43	J	4.24	0.785	1
06935	Arsenic	7440-38-2	6.47		4.24	0.743	1
06946	Barium	7440-39-3	122		1.06	0.0350	1
06947	Beryllium	7440-41-7	0.889	J	1.06	0.0711	1
07914	Boron	7440-42-8	12.4		10.6	0.891	1
06949	Cadmium	7440-43-9	0.787	J	1.06	0.0807	1
01650	Calcium	7440-70-2	5,710		21.2	3.54	1
06951	Chromium	7440-47-3	34.8		3.18	0.170	1
06952	Cobalt	7440-48-4	9.60		1.06	0.105	1
06953	Copper	7440-50-8	17.7		2.12	0.308	1
01654	Iron	7439-89-6	31,600		84.9	7.68	2
06955	Lead	7439-92-1	8.01		3.18	0.531	1
01656	Lithium	7439-93-2	24.1		4.2	0.36	1
01657	Magnesium	7439-95-4	6,940		10.6	1.77	1
06958	Manganese	7439-96-5	477		1.06	0.0881	1
06960	Molybdenum	7439-98-7	0.216	J	2.12	0.180	1
06961	Nickel	7440-02-0	21.4		2.12	0.138	1
10145	Phosphorus	7723-14-0	486		10.6	3.07	1
01662	Potassium	7440-09-7	6,300		106	8.85	1
01667	Sodium	7440-23-5	83.2	J	106	17.7	1
06969	Tin	7440-31-5	3.37	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,100		1.06	0.180	1
06971	Vanadium	7440-62-2	60.5		1.06	0.138	1
06972	Zinc	7440-66-6	74.4		4.24	0.212	1
10146	Zirconium	7440-67-7	3.36	J	5.31	0.891	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.222	J	0.424	0.106	2
06142	Silver	7440-22-4	0.0409	J	0.212	0.0276	2
06144	Strontium	7440-24-6	28.2		0.424	0.0722	2
06145	Thallium	7440-28-0	0.364		0.212	0.0318	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.42		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-545-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184694
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:50 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54500 SDG#: PH100-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0640	1
11031	12378-PeCDD	40321-76-4	0.0851	JQ	5.35	0.0524	1
11031	123478-HxCDD	39227-28-6	5.35	U	5.35	0.0390	1
11031	123678-HxCDD	57653-85-7	0.458	JQ	5.35	0.0406	1
11031	123789-HxCDD	19408-74-3	0.689	JBQ	5.35	0.0385	1
11031	1234678-HpCDD	35822-46-9	0.589	JBQ	5.35	0.0356	1
11031	OCDD	3268-87-9	6.06	JB	10.7	0.0293	1
11031	2378-TCDF	51207-31-9	0.0886	JQ	1.07	0.0528	1
11031	12378-PeCDF	57117-41-6	0.235	JBQ	5.35	0.0238	1
11031	23478-PeCDF	57117-31-4	0.0410	JBQ	5.35	0.0234	1
11031	123478-HxCDF	70648-26-9	0.0802	JBQ	5.35	0.0186	1
11031	123678-HxCDF	57117-44-9	0.0247	JBQ	5.35	0.0165	1
11031	123789-HxCDF	72918-21-9	1.14	JB	5.35	0.0186	1
11031	234678-HxCDF	60851-34-5	0.0607	JB	5.35	0.0156	1
11031	1234678-HpCDF	67562-39-4	0.138	JBQ	5.35	0.0123	1
11031	1234789-HpCDF	55673-89-7	0.0380	JB	5.35	0.0174	1
11031	OCDF	39001-02-0	0.321	JB	10.7	0.0333	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.123				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	90	24 - 185
13C12-23478-PeCDF	86	21 - 178
13C12-123478-HxCDF	91	26 - 152
13C12-123678-HxCDF	97	26 - 123
13C12-234678-HxCDF	95	28 - 136
13C12-123789-HxCDF	89	29 - 147
13C12-1234678-HpCDF	114	28 - 143
13C12-1234789-HpCDF	90	26 - 138
13C12-OCDF	93	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-545-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184694
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:50 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54500 SDG#: PH100-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-545-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184694
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:50 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54500 SDG#: PH100-12

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 06:21	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/11/2013 01:00	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 20:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/14/2013 14:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/07/2013 01:22	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 06:06	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:57	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:57	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:57	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:57	David K Beck	2

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

Sample Description: SL-545-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184694
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 12:50 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54500 SDG#: PH100-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 09:10	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401B	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-545-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184695
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:00 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54560 SDG#: PH100-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.85	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.61
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

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

Sample Description: SL-545-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184695
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:00 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54560 SDG#: PH100-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,300		41.2	7.43	1
06944	Antimony	7440-36-0	1.26	J	4.12	0.763	1
06935	Arsenic	7440-38-2	8.49		4.12	0.722	1
06946	Barium	7440-39-3	71.9		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.445	J	1.03	0.0691	1
07914	Boron	7440-42-8	5.37	J	10.3	0.866	1
06949	Cadmium	7440-43-9	0.485	J	1.03	0.0783	1
01650	Calcium	7440-70-2	43,600		20.6	3.44	1
06951	Chromium	7440-47-3	15.0		3.09	0.165	1
06952	Cobalt	7440-48-4	4.51		1.03	0.102	1
06953	Copper	7440-50-8	6.41		2.06	0.299	1
01654	Iron	7439-89-6	18,900		41.2	3.73	1
06955	Lead	7439-92-1	3.78		3.09	0.515	1
01656	Lithium	7439-93-2	27.3		4.1	0.35	1
01657	Magnesium	7439-95-4	4,550		10.3	1.72	1
06958	Manganese	7439-96-5	265		1.03	0.0856	1
06960	Molybdenum	7439-98-7	2.06	U	2.06	0.175	1
06961	Nickel	7440-02-0	9.93		2.06	0.134	1
10145	Phosphorus	7723-14-0	368		10.3	2.98	1
01662	Potassium	7440-09-7	2,050		103	8.60	1
01667	Sodium	7440-23-5	103	J	103	17.2	1
06969	Tin	7440-31-5	3.23	J	10.3	0.227	1
06970	Titanium	7440-32-6	995		1.03	0.175	1
06971	Vanadium	7440-62-2	31.6		1.03	0.134	1
06972	Zinc	7440-66-6	49.2		4.12	0.206	1
10146	Zirconium	7440-67-7	2.58	J	5.15	0.866	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.412	U	0.412	0.103	2
06142	Silver	7440-22-4	0.206	U	0.206	0.0268	2
06144	Strontium	7440-24-6	34.9		0.412	0.0701	2
06145	Thallium	7440-28-0	0.228		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.25		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.9		0.10	0.10	1

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

Sample Description: SL-545-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184695
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:00 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54560 SDG#: PH100-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLG026	09/14/2013 06:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLG026	09/09/2013 11:45	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13247A16B	09/05/2013 22:39	Marie D Beamenderfer	24.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324732250	09/04/2013 20:22	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324732250	09/04/2013 20:29	Lisa J Cooke	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132490031A	09/11/2013 01:18	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132490031A	09/09/2013 03:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520007A	09/11/2013 18:47	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520007A	09/09/2013 18:15	Wanda F Oswald	1
01643	Aluminum	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1

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

Sample Description: SL-545-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7184695
LL Group # 1416159
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/03/2013 13:00 by VC

Submitted: 09/04/2013 09:50
Reported: 09/24/2013 17:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54560 SDG#: PH100-13*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132470637001	09/06/2013 06:10	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132470637001B	09/08/2013 23:59	David K Beck	2
06142	Silver	SW-846 6020A	1	132470637001A	09/08/2013 23:59	David K Beck	2
06144	Strontium	SW-846 6020A	1	132470637001A	09/08/2013 23:59	David K Beck	2
06145	Thallium	SW-846 6020A	1	132470637001A	09/08/2013 23:59	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132470638001	09/06/2013 09:12	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132470637001	09/05/2013 10:30	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132470638001	09/05/2013 12:50	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13247039401B	09/04/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402A	09/10/2013 22:01	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416159
Reported: 09/24/13 at 05:39 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13249SLG026	Sample number(s): 7184684-7184695									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	97		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	102		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	99		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	100		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	129		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	103		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	102		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	107		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	109		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	98		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	105		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	99		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	99		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	187*		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	108		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	96		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	100		79-112		
Batch number: 13247A16B	Sample number(s): 7184685,7184687,7184689,7184691,7184693,7184695									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	88	79	67-119	12	30
Batch number: 13248A20A	Sample number(s): 7184683									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	102	75-135	4	30
Batch number: 132520019A	Sample number(s): 7184692-7184693									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	86		85-115		
Batch number: 132480022A	Sample number(s): 7184684-7184685,7184690-7184691									
Aldrin	0.83	U	0.83	0.17	ug/kg	77		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	91		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	82		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	89		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	100		69-141		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416159
Reported: 09/24/13 at 05:39 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
p,p-DDE	1.7	U	1.7	0.33	ug/kg	84		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	95		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	72		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	102		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	94		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	85		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	89		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	92		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	84		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	92		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	94		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	85		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	101		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132490031A	Sample number(s): 7184684-7184695									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	84	87	62-87	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	96		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	102		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132520007A	Sample number(s): 7184684-7184695									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	88		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	91		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	92		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	76		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	76		49-107		
Batch number: 132470637001	Sample number(s): 7184684-7184695									
Aluminum	40.0	U	40.0	7.21	mg/kg	105		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	109		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	105		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	104		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	106		80-120		
Calcium	10.2	J	20.0	3.34	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	104		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	106		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	107		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	104		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	107		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	104		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	103		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	106		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	106		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	107		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416159
Reported: 09/24/13 at 05:39 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Phosphorus	10.0	U	10.0	2.89	mg/kg	107		80-120		
Potassium	100 U		100.	8.34	mg/kg	103		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.69	J	10.0	0.220	mg/kg	105		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	107		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	99		80-120		
Zinc	0.230	J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	107		80-120		
Batch number: 132470637001A	Sample number(s): 7184684-7184695									
Silver	0.200	U	0.200	0.0260	mg/kg	103		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	101		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	103		80-120		
Batch number: 132470637001B	Sample number(s): 7184684-7184695									
Selenium	0.400	U	0.400	0.100	mg/kg	105		80-120		
Batch number: 132470638001	Sample number(s): 7184684-7184695									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	108		85-120		
Batch number: 13247039401A	Sample number(s): 7184684-7184692									
15a pH by 9045D						100		95-105		
Batch number: 13247039401B	Sample number(s): 7184693-7184695									
15a pH by 9045D						100		95-105		
Batch number: 13253162402A	Sample number(s): 7184684-7184695									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13254002	Sample number(s): 7184684,7184686,7184688,7184690,7184692,7184694									
2378-TCDD	1.00	U	1.00	0.115	ng/kg	101		67-158		
12378-PeCDD	5.00	U	5.00	0.0609	ng/kg	103		70-142		
123478-HxCDD	0.0390	J	5.00	0.0320	ng/kg	105		70-164		
123678-HxCDD	5.00	U	5.00	0.0325	ng/kg	106		76-134		
123789-HxCDD	0.0470	J	5.00	0.0333	ng/kg	105		64-162		
1234678-HpCDD	0.0675	J	5.00	0.0370	ng/kg	99		70-140		
OCDD	0.281	J	10.0	0.0392	ng/kg	95		78-144		
2378-TCDF	1.00	U	1.00	0.0777	ng/kg	103		75-158		
12378-PeCDF	0.0692	J	5.00	0.0397	ng/kg	92		80-134		
23478-PeCDF	0.0786	J	5.00	0.0412	ng/kg	92		68-160		
123478-HxCDF	0.0639	J	5.00	0.0250	ng/kg	94		72-134		
123678-HxCDF	0.0330	J	5.00	0.0207	ng/kg	93		84-130		
123789-HxCDF	0.0649	J	5.00	0.0253	ng/kg	93		78-130		
234678-HxCDF	0.0615	J	5.00	0.0227	ng/kg	95		70-156		
1234678-HpCDF	0.0376	J	5.00	0.0123	ng/kg	89		82-122		
1234789-HpCDF	0.0826	J	5.00	0.0194	ng/kg	92		78-138		
OCDF	0.227	J	10.0	0.0509	ng/kg	91		63-170		
TEQ WHO 2005 - EDLx0.0	0.0301				ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416159
Reported: 09/24/13 at 05:39 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13249SLG026	Sample number(s): 7184684-7184695 UNSPK: 7184684								
Acenaphthene	101	98	48-127	3	30				
Acenaphthylene	98	92	49-121	6	30				
Anthracene	99	97	52-126	2	30				
Benzo(a)anthracene	109	107	44-143	1	30				
Benzo(a)pyrene	98	109	44-140	10	30				
Benzo(b)fluoranthene	134	149*	26-142	11	30				
Benzo(e)pyrene	105	173*	70-130	49*	30				
Benzo(g,h,i)perylene	80	86	33-141	8	30				
Benzo(k)fluoranthene	102	119	54-142	15	30				
Butylbenzylphthalate	0*	0*	49-151	0	30				
Di-n-butylphthalate	0*	0*	52-147	0	30				
Chrysene	83	119	29-148	25	30				
Dibenz(a,h)anthracene	88	84	20-137	5	30				
Diethylphthalate	0*	0*	43-145	0	30				
Dimethylphthalate	0*	0*	58-129	0	30				
Bis(2-Ethylhexyl)phthalate	0*	0*	39-167	0	30				
Fluoranthene	100	98	40-148	2	30				
Fluorene	99	96	51-137	2	30				
Indeno(1,2,3-cd)pyrene	82	74	17-136	11	30				
1-Methylnaphthalene	105	107	50-131	2	30				
2-Methylnaphthalene	110	107	35-152	3	30				
Naphthalene	103	102	31-148	1	30				
N-Nitrosodimethylamine	171*	172*	48-113	1	30				
Di-n-octylphthalate	0*	0*	52-162	0	30				
Phenanthrene	100	93	29-142	7	30				
Pyrene	91	88	26-143	4	30				
Batch number: 132520019A	Sample number(s): 7184692-7184693 UNSPK: P189536								
6a Perchlorate (Method 6850)	77*	74*	80-120	4	20				
Batch number: 132480022A	Sample number(s): 7184684-7184685,7184690-7184691 UNSPK: P182118								
Aldrin	82	88	16-126	7	50				
Alpha BHC	94	102	14-140	8	50				
Beta BHC	86	92	42-133	7	50				
Gamma BHC - Lindane	93	101	30-137	8	50				
p,p-DDD	106	114	43-149	7	50				
p,p-DDE	88	95	35-152	8	50				
p,p-DDT	103	109	12-193	6	50				
Delta BHC	87	93	13-153	7	50				
Dieldrin	107	116	41-153	8	50				
Endosulfan I	99	107	26-146	7	50				
Endosulfan II	85	90	34-141	7	50				
Endosulfan Sulfate	95	100	10-181	6	50				
Endrin	100	106	30-152	6	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416159
Reported: 09/24/13 at 05:39 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Endrin Aldehyde	85	91	23-138	7	35				
Endrin Ketone	93	99	30-148	5	50				
Heptachlor	100	108	16-152	8	50				
Heptachlor Epoxide	89	95	33-144	7	50				
Methoxychlor	105	109	41-161	4	50				
Batch number: 132490031A	Sample number(s): 7184684-7184695 UNSPK: 7184684								
PCB-1016	94	100	41-135	7	50				
PCB-1260	95	97	40-134	3	50				
Batch number: 132520007A	Sample number(s): 7184684-7184695 UNSPK: 7184684								
EFH (C12-C14)	90	88	49-123	2	20				
EFH (C15-C20)	130*	132*	49-123	1	20				
EFH (C21-C30)	137*	181*	49-123	15	20				
EFH (C30-C40)	127*	326*	49-123	32*	20				
EFH (C8-C11)	74	73	49-123	1	20				
Batch number: 132470637001	Sample number(s): 7184684-7184695 UNSPK: 7184693 BKG: 7184693								
Aluminum	1024 (2)	1065 (2)	75-125	0	20	14,000	13,700	2	20
Antimony	56*	47*	75-125	17	20	1.86 J	1.66 J	11 (1)	20
Arsenic	102	104	75-125	0	20	5.67	5.50	3 (1)	20
Barium	102	104	75-125	0	20	88.4	86.5	2	20
Beryllium	103	103	75-125	1	20	0.505 J	0.493 J	2 (1)	20
Boron	100	100	75-125	2	20	6.12 J	5.75 J	6 (1)	20
Cadmium	99	99	75-125	1	20	0.409 J	0.368 J	10 (1)	20
Calcium	175 (2)	146 (2)	75-125	3	20	3,480	3,430	1	20
Chromium	105	110	75-125	1	20	26.9	27.5	2	20
Cobalt	98	99	75-125	1	20	6.49	6.60	2	20
Copper	105	106	75-125	1	20	10.1	10.2	1	20
Iron	681 (2)	365 (2)	75-125	1	20	22,200	22,100	0	20
Lead	97	98	75-125	1	20	4.45	4.23	5 (1)	20
Lithium	104	102	75-125	3	20	31.7	31.4	1	20
Magnesium	120 (2)	113 (2)	75-125	0	20	6,550	6,570	0	20
Manganese	86 (2)	25 (2)	75-125	9	20	318	320	1	20
Molybdenum	99	99	75-125	3	20	0.407 J	0.187 J	74* (1)	20
Nickel	98	99	75-125	1	20	24.1	23.5	2	20
Phosphorus	106 (2)	103 (2)	75-125	1	20	505	488	3	20
Potassium	136*	113	75-125	8	20	2,090	2,040	2	20
Sodium	102	101	75-125	3	20	106	106	0 (1)	20
Tin	92	93	75-125	2	20	3.68 J	3.45 J	7 (1)	20
Titanium	310 (2)	163 (2)	75-125	9	20	1,340	1,270	6	20
Vanadium	103	102	75-125	2	20	46.3	45.6	1	20
Zinc	102	100	75-125	2	20	57.5	57.0	1	20
Zirconium	104	104	75-125	2	20	2.99 J	3.91 J	27* (1)	20
Batch number: 132470637001A	Sample number(s): 7184684-7184695 UNSPK: 7184693 BKG: 7184693								
Silver	98	100	75-125	0	20	0.200 U	0.198 U	0 (1)	20
Strontium	86	92	75-125	1	20	19.1	18.5	3	20
Thallium	95	100	75-125	2	20	0.244	0.242	1 (1)	20
Batch number: 132470637001B	Sample number(s): 7184684-7184695 UNSPK: 7184693 BKG: 7184693								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416159
Reported: 09/24/13 at 05:39 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Selenium	103	109	75-125	4	20	0.400 U	0.396 U	0 (1)	20
Batch number: 132470638001	Sample number(s): 7184684-7184695 UNSPK: 7184693 BKG: 7184693								
3a Mercury 7471A	112	112	65-135	0	20	0.0160 U	0.0165 U	0 (1)	20
Batch number: 13247039401A	Sample number(s): 7184684-7184692 BKG: 7184685								
15a pH by 9045D						8.35	8.35	0	3
Batch number: 13247039401B	Sample number(s): 7184693-7184695 BKG: 7184695								
15a pH by 9045D						8.25	8.28	0	3
Batch number: 13253162402A	Sample number(s): 7184684-7184695 BKG: 7184687								
14a Moisture Content by 160.3						9.1	9.5	4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13249SLG026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7184684	89	92	107
7184685	93	99	107
7184686	77	70	91
7184687	72	69	89
7184688	88	76	103
7184689	88	88	100
7184690	85	79	93
7184691	88	90	96
7184692	94	91	104
7184693	91	98	103
7184694	82	81	102
7184695	95	100	100
Blank	90	100	106
LCS	88	100	104
MS	91	93	102
MSD	92	92	100
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13247A16B

	Trifluorotoluene-F
7184685	74
7184687	69

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416159
Reported: 09/24/13 at 05:39 PM

Surrogate Quality Control

7184689	70
7184691	77
7184693	70
7184695	73
Blank	78
LCS	82
LCSD	73
Limits:	50-142

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13248A20A

	Trifluorotoluene-F
7184683	87
Blank	88
LCS	125
LCSD	125
Limits:	63-135

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132480022A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7184684	85	100
7184685	88	103
7184690	96	106
7184691	91	108
Blank	80	101
LCS	80	100
MS	80	100
MSD	88	103
Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132490031A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7184684	109	102
7184685	113	99
7184686	112	104
7184687	114	105
7184688	114	107
7184689	114	108
7184690	111	106
7184691	110	103
7184692	110	103
7184693	111	109
7184694	110	105
7184695	124*	112
Blank	118	111
LCS	115	109
LCSD	117	114
MS	111	100

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416159
Reported: 09/24/13 at 05:39 PM

Surrogate Quality Control

MSD	112	101
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132520007A

	Chlorobenzene	Orthoterphenyl
7184684	100	89
7184685	102	90
7184686	102	89
7184687	102	90
7184688	108	98
7184689	106	95
7184690	100	90
7184691	103	92
7184692	106	95
7184693	103	91
7184694	100	87
7184695	103	92
Blank	107	97
LCS	107	97
MS	101	92
MSD	103	90
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13254002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7184684	78	93	95	97	96	95
7184686	69	91	88	97	93	86
7184688	59	77	72	80	74	68
7184690	61	84	80	87	83	76
7184692	61	78	80	87	82	78
7184694	70	86	91	97	95	89
Blank	55	64	68	77	71	66
OPR	62	78	66	77	70	65
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7184684	103	100	111	81	81	81
7184686	117	89	91	85	85	84
7184688	105	74	82	72	68	70
7184690	107	79	84	78	72	74
7184692	111	82	89	72	72	74
7184694	114	90	93	81	82	80
Blank	112	79	84	65	75	77
OPR	99	67	74	80	78	76
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416159
Reported: 09/24/13 at 05:39 PM

Surrogate Quality Control

7184684	81	87	101	88	93
7184686	81	89	98	73	95
7184688	68	77	87	61	82
7184690	73	79	86	66	83
7184692	74	82	92	66	82
7184694	79	88	91	76	90
Blank	74	87	102	54	72
OPR	75	85	96	62	85
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

SSFL Phase 3 Chain of Custody

13013 1416159 7184683-95

CDM Smith

DateShipped: 9/3/2013

CarrierName: FedEx

AirbillNo: 796603352029

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20130903-01

Cooler #: 1

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water) Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270 TIC 8270	PAHs 8270 SIM 1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082 Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil) pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM TPH-GRO 8015	TPH-EFH 8015 Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056 Energetics 8330	Cyanide 9012	Formaldehyde 8315 NDMA 1625	Organotin Methyl Mercury 1630	Other Analysis/Notes
TB-090313	9/3/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day														X								
SL-525-SA5D-SB-0.0-0.5	9/3/13 09:15	SO	None	2 - SS-Sleeve	10 day	X	X			X	X	X					X			X							
SL-525-SA5D-SB-0.0-0.5	9/3/13 09:15	SO	None	1 - 4 oz glass	10 day									X													
SL-525-SA5D-SB-2.5-3.5	9/3/13 09:25	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X			X			X							
SL-525-SA5D-SB-2.5-3.5	9/3/13 09:25	SO	None	2 - Encore	10 day														X								
SL-527-SA5D-SB-0.0-0.5	9/3/13 08:20	SO	None	2 - SS-Sleeve	10 day	X	X			X	X	X								X							
SL-527-SA5D-SB-0.0-0.5	9/3/13 08:20	SO	None	1 - 4 oz glass	10 day									X													
SL-527-SA5D-SB-4.0-5.0	9/3/13 08:35	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X						X							
SL-527-SA5D-SB-4.0-5.0	9/3/13 08:35	SO	None	2 - Encore	10 day														X								
SL-528-SA5D-SB-0.0-0.5	9/3/13 09:55	SO	None	2 - SS-Sleeve	10 day	X	X			X	X	X								X							
SL-528-SA5D-SB-0.0-0.5	9/3/13 09:55	SO	None	1 - 4 oz glass	10 day									X													
SL-528-SA5D-SB-2.5-3.5	9/3/13 10:05	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X						X							
SL-528-SA5D-SB-2.5-3.5	9/3/13 10:05	SO	None	2 - Encore	10 day														X								

Sampler: V. Carbone

Special Instructions:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stacy Myers	09/03/2013	1600									
										9-4-13	0956

13013 1416159 7184683-95

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/3/2013
CarrierName: FedEx
AirbillNo: 796603352029

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130903-02
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-540-SA5D-SB-0.0-0.5	9/3/13 12:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X				X											
SL-540-SA5D-SB-0.0-0.5	9/3/13 12:00	SO	None	1 - 4 oz glass	10 day														X																	
SL-540-SA5D-SB-5.0-6.0	9/3/13 12:10	SO	None	2 - Encore	10 day																			X												
SL-541-SA5D-SB-0.0-0.5	9/3/13 13:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X		X								X											
SL-541-SA5D-SB-0.0-0.5	9/3/13 13:35	SO	None	1 - 4 oz glass	10 day														X																	
SL-541-SA5D-SB-2.5-3.5	9/3/13 13:45	SO	None	2 - Encore	10 day																			X												
SL-545-SA5D-SB-0.0-0.5	9/3/13 12:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-545-SA5D-SB-0.0-0.5	9/3/13 12:50	SO	None	1 - 4 oz glass	10 day														X																	
SL-545-SA5D-SB-6.0-7.0	9/3/13 13:00	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shelf Myers	09/03/2013	1600									
										9-4-13	0950

SSFL Phase 3 Chain of Custody

13013 1416159 7184683-95

CDM Smith

DateShipped: 9/3/2013
CarrierName: FedEx
AirbillNo: 796603352029

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130903-03
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-540-SA5D-SB-5.0-6.0	9/3/13 12:10	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X			X					X										
SL-541-SA5D-SB-2.5-3.5	9/3/13 13:45	SO	None	2 - 16 oz glass	10 day	X	X					X			X		X	X								X										
SL-545-SA5D-SB-6.0-7.0	9/3/13 13:00	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Myers	09/03/2013	1600									
										9-4-13	0950

COC Rev 2

COC 20130903-03, Page 1 of 1

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Environmental Sample Administration Receipt Documentation Log

1416159

Client/Project: CDM Smith

Date of Receipt: 9-4-13

Time of Receipt: 0950

Source Code: So

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.6	TB	WI	Y	B	
2	↓	1.0	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 5200 **Date/Time:** 9-4-13 1050

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH101

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 24, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/05/2013
Group Number: 1416493
SDG: PH101
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB-090413 Water	7186218
TB-090413 Water	7186219
SL-524-SA5D-SB-0.0-0.5 Soil	7186220
SL-524-SA5D-SB-5.5-6.5 Soil	7186221
SL-524-SA5D-SB-5.5-6.5MS Soil	7186222
SL-524-SA5D-SB-5.5-6.5MSD Soil	7186223
SL-524-SA5D-SB-5.5-6.5DUP Soil	7186224
SL-824-SA5D-SB-5.5-6.5 Soil	7186225
SL-544-SA5D-SB-0.0-0.5 Soil	7186226
SL-544-SA5D-SB-6.5-7.5 Soil	7186227
SL-546-SA5D-SB-0.0-0.5 Soil	7186228
SL-546-SA5D-SB-4.0-5.0 Soil	7186229
SL-547-SA5D-SB-0.0-0.5 Soil	7186230
SL-547-SA5D-SB-4.0-5.0 Soil	7186231

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

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: EB-090413 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7186218
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 15:00 by PH

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

101EB SDG#: PH101-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.11	J	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.30	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	1.6		1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.051	U	0.051	0.010	1
12971	Naphthalene	91-20-3	0.032	J	0.051	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.031	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.

GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	
10407	2,4-D	94-75-7	0.49	U	0.49	0.16	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.98	U	0.98	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.078	1
10407	Dinoseb	88-85-7	0.49	U	0.49	0.12	1

The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.

10407	2,4-DP (Dichlorprop)	120-36-5	0.49	U	0.49	0.16	1
10407	MCPA	94-74-6	200	U	200	49	1
10407	MCPP	93-65-2	200	U	200	49	1
10407	2,4,5-T	93-76-5	0.049	U	0.049	0.015	1
10407	2,4,5-TP	93-72-1	0.049	U	0.049	0.0098	1

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

Sample Description: EB-090413 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7186218
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 15:00 by PH

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

101EB SDG#: PH101-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		**ug/l**		**ug/l**	**ug/l**	
06386	6b Perchlorate (Method 6850)	14797-73-0	1.0	U	1.0	0.20	1
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0090	U	0.0090	0.0018	1
10589	Alpha BHC	319-84-6	0.0090	U	0.0090	0.0027	1
10589	Beta BHC	319-85-7	0.0090	U	0.0090	0.0030	1
10589	Gamma BHC - Lindane	58-89-9	0.0090	U	0.0090	0.0018	1
10589	Chlordane	57-74-9	0.45	U	0.45	0.14	1
10589	p,p-DDD	72-54-8	0.018	U	0.018	0.0045	1
10589	p,p-DDE	72-55-9	0.018	U	0.018	0.0045	1
10589	p,p-DDT	50-29-3	0.018	U	0.018	0.0047	1
10589	Delta BHC	319-86-8	0.0090	U	0.0090	0.0030	1
10589	Dieldrin	60-57-1	0.018	U	0.018	0.0048	1
10589	Endosulfan I	959-98-8	0.0090	U	0.0090	0.0039	1
10589	Endosulfan II	33213-65-9	0.018	U	0.018	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.018	U	0.018	0.0052	1
10589	Endrin	72-20-8	0.018	U	0.018	0.0073	1
10589	Endrin Aldehyde	7421-93-4	0.090	U	0.090	0.018	1
10589	Endrin Ketone	53494-70-5	0.018	U	0.018	0.0045	1
10589	Heptachlor	76-44-8	0.0090	U	0.0090	0.0018	1
10589	Heptachlor Epoxide	1024-57-3	0.0090	U	0.0090	0.0021	1
10589	Methoxychlor	72-43-5	0.090	U	0.090	0.027	1
10589	Mirex	2385-85-5	0.22	U	0.22	0.076	1
10589	Toxaphene	8001-35-2	2.7	U	2.7	0.90	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.41	U	0.41	0.082	1
13092	Aroclor 5442	12642-23-8	0.41	U	0.41	0.082	1
13092	Aroclor 5460	11126-42-4	0.41	U	0.41	0.090	1
13092	PCB-1016	12674-11-2	0.41	U	0.41	0.082	1
13092	PCB-1221	11104-28-2	0.41	U	0.41	0.082	1
13092	PCB-1232	11141-16-5	0.41	U	0.41	0.16	1
13092	PCB-1242	53469-21-9	0.41	U	0.41	0.082	1
13092	PCB-1248	12672-29-6	0.41	U	0.41	0.082	1
13092	PCB-1254	11097-69-1	0.41	U	0.41	0.082	1
13092	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
13092	PCB-1262	37324-23-5	0.41	U	0.41	0.16	1
13092	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C15-C20)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C21-C30)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C30 - C40)	n.a.	0.48	U	0.48	0.096	1
10365	EFH (C8-C11)	n.a.	0.096	U	0.096	0.048	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
For all QC parameters which are outside project defined limits,

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

Sample Description: EB-090413 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7186218
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 15:00 by PH

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

101EB SDG#: PH101-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
but within the laboratory statistical limits, no corrective action is taken.							
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.00040	J	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100	U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.0346	J	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300	U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100	U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200	U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400	U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300	U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400	U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200	U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0011	J	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200	U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200	U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200	U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00	U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00	U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400	U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200	U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100	U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400	U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100	U	0.100	0.0084	1
	SW-846 6020A		**mg/l**		**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040	U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010	U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020	U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010	U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020	U	0.00020	0.000060	1
Wet Chemistry	**EPA 300.0**		**mg/l**		**mg/l**	**mg/l**	
01504	1b Anions by 300.0-Fluoride	16984-48-8	0.10	U	0.10	0.080	1
	SW-846 7199		**ug/l**		**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0	U	10.0	5.0	1
	SW-846 9040C		**Std. Units**		**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.0		0.010	0.010	1

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

Sample Description: EB-090413 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7186218
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 15:00 by PH

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

101EB SDG#: PH101-01EB

CAT No.	Analysis Name		CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans		**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD		1746-01-6	2.01	U	2.01	0.195	1
10915	12378-PeCDD		40321-76-4	0.517	JBQ	10.1	0.129	1
10915	123478-HxCDD		39227-28-6	0.254	JBQ	10.1	0.111	1
10915	123678-HxCDD		57653-85-7	0.212	JBQ	10.1	0.120	1
10915	123789-HxCDD		19408-74-3	0.136	JBQ	10.1	0.108	1
10915	1234678-HpCDD		35822-46-9	0.554	JBQ	10.1	0.0939	1
10915	OCDD		3268-87-9	0.962	JBQ	20.1	0.126	1
10915	2378-TCDF		51207-31-9	2.01	U	2.01	0.127	1
10915	12378-PeCDF		57117-41-6	0.614	JQ	10.1	0.0736	1
10915	23478-PeCDF		57117-31-4	0.211	JBQ	10.1	0.0638	1
10915	123478-HxCDF		70648-26-9	0.194	JBQ	10.1	0.0573	1
10915	123678-HxCDF		57117-44-9	0.179	JBQ	10.1	0.0534	1
10915	123789-HxCDF		72918-21-9	0.278	JBQ	10.1	0.0561	1
10915	234678-HxCDF		60851-34-5	0.236	JB	10.1	0.0532	1
10915	1234678-HpCDF		67562-39-4	0.461	JBQ	10.1	0.0397	1
10915	1234789-HpCDF		55673-89-7	0.305	JB	10.1	0.0435	1
10915	OCDF		39001-02-0	0.878	JBQ	20.1	0.133	1
Toxic Equivalents		**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0		n.a.	0.0266				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	89	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	91	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: EB-090413 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7186218
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 15:00 by PH

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

101EB SDG#: PH101-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: EB-090413 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7186218
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 15:00 by PH

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

101EB SDG#: PH101-01EB

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13254WAE026	09/16/2013 18:52	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13254WAE026	09/11/2013 17:00	JoElla L Rice	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13248A20A	09/05/2013 22:18	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13248A20A	09/05/2013 22:18	Catherine J Schwarz	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132520027A	09/11/2013 20:04	Melissa McDermott	1
06386	6b Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132530002A	09/10/2013 17:03	Richard A Shober	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132490036A	09/10/2013 19:32	Jamie L Brillhart	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132530010A	09/11/2013 21:54	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132530010A	09/10/2013 15:30	Seth A Farrier	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132490036A	09/09/2013 11:00	William H Saadeh	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132520027A	09/11/2013 04:45	Roman Kuropatkin	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520014A	09/10/2013 17:00	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132520014A	09/09/2013 22:00	Elaine F Stoltzfus	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13255004	09/18/2013 18:59	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13255004	09/13/2013 13:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07044	Antimony	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07035	Arsenic	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07046	Barium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07047	Beryllium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
08014	Boron	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07049	Cadmium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
01750	Calcium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07051	Chromium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07052	Cobalt	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07053	Copper	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
01754	Iron	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07055	Lead	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
01757	Magnesium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1

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

Sample Description: EB-090413 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7186218
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 15:00 by PH

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

101EB SDG#: PH101-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07058	Manganese	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07060	Molybdenum	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07061	Nickel	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
10143	Phosphorus	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
01762	Potassium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
01767	Sodium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07069	Tin	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07070	Titanium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07071	Vanadium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
07072	Zinc	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
10144	Zirconium	SW-846 6010C	1	132480635001	09/07/2013 05:15	Tara L Snyder	1
06041	Selenium	SW-846 6020A	1	132480639001B	09/12/2013 21:20	David K Beck	1
06042	Silver	SW-846 6020A	1	132480639001A	09/12/2013 21:20	David K Beck	1
06044	Strontium	SW-846 6020A	1	132480639001A	09/12/2013 21:20	David K Beck	1
06045	Thallium	SW-846 6020A	1	132480639001A	09/12/2013 21:20	David K Beck	1
00259	3b Mercury 7470A	SW-846 7470A	1	132505713006	09/10/2013 11:47	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132480635001	09/06/2013 07:15	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132480639001	09/06/2013 07:13	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132505713006	09/09/2013 15:30	Nelli S Markaryan	1
01504	1b Anions by 300.0-Fluoride	EPA 300.0	1	13255655131C	09/13/2013 02:36	Christopher D Meeks	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13248621403A	09/05/2013 14:15	William L Hamaker Jr	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13248002103A	09/05/2013 20:29	Michele L Graham	1

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

Sample Description: TB-090413 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7186219
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:00

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

101TB SDG#: PH101-02TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13248A20A	09/05/2013 21:34	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13248A20A	09/05/2013 21:34	Catherine J Schwarz	1

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

Sample Description: SL-524-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186220
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:20 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52400 SDG#: PH101-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	0.86	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.6	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.71	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	4.7		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	3.0		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	0.74	J	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.4	J	1.7	0.69	1
12969	Naphthalene	91-20-3	1.5	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	2.6		1.7	0.69	1
12969	Pyrene	129-00-0	2.9		1.7	0.69	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	94	U	94	46	1
10401	2,4-DB	94-82-6	18	U	18	6.5	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.4	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.4	1
10401	MCPA	94-74-6	2,600	U	2,600	800	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	790	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.86	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.79	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2,4-DB						
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1

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

Sample Description: SL-524-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186220
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:20 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52400 SDG#: PH101-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	0.50	J	1.8	0.35	1
10590	p,p-DDE	72-55-9	15		8.9	1.7	5
10590	p,p-DDT	50-29-3	1.9		1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	0.52	J	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	14		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	25		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,000		41.5	7.48	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.768	1
06935	Arsenic	7440-38-2	5.42		4.15	0.726	1
06946	Barium	7440-39-3	121		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.780	J	1.04	0.0695	1
07914	Boron	7440-42-8	28.6		10.4	0.872	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

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

Sample Description: SL-524-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186220
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:20 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52400 SDG#: PH101-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.624	J	1.04	0.0789	1
01650	Calcium	7440-70-2	4,190		20.8	3.47	1
06951	Chromium	7440-47-3	28.1		3.11	0.166	1
06952	Cobalt	7440-48-4	6.99		1.04	0.103	1
06953	Copper	7440-50-8	16.7		2.08	0.301	1
01654	Iron	7439-89-6	26,100		41.5	3.76	1
06955	Lead	7439-92-1	11.8		3.11	0.519	1
01656	Lithium	7439-93-2	20.4		4.2	0.35	1
01657	Magnesium	7439-95-4	4,940		10.4	1.73	1
06958	Manganese	7439-96-5	374		1.04	0.0861	1
06960	Molybdenum	7439-98-7	0.413	J	2.08	0.176	1
06961	Nickel	7440-02-0	16.8		2.08	0.135	1
10145	Phosphorus	7723-14-0	247		10.4	3.00	1
01662	Potassium	7440-09-7	3,250		104	8.66	1
01667	Sodium	7440-23-5	106		104	17.3	1
06969	Tin	7440-31-5	2.90	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,160		1.04	0.176	1
06971	Vanadium	7440-62-2	50.7		1.04	0.135	1
06972	Zinc	7440-66-6	60.6		4.15	0.208	1
10146	Zirconium	7440-67-7	5.68		5.19	0.872	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.132	J	0.415	0.104	2
06142	Silver	7440-22-4	0.0922	J	0.208	0.0270	2
06144	Strontium	7440-24-6	41.0		0.415	0.0706	2
06145	Thallium	7440-28-0	0.419		0.208	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.277		0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.45		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-524-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186220
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:20 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52400 SDG#: PH101-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0726	1
11031	12378-PeCDD	40321-76-4	0.371	JQ	5.10	0.0635	1
11031	123478-HxCDD	39227-28-6	0.487	JBQ	5.10	0.0664	1
11031	123678-HxCDD	57653-85-7	2.02	JQ	5.10	0.0684	1
11031	123789-HxCDD	19408-74-3	1.61	JBQ	5.10	0.0652	1
11031	1234678-HpCDD	35822-46-9	49.1	B	5.10	0.0965	1
11031	OCDD	3268-87-9	816	B	10.2	0.0744	1
11031	2378-TCDF	51207-31-9	0.247	JQ	1.02	0.110	1
11031	12378-PeCDF	57117-41-6	0.722	JBQ	5.10	0.0429	1
11031	23478-PeCDF	57117-31-4	0.409	JBQ	5.10	0.0419	1
11031	123478-HxCDF	70648-26-9	0.349	JBQ	5.10	0.0324	1
11031	123678-HxCDF	57117-44-9	0.310	JBQ	5.10	0.0290	1
11031	123789-HxCDF	72918-21-9	0.689	JB	5.10	0.0348	1
11031	234678-HxCDF	60851-34-5	0.337	JB	5.10	0.0308	1
11031	1234678-HpCDF	67562-39-4	4.77	JB	5.10	0.0256	1
11031	1234789-HpCDF	55673-89-7	0.410	JB	5.10	0.0346	1
11031	OCDF	39001-02-0	15.2	B	10.2	0.0415	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.895				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	93	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	109	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	89	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-524-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186220
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:20 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52400 SDG#: PH101-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-524-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186220
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:20 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52400 SDG#: PH101-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 05:22	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132490029A	09/10/2013 12:03	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 21:07	Jamie L Brillhart	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/17/2013 08:05	Jamie L Brillhart	5
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/11/2013 23:26	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132490029A	09/08/2013 09:15	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520015A	09/10/2013 22:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520015A	09/09/2013 22:00	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/14/2013 14:57	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1

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

Sample Description: SL-524-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186220
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:20 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52400 SDG#: PH101-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 10:50	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:36	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:36	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:36	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:36	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:23	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13248039402A	09/05/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401A	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-524-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186221
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	0.84	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.7
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	39	U	39	13	1
10401	Dalapon	75-99-0	96	U	96	47	1
10401	2,4-DB	94-82-6	18	U	18	6.6	1
10401	Dicamba	1918-00-9	13	U	13	4.3	1
10401	Dinoseb	88-85-7	26	U	26	9.6	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.6	1
10401	MCPA	94-74-6	2,700	U	2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	800	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.88	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.80	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
2,4-DB

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

Sample Description: SL-524-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186221
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.6	J	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,100		42.8	7.72	1
06944	Antimony	7440-36-0	4.28	U	4.28	0.792	1

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

Sample Description: SL-524-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186221
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	4.02	J	4.28	0.749	1
06946	Barium	7440-39-3	76.5		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.449	J	1.07	0.0717	1
07914	Boron	7440-42-8	22.7		10.7	0.899	1
06949	Cadmium	7440-43-9	0.456	J	1.07	0.0814	1
01650	Calcium	7440-70-2	3,180		21.4	3.58	1
06951	Chromium	7440-47-3	17.1		3.21	0.171	1
06952	Cobalt	7440-48-4	3.69		1.07	0.106	1
06953	Copper	7440-50-8	10.1		2.14	0.310	1
01654	Iron	7439-89-6	20,000		42.8	3.88	1
06955	Lead	7439-92-1	4.53		3.21	0.535	1
01656	Lithium	7439-93-2	21.8		4.3	0.36	1
01657	Magnesium	7439-95-4	4,290		10.7	1.79	1
06958	Manganese	7439-96-5	182		1.07	0.0889	1
06960	Molybdenum	7439-98-7	2.14	U	2.14	0.182	1
06961	Nickel	7440-02-0	8.39		2.14	0.139	1
10145	Phosphorus	7723-14-0	305		10.7	3.09	1
01662	Potassium	7440-09-7	1,690		107	8.93	1
01667	Sodium	7440-23-5	160		107	17.9	1
06969	Tin	7440-31-5	2.92	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,250		1.07	0.182	1
06971	Vanadium	7440-62-2	35.6		1.07	0.139	1
06972	Zinc	7440-66-6	47.3		4.28	0.214	1
10146	Zirconium	7440-67-7	4.01	J	5.35	0.899	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.428	U	0.428	0.107	2
06142	Silver	7440-22-4	0.0657	J	0.214	0.0278	2
06144	Strontium	7440-24-6	25.3		0.428	0.0728	2
06145	Thallium	7440-28-0	0.233		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.113		0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.74		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-524-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186221
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 03:46	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13249A16A	09/06/2013 20:06	Laura M Krieger	24.7
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324832261	09/05/2013 15:13	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324832261	09/05/2013 15:13	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132490029A	09/10/2013 12:30	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 21:22	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/11/2013 23:45	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132490029A	09/08/2013 09:15	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520015A	09/10/2013 19:08	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520015A	09/09/2013 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1

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

Sample Description: SL-524-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186221
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 10:27	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:22	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:22	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:22	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:22	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:25	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13248039402A	09/05/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401A	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-524-SA5D-SB-5.5-6.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186222
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	35		1.8	0.71	1
12969	Acenaphthylene	208-96-8	34		1.8	0.35	1
12969	Anthracene	120-12-7	34		1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	35		1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	34		1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	34		1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	31		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	35		1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	36		1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	39		19	6.4	1
12969	Di-n-butylphthalate	84-74-2	38		19	6.4	1
12969	Chrysene	218-01-9	34		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	34		1.8	0.71	1
12969	Diethylphthalate	84-66-2	36		19	6.4	1
12969	Dimethylphthalate	131-11-3	33		19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	60		19	6.4	1
12969	Fluoranthene	206-44-0	34		1.8	0.71	1
12969	Fluorene	86-73-7	34		1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	35		1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	35		1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	35		1.8	0.71	1
12969	Naphthalene	91-20-3	35		1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	32		1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	38		19	6.4	1
12969	Phenanthrene	85-01-8	33		1.8	0.71	1
12969	Pyrene	129-00-0	34		1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.1		1.0	0.2	24.22
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	110		38	13	1
10401	Dalapon	75-99-0	140		95	46	1
10401	2,4-DB	94-82-6	130		18	6.6	1
10401	Dicamba	1918-00-9	9.1	J	13	4.2	1
10401	Dinoseb	88-85-7	44		25	9.5	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	120		18	9.5	1
10401	MCPA	94-74-6	8,700		2,600	800	1
10401	MCPP (Mecoprop)	93-65-2	8,500		2,600	790	1
10401	2,4,5-T	93-76-5	12		1.8	0.87	1
10401	2,4,5-TP	93-72-1	11		1.8	0.79	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
2,4-DB

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

Sample Description: SL-524-SA5D-SB-5.5-6.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186222
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	3.5		0.89	0.18	1
10590	Alpha BHC	319-84-6	4.1		0.89	0.18	1
10590	Beta BHC	319-85-7	3.5		2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	4.0		0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	8.6		1.8	0.35	1
10590	p,p-DDE	72-55-9	8.0		1.8	0.35	1
10590	p,p-DDT	50-29-3	9.3		1.8	0.37	1
10590	Delta BHC	319-86-8	3.7		0.89	0.48	1
10590	Dieldrin	60-57-1	9.2		1.8	0.35	1
10590	Endosulfan I	959-98-8	4.3		0.89	0.24	1
10590	Endosulfan II	33213-65-9	7.4		1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	7.4		1.8	0.35	1
10590	Endrin	72-20-8	8.8		1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	7.1		1.8	0.35	1
10590	Endrin Ketone	53494-70-5	7.7		1.9	0.64	1
10590	Heptachlor	76-44-8	4.2		0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	3.5		0.89	0.18	1
10590	Methoxychlor	72-43-5	46		7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	190		18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	200		18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	3.3	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.6		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	5.3	J	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,900		42.8	7.72	1
06944	Antimony	7440-36-0	35.5		4.28	0.792	1

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

Sample Description: SL-524-SA5D-SB-5.5-6.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186222
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	20.1	4.28	0.749	1
06946	Barium	7440-39-3	298	1.07	0.0353	1
06947	Beryllium	7440-41-7	5.77	1.07	0.0717	1
07914	Boron	7440-42-8	220	10.7	0.899	1
06949	Cadmium	7440-43-9	5.56	1.07	0.0814	1
01650	Calcium	7440-70-2	3,970	21.4	3.58	1
06951	Chromium	7440-47-3	38.9	3.21	0.171	1
06952	Cobalt	7440-48-4	54.4	1.07	0.106	1
06953	Copper	7440-50-8	38.0	2.14	0.310	1
01654	Iron	7439-89-6	21,700	42.8	3.88	1
06955	Lead	7439-92-1	19.9	3.21	0.535	1
01656	Lithium	7439-93-2	127	4.3	0.36	1
01657	Magnesium	7439-95-4	4,870	10.7	1.79	1
06958	Manganese	7439-96-5	270	1.07	0.0889	1
06960	Molybdenum	7439-98-7	199	2.14	0.182	1
06961	Nickel	7440-02-0	60.3	2.14	0.139	1
10145	Phosphorus	7723-14-0	421	10.7	3.09	1
01662	Potassium	7440-09-7	3,000	107	8.93	1
01667	Sodium	7440-23-5	1,200	107	17.9	1
06969	Tin	7440-31-5	370	10.7	0.236	1
06970	Titanium	7440-32-6	1,680	1.07	0.182	1
06971	Vanadium	7440-62-2	90.8	1.07	0.139	1
06972	Zinc	7440-66-6	102	4.28	0.214	1
10146	Zirconium	7440-67-7	108	5.35	0.899	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.37	0.428	0.107	2
06142	Silver	7440-22-4	12.4	0.214	0.0278	2
06144	Strontium	7440-24-6	36.0	0.428	0.0728	2
06145	Thallium	7440-28-0	0.734	0.214	0.0321	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.267	0.0176	0.0106	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	6.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

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

Sample Description: SL-524-SA5D-SB-5.5-6.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186222
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 04:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13249A16A	09/06/2013 20:44	Laura M Krieger	24.22
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324832261	09/05/2013 15:13	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324832261	09/05/2013 15:14	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132490029A	09/10/2013 12:57	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 21:37	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 00:03	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132490029A	09/08/2013 09:15	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520015A	09/10/2013 19:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520015A	09/09/2013 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 10:38	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:29	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:29	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:29	Choon Y Tian	2

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

Sample Description: SL-524-SA5D-SB-5.5-6.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186222
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:29	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:31	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401A	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-524-SA5D-SB-5.5-6.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186223
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	32		1.8	0.71	1
12969	Acenaphthylene	208-96-8	32		1.8	0.35	1
12969	Anthracene	120-12-7	32		1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	32		1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	31		1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	35		1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	29		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	33		1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	32		1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	36		19	6.4	1
12969	Di-n-butylphthalate	84-74-2	35		19	6.4	1
12969	Chrysene	218-01-9	32		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	32		1.8	0.71	1
12969	Diethylphthalate	84-66-2	34		19	6.4	1
12969	Dimethylphthalate	131-11-3	31		19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	35		19	6.4	1
12969	Fluoranthene	206-44-0	32		1.8	0.71	1
12969	Fluorene	86-73-7	32		1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	33		1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	32		1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	31		1.8	0.71	1
12969	Naphthalene	91-20-3	31		1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	28		1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	35		19	6.4	1
12969	Phenanthrene	85-01-8	31		1.8	0.71	1
12969	Pyrene	129-00-0	31		1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	7.2		0.9	0.2	20.46
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	96		38	13	1
10401	Dalapon	75-99-0	130		96	47	1
10401	2,4-DB	94-82-6	120		18	6.6	1
10401	Dicamba	1918-00-9	8.3	J	13	4.3	1
10401	Dinoseb	88-85-7	38		26	9.6	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	110		18	9.6	1
10401	MCPA	94-74-6	7,700		2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	7,600		2,700	800	1
10401	2,4,5-T	93-76-5	11		1.8	0.87	1
10401	2,4,5-TP	93-72-1	9.9		1.8	0.80	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
2,4-DB

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

Sample Description: SL-524-SA5D-SB-5.5-6.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186223
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	3.0		0.89	0.18	1
10590	Alpha BHC	319-84-6	3.4		0.89	0.18	1
10590	Beta BHC	319-85-7	3.2		2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	3.4		0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	8.1		1.8	0.35	1
10590	p,p-DDE	72-55-9	7.0		1.8	0.35	1
10590	p,p-DDT	50-29-3	8.6		1.8	0.37	1
10590	Delta BHC	319-86-8	3.4		0.89	0.48	1
10590	Dieldrin	60-57-1	8.6		1.8	0.35	1
10590	Endosulfan I	959-98-8	3.9		0.89	0.24	1
10590	Endosulfan II	33213-65-9	7.1		1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	7.1		1.8	0.35	1
10590	Endrin	72-20-8	8.2		1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	7.0		1.8	0.35	1
10590	Endrin Ketone	53494-70-5	7.2		1.9	0.64	1
10590	Heptachlor	76-44-8	3.6		0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	3.3		0.89	0.18	1
10590	Methoxychlor	72-43-5	44		7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	200		18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	200		18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	3.2	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.4		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	5.0	J	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,400		42.8	7.72	1
06944	Antimony	7440-36-0	35.0		4.28	0.792	1

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

Sample Description: SL-524-SA5D-SB-5.5-6.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186223
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	20.1	4.28	0.749	1
06946	Barium	7440-39-3	290	1.07	0.0353	1
06947	Beryllium	7440-41-7	5.73	1.07	0.0717	1
07914	Boron	7440-42-8	219	10.7	0.899	1
06949	Cadmium	7440-43-9	5.57	1.07	0.0814	1
01650	Calcium	7440-70-2	3,800	21.4	3.58	1
06951	Chromium	7440-47-3	38.7	3.21	0.171	1
06952	Cobalt	7440-48-4	54.4	1.07	0.106	1
06953	Copper	7440-50-8	37.5	2.14	0.310	1
01654	Iron	7439-89-6	20,900	42.8	3.88	1
06955	Lead	7439-92-1	20.0	3.21	0.535	1
01656	Lithium	7439-93-2	126	4.3	0.36	1
01657	Magnesium	7439-95-4	4,670	10.7	1.79	1
06958	Manganese	7439-96-5	260	1.07	0.0889	1
06960	Molybdenum	7439-98-7	198	2.14	0.182	1
06961	Nickel	7440-02-0	60.1	2.14	0.139	1
10145	Phosphorus	7723-14-0	425	10.7	3.09	1
01662	Potassium	7440-09-7	2,950	107	8.93	1
01667	Sodium	7440-23-5	1,190	107	17.9	1
06969	Tin	7440-31-5	369	10.7	0.236	1
06970	Titanium	7440-32-6	1,560	1.07	0.182	1
06971	Vanadium	7440-62-2	89.6	1.07	0.139	1
06972	Zinc	7440-66-6	100	4.28	0.214	1
10146	Zirconium	7440-67-7	107	5.35	0.899	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.23	0.428	0.107	2
06142	Silver	7440-22-4	11.3	0.214	0.0278	2
06144	Strontium	7440-24-6	31.8	0.428	0.0728	2
06145	Thallium	7440-28-0	0.687	0.214	0.0321	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.261	0.0171	0.0103	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	6.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

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

Sample Description: SL-524-SA5D-SB-5.5-6.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186223
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 04:50	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13249A16A	09/06/2013 21:22	Laura M Krieger	20.46
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324832261	09/05/2013 15:14	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324832261	09/05/2013 15:14	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132490029A	09/10/2013 13:24	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 21:53	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 00:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132490029A	09/08/2013 09:15	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520015A	09/10/2013 19:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520015A	09/09/2013 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 10:42	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:31	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:31	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:31	Choon Y Tian	2

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

Sample Description: SL-524-SA5D-SB-5.5-6.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186223
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:31	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:33	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401A	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-524-SA5D-SB-5.5-6.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186224
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,600		42.8	7.72	1
06944	Antimony	7440-36-0	4.28	U	4.28	0.792	1
06935	Arsenic	7440-38-2	4.00	J	4.28	0.749	1
06946	Barium	7440-39-3	80.5		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.483	J	1.07	0.0717	1
07914	Boron	7440-42-8	23.3		10.7	0.899	1
06949	Cadmium	7440-43-9	0.472	J	1.07	0.0814	1
01650	Calcium	7440-70-2	3,240		21.4	3.58	1
06951	Chromium	7440-47-3	18.1		3.21	0.171	1
06952	Cobalt	7440-48-4	3.92		1.07	0.106	1
06953	Copper	7440-50-8	10.3		2.14	0.310	1
01654	Iron	7439-89-6	21,100		42.8	3.88	1
06955	Lead	7439-92-1	4.49		3.21	0.535	1
01656	Lithium	7439-93-2	21.6		4.3	0.36	1
01657	Magnesium	7439-95-4	4,420		10.7	1.79	1
06958	Manganese	7439-96-5	191		1.07	0.0889	1
06960	Molybdenum	7439-98-7	2.14	U	2.14	0.182	1
06961	Nickel	7440-02-0	8.81		2.14	0.139	1
10145	Phosphorus	7723-14-0	297		10.7	3.09	1
01662	Potassium	7440-09-7	1,680		107	8.93	1
01667	Sodium	7440-23-5	165		107	17.9	1
06969	Tin	7440-31-5	2.76	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,250		1.07	0.182	1
06971	Vanadium	7440-62-2	37.7		1.07	0.139	1
06972	Zinc	7440-66-6	47.7		4.28	0.214	1
10146	Zirconium	7440-67-7	4.39	J	5.35	0.899	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.428	U	0.428	0.107	2
06142	Silver	7440-22-4	0.0654	J	0.214	0.0278	2
06144	Strontium	7440-24-6	24.3		0.428	0.0728	2
06145	Thallium	7440-28-0	0.237		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0465		0.0176	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.70		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	6.6		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	6.6		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

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

Sample Description: SL-524-SA5D-SB-5.5-6.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186224
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:35 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52455 SDG#: PH101-04DUP

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 10:35	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:27	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:27	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:27	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:27	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:29	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13248039402A	09/05/2013 19:35	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401A	09/11/2013 20:21	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401A	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-824-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186225
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:45 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82455 SDG#: PH101-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.89
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	96	U	96	47	1
10401	2,4-DB	94-82-6	18	U	18	6.6	1
10401	Dicamba	1918-00-9	13	U	13	4.3	1
10401	Dinoseb	88-85-7	26	U	26	9.6	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.6	1
10401	MCPA	94-74-6	2,700	U	2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	800	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.88	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.80	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
2,4-DB

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

Sample Description: SL-824-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186225
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:45 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82455 SDG#: PH101-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.36	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.36	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.36	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.36	1
10590	Endrin	72-20-8	1.8	U	1.8	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.36	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.65	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,800		42.2	7.61	1
06944	Antimony	7440-36-0	4.22	U	4.22	0.781	1

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

Sample Description: SL-824-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186225
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:45 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82455 SDG#: PH101-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	5.01		4.22	0.739	1
06946	Barium	7440-39-3	84.0		1.06	0.0348	1
06947	Beryllium	7440-41-7	0.453	J	1.06	0.0707	1
07914	Boron	7440-42-8	22.1		10.6	0.886	1
06949	Cadmium	7440-43-9	0.427	J	1.06	0.0802	1
01650	Calcium	7440-70-2	3,230		21.1	3.52	1
06951	Chromium	7440-47-3	17.0		3.17	0.169	1
06952	Cobalt	7440-48-4	3.99		1.06	0.104	1
06953	Copper	7440-50-8	10.5		2.11	0.306	1
01654	Iron	7439-89-6	20,800		42.2	3.82	1
06955	Lead	7439-92-1	3.96		3.17	0.528	1
01656	Lithium	7439-93-2	24.5		4.2	0.36	1
01657	Magnesium	7439-95-4	4,660		10.6	1.76	1
06958	Manganese	7439-96-5	225		1.06	0.0876	1
06960	Molybdenum	7439-98-7	2.11	U	2.11	0.179	1
06961	Nickel	7440-02-0	9.18		2.11	0.137	1
10145	Phosphorus	7723-14-0	351		10.6	3.05	1
01662	Potassium	7440-09-7	1,850		106	8.80	1
01667	Sodium	7440-23-5	141		106	17.6	1
06969	Tin	7440-31-5	2.88	J	10.6	0.232	1
06970	Titanium	7440-32-6	1,310		1.06	0.179	1
06971	Vanadium	7440-62-2	36.4		1.06	0.137	1
06972	Zinc	7440-66-6	51.8		4.22	0.211	1
10146	Zirconium	7440-67-7	4.05	J	5.28	0.886	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.422	U	0.422	0.106	2
06142	Silver	7440-22-4	0.0687	J	0.211	0.0274	2
06144	Strontium	7440-24-6	32.2		0.422	0.0718	2
06145	Thallium	7440-28-0	0.328		0.211	0.0317	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.78		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-824-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186225
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:45 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82455 SDG#: PH101-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 05:55	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13249A16A	09/06/2013 17:34	Laura M Krieger	22.89
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324832261	09/05/2013 15:15	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324832261	09/05/2013 15:15	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132490029A	09/10/2013 13:51	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 22:08	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 00:40	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132490029A	09/08/2013 09:15	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520015A	09/10/2013 20:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520015A	09/09/2013 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1

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

Sample Description: SL-824-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186225
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 08:45 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82455 SDG#: PH101-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 10:54	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:38	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:38	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:38	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:38	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:35	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13248039402A	09/05/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401A	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-544-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186226
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 09:40 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54400 SDG#: PH101-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.6	J	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.4	J	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.4	J	1.7	0.70	1
12969	Pyrene	129-00-0	1.3	J	1.7	0.70	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	4.4	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	11		10	4.2	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

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

Sample Description: SL-544-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186226
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 09:40 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54400 SDG#: PH101-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,600		41.9	7.55	1
06944	Antimony	7440-36-0	4.19	U	4.19	0.775	1
06935	Arsenic	7440-38-2	5.67		4.19	0.733	1
06946	Barium	7440-39-3	107		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.706	J	1.05	0.0702	1
07914	Boron	7440-42-8	29.3		10.5	0.880	1
06949	Cadmium	7440-43-9	0.619	J	1.05	0.0796	1
01650	Calcium	7440-70-2	3,450		20.9	3.50	1
06951	Chromium	7440-47-3	27.5		3.14	0.168	1
06952	Cobalt	7440-48-4	7.92		1.05	0.104	1
06953	Copper	7440-50-8	18.7		2.09	0.304	1
01654	Iron	7439-89-6	27,100		41.9	3.79	1
06955	Lead	7439-92-1	7.92		3.14	0.524	1
01656	Lithium	7439-93-2	19.8		4.2	0.36	1
01657	Magnesium	7439-95-4	5,530		10.5	1.75	1
06958	Manganese	7439-96-5	410		1.05	0.0869	1
06960	Molybdenum	7439-98-7	0.487	J	2.09	0.178	1
06961	Nickel	7440-02-0	15.8		2.09	0.136	1
10145	Phosphorus	7723-14-0	383		10.5	3.03	1
01662	Potassium	7440-09-7	5,620		105	8.73	1
01667	Sodium	7440-23-5	85.8	J	105	17.5	1
06969	Tin	7440-31-5	2.93	J	10.5	0.230	1
06970	Titanium	7440-32-6	1,280		1.05	0.178	1
06971	Vanadium	7440-62-2	52.8		1.05	0.136	1
06972	Zinc	7440-66-6	65.0		4.19	0.209	1
10146	Zirconium	7440-67-7	5.06	J	5.24	0.880	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.240	J	0.419	0.105	2
06142	Silver	7440-22-4	0.0299	J	0.209	0.0272	2
06144	Strontium	7440-24-6	28.3		0.419	0.0712	2
06145	Thallium	7440-28-0	0.354		0.209	0.0314	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0166	U	0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.85		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.5		0.10	0.10	1

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

Sample Description: SL-544-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186226
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 09:40 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54400 SDG#: PH101-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

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

Sample Description: SL-544-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186226
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 09:40 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54400 SDG#: PH101-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.101	JQ	1.04	0.0756	1
11031	12378-PeCDD	40321-76-4	0.188	J	5.21	0.0563	1
11031	123478-HxCDD	39227-28-6	0.0521	JBQ	5.21	0.0415	1
11031	123678-HxCDD	57653-85-7	0.560	J	5.21	0.0437	1
11031	123789-HxCDD	19408-74-3	0.794	JB	5.21	0.0404	1
11031	1234678-HpCDD	35822-46-9	0.562	JBQ	5.21	0.0350	1
11031	OCDD	3268-87-9	6.62	JB	10.4	0.0276	1
11031	2378-TCDF	51207-31-9	1.04	U	1.04	0.0547	1
11031	12378-PeCDF	57117-41-6	0.461	JBQ	5.21	0.0272	1
11031	23478-PeCDF	57117-31-4	0.146	JBQ	5.21	0.0277	1
11031	123478-HxCDF	70648-26-9	0.0932	JB	5.21	0.0194	1
11031	123678-HxCDF	57117-44-9	0.130	JBQ	5.21	0.0170	1
11031	123789-HxCDF	72918-21-9	1.39	JB	5.21	0.0202	1
11031	234678-HxCDF	60851-34-5	0.0686	JBQ	5.21	0.0170	1
11031	1234678-HpCDF	67562-39-4	0.148	JB	5.21	0.0132	1
11031	1234789-HpCDF	55673-89-7	0.0544	JBQ	5.21	0.0208	1
11031	OCDF	39001-02-0	0.290	JBQ	10.4	0.0386	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.475				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	95	23 - 140
13C12-OCDD	107	17 - 157
13C12-2378-TCDF	83	24 - 169
13C12-12378-PeCDF	100	24 - 185
13C12-23478-PeCDF	92	21 - 178
13C12-123478-HxCDF	93	26 - 152
13C12-123678-HxCDF	104	26 - 123
13C12-234678-HxCDF	98	28 - 136
13C12-123789-HxCDF	93	29 - 147
13C12-1234678-HpCDF	132	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	98	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-544-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186226
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 09:40 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54400 SDG#: PH101-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-544-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186226
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 09:40 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54400 SDG#: PH101-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 06:27	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 00:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520015A	09/10/2013 21:37	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520015A	09/09/2013 22:00	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/14/2013 15:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 11:06	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:46	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:46	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:46	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:46	Choon Y Tian	2

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

Sample Description: SL-544-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186226
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 09:40 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54400 SDG#: PH101-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:37	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13248039402A	09/05/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401A	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-544-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186227
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 09:50 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54465 SDG#: PH101-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.37
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

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

Sample Description: SL-544-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186227
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 09:50 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54465 SDG#: PH101-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,700		41.2	7.42	1
06944	Antimony	7440-36-0	4.12	U	4.12	0.762	1
06935	Arsenic	7440-38-2	18.9		4.12	0.721	1
06946	Barium	7440-39-3	78.8		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.450	J	1.03	0.0690	1
07914	Boron	7440-42-8	20.3		10.3	0.865	1
06949	Cadmium	7440-43-9	0.425	J	1.03	0.0782	1
01650	Calcium	7440-70-2	2,650		20.6	3.44	1
06951	Chromium	7440-47-3	15.8		3.09	0.165	1
06952	Cobalt	7440-48-4	4.80		1.03	0.102	1
06953	Copper	7440-50-8	10.3		2.06	0.299	1
01654	Iron	7439-89-6	18,900		41.2	3.73	1
06955	Lead	7439-92-1	4.27		3.09	0.515	1
01656	Lithium	7439-93-2	27.6		4.1	0.35	1
01657	Magnesium	7439-95-4	4,350		10.3	1.72	1
06958	Manganese	7439-96-5	252		1.03	0.0855	1
06960	Molybdenum	7439-98-7	2.06	U	2.06	0.175	1
06961	Nickel	7440-02-0	8.95		2.06	0.134	1
10145	Phosphorus	7723-14-0	409		10.3	2.98	1
01662	Potassium	7440-09-7	3,040		103	8.59	1
01667	Sodium	7440-23-5	105		103	17.2	1
06969	Tin	7440-31-5	3.14	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,410		1.03	0.175	1
06971	Vanadium	7440-62-2	33.2		1.03	0.134	1
06972	Zinc	7440-66-6	60.5		4.12	0.206	1
10146	Zirconium	7440-67-7	4.93	J	5.15	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.412	U	0.412	0.103	2
06142	Silver	7440-22-4	0.206	U	0.206	0.0268	2
06144	Strontium	7440-24-6	17.1		0.412	0.0700	2
06145	Thallium	7440-28-0	0.360		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.21		0.0100	0.0100	1

The pH was measured in water at 21.7 C.

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

Sample Description: SL-544-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186227
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 09:50 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54465 SDG#: PH101-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	5.7	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 06:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13249A16A	09/06/2013 18:12	Laura M Krieger	24.37
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324832261	09/05/2013 15:18	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324832261	09/05/2013 15:18	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 01:17	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520015A	09/10/2013 20:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520015A	09/09/2013 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1

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

Sample Description: SL-544-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186227
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 09:50 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54465 SDG#: PH101-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 11:10	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:48	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:48	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:48	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:48	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13248039402A	09/05/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-546-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186228
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 13:25 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54600 SDG#: PH101-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.0	J	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.3	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	0.80	J	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	0.73	J	1.7	0.70	1
12969	Naphthalene	91-20-3	0.88	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	0.70	J	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.4		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	14		10	4.1	1

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

Sample Description: SL-546-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186228
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 13:25 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54600 SDG#: PH101-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,000		41.7	7.52	1
06944	Antimony	7440-36-0	4.17	U	4.17	0.772	1
06935	Arsenic	7440-38-2	6.69		4.17	0.730	1
06946	Barium	7440-39-3	98.9		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.631	J	1.04	0.0699	1
07914	Boron	7440-42-8	27.1		10.4	0.876	1
06949	Cadmium	7440-43-9	0.677	J	1.04	0.0792	1
01650	Calcium	7440-70-2	3,100		20.9	3.48	1
06951	Chromium	7440-47-3	25.4		3.13	0.167	1
06952	Cobalt	7440-48-4	7.02		1.04	0.103	1
06953	Copper	7440-50-8	17.6		2.09	0.302	1
01654	Iron	7439-89-6	24,600		41.7	3.77	1
06955	Lead	7439-92-1	9.06		3.13	0.521	1
01656	Lithium	7439-93-2	17.9		4.2	0.35	1
01657	Magnesium	7439-95-4	4,960		10.4	1.74	1
06958	Manganese	7439-96-5	369		1.04	0.0865	1
06960	Molybdenum	7439-98-7	0.580	J	2.09	0.177	1
06961	Nickel	7440-02-0	14.3		2.09	0.136	1
10145	Phosphorus	7723-14-0	422		10.4	3.01	1
01662	Potassium	7440-09-7	5,400		104	8.70	1
01667	Sodium	7440-23-5	79.8	J	104	17.4	1
06969	Tin	7440-31-5	2.87	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,230		1.04	0.177	1
06971	Vanadium	7440-62-2	47.7		1.04	0.136	1
06972	Zinc	7440-66-6	63.5		4.17	0.209	1
10146	Zirconium	7440-67-7	4.28	J	5.21	0.876	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.254	J	0.417	0.104	2
06142	Silver	7440-22-4	0.0307	J	0.209	0.0271	2
06144	Strontium	7440-24-6	28.0		0.417	0.0709	2
06145	Thallium	7440-28-0	0.403		0.209	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0132	J	0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.73		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.1		0.10	0.10	1

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

Sample Description: SL-546-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186228
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 13:25 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54600 SDG#: PH101-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

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

Sample Description: SL-546-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186228
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 13:25 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54600 SDG#: PH101-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.117	JQ	1.01	0.0820	1
11031	12378-PeCDD	40321-76-4	0.437	J	5.06	0.0694	1
11031	123478-HxCDD	39227-28-6	0.211	JBQ	5.06	0.0483	1
11031	123678-HxCDD	57653-85-7	0.744	JQ	5.06	0.0498	1
11031	123789-HxCDD	19408-74-3	1.05	JB	5.06	0.0482	1
11031	1234678-HpCDD	35822-46-9	1.97	JB	5.06	0.0407	1
11031	OCDD	3268-87-9	18.6	B	10.1	0.0301	1
11031	2378-TCDF	51207-31-9	0.108	J	1.01	0.0781	1
11031	12378-PeCDF	57117-41-6	0.617	JB	5.06	0.0326	1
11031	23478-PeCDF	57117-31-4	0.443	JBQ	5.06	0.0334	1
11031	123478-HxCDF	70648-26-9	0.248	JB	5.06	0.0262	1
11031	123678-HxCDF	57117-44-9	0.290	JBQ	5.06	0.0226	1
11031	123789-HxCDF	72918-21-9	1.69	JB	5.06	0.0288	1
11031	234678-HxCDF	60851-34-5	0.242	JBQ	5.06	0.0242	1
11031	1234678-HpCDF	67562-39-4	0.462	JB	5.06	0.0175	1
11031	1234789-HpCDF	55673-89-7	0.187	JB	5.06	0.0263	1
11031	OCDF	39001-02-0	1.05	JBQ	10.1	0.0385	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.797				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	114	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	86	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-546-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186228
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 13:25 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54600 SDG#: PH101-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-546-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186228
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 13:25 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54600 SDG#: PH101-08

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 07:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 01:36	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520015A	09/10/2013 21:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520015A	09/09/2013 22:00	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/14/2013 16:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 11:14	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:50	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:50	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:50	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:50	Choon Y Tian	2

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

Sample Description: SL-546-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186228
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 13:25 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54600 SDG#: PH101-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:41	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13248039402A	09/05/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-546-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186229
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 13:45 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54640 SDG#: PH101-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.63
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

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

Sample Description: SL-546-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186229
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 13:45 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54640 SDG#: PH101-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,600		45.3	8.17	1
06944	Antimony	7440-36-0	4.53	U	4.53	0.838	1
06935	Arsenic	7440-38-2	8.31		4.53	0.793	1
06946	Barium	7440-39-3	128		1.13	0.0374	1
06947	Beryllium	7440-41-7	0.912	J	1.13	0.0759	1
07914	Boron	7440-42-8	34.6		11.3	0.951	1
06949	Cadmium	7440-43-9	0.600	J	1.13	0.0861	1
01650	Calcium	7440-70-2	4,620		22.7	3.78	1
06951	Chromium	7440-47-3	34.9		3.40	0.181	1
06952	Cobalt	7440-48-4	8.45		1.13	0.112	1
06953	Copper	7440-50-8	19.1		2.27	0.328	1
01654	Iron	7439-89-6	32,300		90.6	8.20	2
06955	Lead	7439-92-1	8.87		3.40	0.566	1
01656	Lithium	7439-93-2	27.0		4.5	0.39	1
01657	Magnesium	7439-95-4	6,860		11.3	1.89	1
06958	Manganese	7439-96-5	428		1.13	0.0940	1
06960	Molybdenum	7439-98-7	0.755	J	2.27	0.193	1
06961	Nickel	7440-02-0	18.8		2.27	0.147	1
10145	Phosphorus	7723-14-0	337		11.3	3.27	1
01662	Potassium	7440-09-7	5,130		113	9.45	1
01667	Sodium	7440-23-5	124		113	18.9	1
06969	Tin	7440-31-5	3.37	J	11.3	0.249	1
06970	Titanium	7440-32-6	1,280		1.13	0.193	1
06971	Vanadium	7440-62-2	63.2		1.13	0.147	1
06972	Zinc	7440-66-6	71.1		4.53	0.227	1
10146	Zirconium	7440-67-7	6.22		5.66	0.951	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.282	J	0.453	0.113	2
06142	Silver	7440-22-4	0.0801	J	0.227	0.0294	2
06144	Strontium	7440-24-6	48.9		0.453	0.0770	2
06145	Thallium	7440-28-0	0.541		0.227	0.0340	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184	U	0.0184	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.58		0.0100	0.0100	1

The pH was measured in water at 21.9 C.

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

Sample Description: SL-546-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186229
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 13:45 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54640 SDG#: PH101-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	11.7	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 08:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13249A16A	09/06/2013 18:50	Laura M Krieger	21.63
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324832261	09/05/2013 15:19	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324832261	09/05/2013 15:19	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 01:54	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520015A	09/10/2013 20:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520015A	09/09/2013 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/07/2013 01:34	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1

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

Sample Description: SL-546-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186229
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 13:45 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54640 SDG#: PH101-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 11:18	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:53	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:53	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:53	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:53	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13248039402A	09/05/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-547-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186230
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 12:00 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54700 SDG#: PH101-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.1	J	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.4	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	0.72	J	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	0.75	J	1.8	0.70	1
12969	Naphthalene	91-20-3	0.83	J	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	0.71	J	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	11		10	4.2	1

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

Sample Description: SL-547-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186230
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 12:00 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54700 SDG#: PH101-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,600		41.5	7.47	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.767	1
06935	Arsenic	7440-38-2	4.51		4.15	0.725	1
06946	Barium	7440-39-3	103		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.707	J	1.04	0.0694	1
07914	Boron	7440-42-8	30.9		10.4	0.871	1
06949	Cadmium	7440-43-9	0.587	J	1.04	0.0788	1
01650	Calcium	7440-70-2	3,670		20.7	3.46	1
06951	Chromium	7440-47-3	30.6		3.11	0.166	1
06952	Cobalt	7440-48-4	8.39		1.04	0.103	1
06953	Copper	7440-50-8	17.7		2.07	0.301	1
01654	Iron	7439-89-6	28,700		82.9	7.50	2
06955	Lead	7439-92-1	8.56		3.11	0.518	1
01656	Lithium	7439-93-2	22.1		4.1	0.35	1
01657	Magnesium	7439-95-4	6,200		10.4	1.73	1
06958	Manganese	7439-96-5	376		1.04	0.0860	1
06960	Molybdenum	7439-98-7	0.396	J	2.07	0.176	1
06961	Nickel	7440-02-0	15.8		2.07	0.135	1
10145	Phosphorus	7723-14-0	490		10.4	3.00	1
01662	Potassium	7440-09-7	5,840		104	8.64	1
01667	Sodium	7440-23-5	91.9	J	104	17.3	1
06969	Tin	7440-31-5	2.91	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,190		1.04	0.176	1
06971	Vanadium	7440-62-2	58.4		1.04	0.135	1
06972	Zinc	7440-66-6	68.5		4.15	0.207	1
10146	Zirconium	7440-67-7	5.63		5.18	0.871	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.283	J	0.415	0.104	2
06142	Silver	7440-22-4	0.0292	J	0.207	0.0269	2
06144	Strontium	7440-24-6	34.2		0.415	0.0705	2
06145	Thallium	7440-28-0	0.382		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0110	J	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.94		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.4		0.10	0.10	1

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

Sample Description: SL-547-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186230
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 12:00 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54700 SDG#: PH101-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

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

Sample Description: SL-547-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186230
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 12:00 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54700 SDG#: PH101-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0779	1
11031	12378-PeCDD	40321-76-4	5.22	U	5.22	0.0717	1
11031	123478-HxCDD	39227-28-6	5.22	U	5.22	0.0422	1
11031	123678-HxCDD	57653-85-7	0.667	J	5.22	0.0443	1
11031	123789-HxCDD	19408-74-3	0.831	JB	5.22	0.0409	1
11031	1234678-HpCDD	35822-46-9	1.90	JB	5.22	0.0449	1
11031	OCDD	3268-87-9	23.6	B	10.4	0.0315	1
11031	2378-TCDF	51207-31-9	0.106	JQ	1.04	0.0686	1
11031	12378-PeCDF	57117-41-6	0.492	JBQ	5.22	0.0284	1
11031	23478-PeCDF	57117-31-4	0.0975	JBQ	5.22	0.0303	1
11031	123478-HxCDF	70648-26-9	0.0665	JB	5.22	0.0267	1
11031	123678-HxCDF	57117-44-9	0.154	JB	5.22	0.0228	1
11031	123789-HxCDF	72918-21-9	1.75	JB	5.22	0.0265	1
11031	234678-HxCDF	60851-34-5	0.109	JBQ	5.22	0.0239	1
11031	1234678-HpCDF	67562-39-4	0.264	JBQ	5.22	0.0148	1
11031	1234789-HpCDF	55673-89-7	0.0744	JB	5.22	0.0237	1
11031	OCDF	39001-02-0	0.920	JB	10.4	0.0430	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.374				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	96	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	91	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	91	26 - 123
13C12-234678-HxCDF	86	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	123	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	87	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-547-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186230
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 12:00 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54700 SDG#: PH101-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-547-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186230
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 12:00 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54700 SDG#: PH101-10

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 08:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 02:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520015A	09/10/2013 22:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520015A	09/09/2013 22:00	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/14/2013 17:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/07/2013 01:38	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 11:22	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:55	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:55	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:55	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:55	Choon Y Tian	2

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

Sample Description: SL-547-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186230
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 12:00 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54700 SDG#: PH101-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13248039402A	09/05/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-547-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186231
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 12:15 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54740 SDG#: PH101-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.04
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

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

Sample Description: SL-547-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186231
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 12:15 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54740 SDG#: PH101-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,600		43.8	7.90	1
06944	Antimony	7440-36-0	4.38	U	4.38	0.810	1
06935	Arsenic	7440-38-2	5.80		4.38	0.767	1
06946	Barium	7440-39-3	129		1.10	0.0361	1
06947	Beryllium	7440-41-7	0.920	J	1.10	0.0734	1
07914	Boron	7440-42-8	36.9		11.0	0.920	1
06949	Cadmium	7440-43-9	0.494	J	1.10	0.0832	1
01650	Calcium	7440-70-2	4,640		21.9	3.66	1
06951	Chromium	7440-47-3	36.0		3.29	0.175	1
06952	Cobalt	7440-48-4	8.35		1.10	0.108	1
06953	Copper	7440-50-8	17.9		2.19	0.318	1
01654	Iron	7439-89-6	35,600		87.6	7.93	2
06955	Lead	7439-92-1	8.04		3.29	0.548	1
01656	Lithium	7439-93-2	30.4		4.4	0.37	1
01657	Magnesium	7439-95-4	7,620		11.0	1.83	1
06958	Manganese	7439-96-5	405		1.10	0.0909	1
06960	Molybdenum	7439-98-7	0.251	J	2.19	0.186	1
06961	Nickel	7440-02-0	18.1		2.19	0.142	1
10145	Phosphorus	7723-14-0	392		11.0	3.16	1
01662	Potassium	7440-09-7	4,570		110	9.13	1
01667	Sodium	7440-23-5	179		110	18.3	1
06969	Tin	7440-31-5	3.16	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,500		1.10	0.186	1
06971	Vanadium	7440-62-2	71.7		1.10	0.142	1
06972	Zinc	7440-66-6	75.4		4.38	0.219	1
10146	Zirconium	7440-67-7	7.69		5.48	0.920	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.153	J	0.438	0.110	2
06142	Silver	7440-22-4	0.0627	J	0.219	0.0285	2
06144	Strontium	7440-24-6	48.4		0.438	0.0745	2
06145	Thallium	7440-28-0	0.454		0.219	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184	U	0.0184	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.66		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						

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

Sample Description: SL-547-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186231
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 12:15 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54740 SDG#: PH101-11*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	12.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 09:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13249A16A	09/06/2013 19:28	Laura M Krieger	21.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324832261	09/05/2013 15:21	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324832261	09/05/2013 15:21	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 03:45	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132520015A	09/10/2013 21:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132520015A	09/09/2013 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132480637002	09/07/2013 01:42	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1

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

Sample Description: SL-547-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7186231
LL Group # 1416493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/04/2013 12:15 by VC

Submitted: 09/05/2013 09:15
Reported: 09/24/2013 17:48

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54740 SDG#: PH101-11*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132480637002	09/06/2013 11:26	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132480637002B	09/13/2013 11:57	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132480637002A	09/13/2013 11:57	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132480637002A	09/13/2013 11:57	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132480637002A	09/13/2013 11:57	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132480638002	09/06/2013 09:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132480637002	09/06/2013 00:07	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132480638002	09/06/2013 03:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13248039402A	09/05/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13249SLI026	Sample number(s): 7186220-7186223,7186225-7186231									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	96		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	96		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	97		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	100		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	99		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	112		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	100		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	103		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	102		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	103		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	98		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	102		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	97		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	101		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	99		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	99		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	99		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	90		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	104		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	95		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	97		79-112		
Batch number: 13254WAE026	Sample number(s): 7186218									
Acenaphthene	0.050	U	0.050	0.010	ug/l	95	95	77-118	0	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	96	96	80-123	0	30
Anthracene	0.050	U	0.050	0.010	ug/l	99	99	78-123	0	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	101	101	73-127	0	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	100	100	72-120	0	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	106	110	79-136	4	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	91	91	70-130	0	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	98	97	64-130	1	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	107	102	73-131	5	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	63	65	40-138	3	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	95	95	64-141	0	30
Chrysene	0.050	U	0.050	0.010	ug/l	101	101	76-125	0	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	104	103	58-131	1	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	92	90	64-128	2	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	69	68	23-139	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	0.058	J	1.0	0.050	ug/l	82	79	70-143	3	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	101	101	79-124	0	30
Fluorene	0.050	U	0.050	0.010	ug/l	97	97	74-115	0	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	99	101	62-130	2	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	105	104	80-126	1	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	106	107	81-124	0	30
Naphthalene	0.050	U	0.050	0.030	ug/l	99	98	75-120	1	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	71	70	36-120	1	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	82	78	57-145	4	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	97	97	75-120	0	30
Pyrene	0.050	U	0.050	0.010	ug/l	98	99	71-130	1	30
Batch number: 13248A20A	Sample number(s): 7186218-7186219									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	102	75-135	4	30
Batch number: 13249A16A	Sample number(s): 7186221-7186223,7186225,7186227,7186229,7186231									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	79		67-119		
Batch number: 132490029A	Sample number(s): 7186220-7186223,7186225									
2,4-D	36	U	36.	12	ug/kg	116		59-122		
Dalapon	90	U	90.	44	ug/kg	62		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	138*		54-131		
Dicamba	12	U	12.	4.0	ug/kg	94		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	21		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	128		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	96		56-133		
MCPP (Mecoprop)	2,500 U		2,500.	750	ug/kg	90		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	134		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	122		63-130		
Batch number: 132520027A	Sample number(s): 7186218									
2,4-D	0.50	U	0.50	0.16	ug/l	104	116	68-155	11	30
Dalapon	1.3	U	1.3	0.25	ug/l	62	54	25-119	14	30
2,4-DB	1.0	U	1.0	0.30	ug/l	110	116	50-163	6	30
Dicamba	0.30	U	0.30	0.080	ug/l	95	92	64-163	3	30
Dinoseb	0.50	U	0.50	0.12	ug/l	100	94	16-163	6	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	117	126	89-162	7	30
MCPA	200 U		200.	50	ug/l	84	91	68-154	8	30
MCPP	200 U		200.	50	ug/l	87	89	46-173	2	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	105	116	71-174	10	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	105	111	58-155	5	30
Batch number: 132530002A	Sample number(s): 7186218									
6b Perchlorate (Method 6850)	1.0	U	1.0	0.20	ug/l	94		85-115		
Batch number: 132490036A	Sample number(s): 7186218									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	86	74	45-125	15	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	104	94	51-139	10	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	96	86	57-127	11	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	106	92	57-133	14	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	106	87	55-145	19	30

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
p,p-DDE	0.016	U	0.016	0.0040	ug/l	89	73	58-130	19	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	103	80	45-140	25	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	94	83	52-133	13	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	107	90	60-135	17	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	105	91	56-128	14	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	92	79	53-123	15	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	92	79	51-130	15	30
Endrin	0.016	U	0.016	0.0065	ug/l	103	88	43-139	15	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	95	82	50-122	15	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	91	78	51-133	15	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	109	89	48-130	20	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	91	79	65-128	13	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	105	84	40-150	22	30
Mirex	0.20	U	0.20	0.068	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132530010A	Sample number(s): 7186218									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	67	73	35-84	9	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	97	93	67-117	5	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	101	93	67-128	9	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132530015A	Sample number(s): 7186220-7186223,7186225									
Aldrin	0.83	U	0.83	0.17	ug/kg	92		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	109		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	93		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	104		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	108		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	99		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	115		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	96		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	117		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	111		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	100		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	101		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	108		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	95		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	102		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	109		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	95		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	114		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132530026A	Sample number(s): 7186220-7186223,7186225-7186231									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	85	82	62-87	4	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	107		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	109		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132520014A	Sample number(s): 7186218									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	85	84	70-130	1	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	94	93	70-130	2	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	95	92	70-130	2	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	92	89	70-130	4	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	66*	65*	70-130	1	30
Batch number: 132520015A	Sample number(s): 7186220-7186223,7186225-7186231									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	103		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	108		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	110		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	88		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	85		49-107		
Batch number: 132480635001	Sample number(s): 7186218									
Aluminum	0.400	U	0.400	0.0828	mg/l	101	103	90-112	2	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	100	100	88-111	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	105	105	90-113	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	106	106	90-110	0	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	103	103	88-110	0	20
Boron	0.100	U	0.100	0.0084	mg/l	97	97	89-110	0	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	106	106	90-112	0	20
Calcium	0.0352	J	0.400	0.0334	mg/l	103	103	90-110	0	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	103	102	90-110	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	107	108	90-110	0	20
Copper	0.0200	U	0.0200	0.0027	mg/l	110	109	90-112	1	20
Iron	0.400	U	0.400	0.0430	mg/l	101	101	90-112	0	20
Lead	0.0300	U	0.0300	0.0047	mg/l	110	111*	88-110	1	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	106	106	90-110	0	20
Magnesium	0.200	U	0.200	0.0167	mg/l	102	102	90-110	0	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	106	106	90-110	0	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	103	104	90-110	0	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	110	110	90-111	0	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	106	107	90-110	0	20
Potassium	1.00	U	1.00	0.0980	mg/l	103	102	85-115	0	20
Sodium	2.00	U	2.00	0.167	mg/l	102	103	87-114	0	20
Tin	0.0400	U	0.0400	0.0029	mg/l	99	99	90-110	0	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	106	106	90-113	0	20
Vanadium	0.0100	U	0.0100	0.0020	mg/l	100	100	90-110	0	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	106	106	90-110	0	20
Zirconium	0.100	U	0.100	0.0084	mg/l	104	103	90-110	1	20
Batch number: 132480637002	Sample number(s): 7186220-7186231									
Aluminum	40.0	U	40.0	7.21	mg/kg	102		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	99		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Arsenic	4.00 U	4.00	0.700	mg/kg	102		80-120		
Barium	1.00 U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00 U	1.00	0.0670	mg/kg	99		80-120		
Boron	10.0 U	10.0	0.840	mg/kg	95		80-120		
Cadmium	1.00 U	1.00	0.0760	mg/kg	101		80-120		
Calcium	8.21 J	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	107		80-120		
Iron	40.0 U	40.0	3.62	mg/kg	98		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	107		80-120		
Lithium	4.0 U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0 U	10.0	1.67	mg/kg	99		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	99		80-120		
Nickel	2.00 U	2.00	0.130	mg/kg	106		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U	100.	8.34	mg/kg	100		80-120		
Sodium	100 U	100.	16.7	mg/kg	100		80-120		
Tin	1.73 J	10.0	0.220	mg/kg	98		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00 U	1.00	0.130	mg/kg	97		80-120		
Zinc	0.413 J	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00 U	5.00	0.840	mg/kg	101		80-120		
Batch number: 132480637002A	Sample number(s): 7186220-7186231								
Silver	0.200 U	0.200	0.0260	mg/kg	106		80-120		
Strontium	0.400 U	0.400	0.0680	mg/kg	108		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	105		80-120		
Batch number: 132480637002B	Sample number(s): 7186220-7186231								
Selenium	0.400 U	0.400	0.100	mg/kg	103		80-120		
Batch number: 132480638002	Sample number(s): 7186220-7186231								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	114		85-120		
Batch number: 132480639001A	Sample number(s): 7186218								
Silver	0.0010 U	0.0010	0.00011	mg/l	99	101	90-115	2	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	97	101	80-120	4	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	101	100	80-120	2	20
Batch number: 132480639001B	Sample number(s): 7186218								
Selenium	0.0040 U	0.0040	0.00050	mg/l	100	98	80-120	3	20
Batch number: 132505713006	Sample number(s): 7186218								
3b Mercury 7470A	0.00020 U	0.00020	0.00006 0	mg/l	103	102	90-115	1	20
Batch number: 13248621403A	Sample number(s): 7186218								
2b Chromium VI by EPA 7199	10.0 U	10.0	5.0	ug/l	109	112*	90-110	2	20
Batch number: 13255655131C	Sample number(s): 7186218								
1b Anions by 300.0-Fluoride	0.10 U	0.10	0.080	mg/l	93	106	90-110	13	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13248002103A	Sample number(s): 7186218								
28b pH (9040B and 9040C)					100		99-103		
Batch number: 13248039402A	Sample number(s): 7186220-7186221,7186224-7186231								
15a pH by 9045D					99		95-105		
Batch number: 13254162401A	Sample number(s): 7186220-7186226								
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
Batch number: 13254162401B	Sample number(s): 7186227-7186231								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13254002	Sample number(s): 7186220,7186226,7186228,7186230								
2378-TCDD	1.00 U	1.00	0.115	ng/kg	101		67-158		
12378-PeCDD	5.00 U	5.00	0.0609	ng/kg	103		70-142		
123478-HxCDD	0.0390 J	5.00	0.0320	ng/kg	105		70-164		
123678-HxCDD	5.00 U	5.00	0.0325	ng/kg	106		76-134		
123789-HxCDD	0.0470 J	5.00	0.0333	ng/kg	105		64-162		
1234678-HpCDD	0.0675 J	5.00	0.0370	ng/kg	99		70-140		
OCDD	0.281 J	10.0	0.0392	ng/kg	95		78-144		
2378-TCDF	1.00 U	1.00	0.0777	ng/kg	103		75-158		
12378-PeCDF	0.0692 J	5.00	0.0397	ng/kg	92		80-134		
23478-PeCDF	0.0786 J	5.00	0.0412	ng/kg	92		68-160		
123478-HxCDF	0.0639 J	5.00	0.0250	ng/kg	94		72-134		
123678-HxCDF	0.0330 J	5.00	0.0207	ng/kg	93		84-130		
123789-HxCDF	0.0649 J	5.00	0.0253	ng/kg	93		78-130		
234678-HxCDF	0.0615 J	5.00	0.0227	ng/kg	95		70-156		
1234678-HpCDF	0.0376 J	5.00	0.0123	ng/kg	89		82-122		
1234789-HpCDF	0.0826 J	5.00	0.0194	ng/kg	92		78-138		
OCDF	0.227 J	10.0	0.0509	ng/kg	91		63-170		
Batch number: 13255004	Sample number(s): 7186218								
2378-TCDD	0.275 J	2.00	0.204	pg/l	105		60-150		
12378-PeCDD	0.336 J	10.0	0.143	pg/l	104		60-150		
123478-HxCDD	0.243 J	10.0	0.0986	pg/l	100		60-150		
123678-HxCDD	0.275 J	10.0	0.102	pg/l	97		60-150		
123789-HxCDD	0.257 J	10.0	0.0957	pg/l	95		60-150		
1234678-HpCDD	0.485 J	10.0	0.0901	pg/l	100		60-150		
OCDD	1.26 J	20.0	0.116	pg/l	92		60-150		
2378-TCDF	2.00 U	2.00	0.125	pg/l	105		60-150		
12378-PeCDF	10.0 U	10.0	0.0752	pg/l	105		60-150		
23478-PeCDF	0.446 J	10.0	0.0660	pg/l	106		60-150		
123478-HxCDF	0.239 J	10.0	0.0618	pg/l	98		60-150		
123678-HxCDF	0.321 J	10.0	0.0600	pg/l	98		60-150		
123789-HxCDF	0.424 J	10.0	0.0619	pg/l	100		60-150		
234678-HxCDF	0.300 J	10.0	0.0545	pg/l	100		60-150		
1234678-HpCDF	0.513 J	10.0	0.0364	pg/l	103		60-150		
1234789-HpCDF	0.444 J	10.0	0.0389	pg/l	96		60-150		
OCDF	0.948 J	20.0	0.122	pg/l	91		60-150		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13254002	Sample number(s): 7186220,7186226,7186228,7186230								
TEQ WHO 2005 - EDLx0.0	0.0301			ng/kg					
Batch number: 13255004	Sample number(s): 7186218								
TEQ WHO 2005 - EDLx0.0	0.329			pg/l					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13249SLI026	Sample number(s): 7186220-7186223,7186225-7186231 UNSPK: 7186221								
Acenaphthene	98	90	48-127	9	30				
Acenaphthylene	96	90	49-121	7	30				
Anthracene	96	92	52-126	5	30				
Benzo(a)anthracene	98	92	44-143	7	30				
Benzo(a)pyrene	95	89	44-140	6	30				
Benzo(b)fluoranthene	97	98	26-142	1	30				
Benzo(e)pyrene	89	83	70-130	8	30				
Benzo(g,h,i)perylene	98	93	33-141	6	30				
Benzo(k)fluoranthene	101	91	54-142	11	30				
Butylbenzylphthalate	111	101	49-151	10	30				
Di-n-butylphthalate	107	98	52-147	9	30				
Chrysene	93	88	29-148	6	30				
Dibenz(a,h)anthracene	96	92	20-137	5	30				
Diethylphthalate	101	96	43-145	5	30				
Dimethylphthalate	93	89	58-129	5	30				
Bis(2-Ethylhexyl)phthalate	171*	100	39-167	53*	30				
Fluoranthene	95	90	40-148	6	30				
Fluorene	97	92	51-137	6	30				
Indeno(1,2,3-cd)pyrene	97	92	17-136	6	30				
1-Methylnaphthalene	100	91	50-131	10	30				
2-Methylnaphthalene	98	89	35-152	11	30				
Naphthalene	98	87	31-148	12	30				
N-Nitrosodimethylamine	91	79	48-113	15	30				
Di-n-octylphthalate	107	100	52-162	7	30				
Phenanthrene	93	89	29-142	6	30				
Pyrene	96	88	26-143	8	30				
Batch number: 13249A16A	Sample number(s): 7186221-7186223,7186225,7186227,7186229,7186231 UNSPK: 7186221								
11a TPH by EPA 8015B GRO	71	74	69-123	12	30				
Batch number: 132490029A	Sample number(s): 7186220-7186223,7186225 UNSPK: 7186221								
2,4-D	120	108	42-143	11	35				
Dalapon	64	57	16-98	11	50				
2,4-DB	147	131	10-179	11	50				
Dicamba	103	94	55-133	8	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Dinoseb	30	25	10-52	17	35						
2,4-DP (Dichlorprop)	132	118	32-171	11	50						
MCPA	99	87	23-169	12	50						
MCPP (Mecoprop)	96	86	24-164	10	50						
2,4,5-T	141	126	12-172	10	35						
2,4,5-TP	124	111	10-142	10	35						
Batch number: 132530002A	Sample number(s): 7186218 UNSPK: 7186218										
6b Perchlorate (Method 6850)	94	95	80-120	1	20						
Batch number: 132530015A	Sample number(s): 7186220-7186223,7186225 UNSPK: 7186221										
Aldrin	96	83	16-126	14	50						
Alpha BHC	113	93	14-140	20	50						
Beta BHC	97	89	42-133	8	50						
Gamma BHC - Lindane	110	93	30-137	16	50						
p,p-DDD	112	105	43-149	6	50						
p,p-DDE	89	75	35-152	14	50						
p,p-DDT	122	112	12-193	8	50						
Delta BHC	101	94	13-153	7	50						
Dieldrin	121	114	41-153	6	50						
Endosulfan I	113	105	26-146	8	50						
Endosulfan II	103	99	34-141	4	50						
Endosulfan Sulfate	104	100	10-181	4	50						
Endrin	112	106	30-152	6	50						
Endrin Aldehyde	96	94	23-138	2	35						
Endrin Ketone	106	100	30-148	6	50						
Heptachlor	114	98	16-152	16	50						
Heptachlor Epoxide	97	91	33-144	7	50						
Methoxychlor	120	114	41-161	5	50						
Batch number: 132530026A	Sample number(s): 7186220-7186223,7186225-7186231 UNSPK: 7186221										
PCB-1016	106	113	41-135	7	50						
PCB-1260	111	113	40-134	3	50						
Batch number: 132520015A	Sample number(s): 7186220-7186223,7186225-7186231 UNSPK: 7186221										
EFH (C12-C14)	103	101	49-123	2	20						
EFH (C15-C20)	122	119	49-123	3	20						
EFH (C21-C30)	126*	121	49-123	4	20						
EFH (C30-C40)	98	95	49-123	4	20						
EFH (C8-C11)	86	84	49-123	3	20						
Batch number: 132480637002	Sample number(s): 7186220-7186231 UNSPK: 7186221 BKG: 7186221										
Aluminum	1308 (2)	1078 (2)	75-125	3	20	12,200		12,700		4	20
Antimony	66*	65*	75-125	1	20	4.00	U	4.00	U	0 (1)	20
Arsenic	100	100	75-125	0	20	3.76	J	3.74	J	1 (1)	20
Barium	104	100	75-125	3	20	71.4		75.2		5	20
Beryllium	99	99	75-125	1	20	0.419	J	0.451	J	7 (1)	20
Boron	92	91	75-125	1	20	21.2		21.7		3 (1)	20
Cadmium	95	95	75-125	0	20	0.426	J	0.441	J	3 (1)	20
Calcium	184 (2)	145 (2)	75-125	4	20	2,970		3,030		2	20
Chromium	102	101	75-125	1	20	16.0		16.9		6	20

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Cobalt	95	95	75-125	0	20	3.45	3.66	6 (1)	20
Copper	104	102	75-125	1	20	9.46	9.66	2 (1)	20
Iron	1635 (2)	830 (2)	75-125	4	20	18,700	19,700	5	20
Lead	96	96	75-125	0	20	4.23	4.20	1 (1)	20
Lithium	99	97	75-125	1	20	20.3	20.2	1	20
Magnesium	273 (2)	177 (2)	75-125	4	20	4,010	4,130	3	20
Manganese	163*	146*	75-125	3	20	170	178	5	20
Molybdenum	93	92	75-125	0	20	2.00 U	2.00 U	0 (1)	20
Nickel	97	97	75-125	0	20	7.84	8.23	5 (1)	20
Phosphorus	109	113	75-125	1	20	285	277	3	20
Potassium	123	118	75-125	2	20	1,570	1,570	1	20
Sodium	97	96	75-125	1	20	150	154	3 (1)	20
Tin	86	85	75-125	0	20	2.72 J	2.58 J	6 (1)	20
Titanium	404 (2)	291 (2)	75-125	7	20	1,170	1,170	0	20
Vanadium	103	101	75-125	1	20	33.2	35.3	6	20
Zinc	103	99	75-125	2	20	44.2	44.5	1	20
Zirconium	97	97	75-125	1	20	3.75 J	4.10 J	9 (1)	20
Batch number: 132480637002A	Sample number(s): 7186220-7186231 UNSPK: 7186221 BKG: 7186221								
Silver	115	105	75-125	9	20	0.0613 J	0.0611 J	0 (1)	20
Strontium	125	77	75-125	12	20	23.6	22.7	4	20
Thallium	117	106	75-125	7	20	0.217	0.221	2 (1)	20
Batch number: 132480637002B	Sample number(s): 7186220-7186231 UNSPK: 7186221 BKG: 7186221								
Selenium	111	104	75-125	6	20	0.400 U	0.400 U	0 (1)	20
Batch number: 132480638002	Sample number(s): 7186220-7186231 UNSPK: 7186221 BKG: 7186221								
3a Mercury 7471A	87	86	65-135	2	20	0.106	0.0434	84* (1)	20
Batch number: 13248002103A	Sample number(s): 7186218 BKG: P185040								
28b pH (9040B and 9040C)						8.0	8.0	1	3
Batch number: 13248039402A	Sample number(s): 7186220-7186221,7186224-7186231 BKG: 7186221								
15a pH by 9045D						7.74	7.70	1	3
Batch number: 13254162401A	Sample number(s): 7186220-7186226 BKG: 7186221								
14a Moisture Content by 160.3						6.6	6.6	0	20
14a Moisture Content by 160.3						6.6	6.6	0	20
14a Moisture Content by 160.3						6.6	6.6	0	20
Batch number: 13254162401B	Sample number(s): 7186227-7186231 BKG: 7186227								
14a Moisture Content by 160.3						5.7	5.8	1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Surrogate Quality Control

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13249SLI026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7186220	83	76	96
7186221	87	92	100
7186222	86	92	99
7186223	83	89	90
7186225	91	96	99
7186226	78	77	91
7186227	66	71	70
7186228	76	72	88
7186229	85	91	90
7186230	74	72	82
7186231	82	87	90
Blank	88	94	99
LCS	87	97	95
MS	86	92	99
MSD	83	89	90
Limits:	54-129	59-125	61-125

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13254WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7186218	47	60*	48*
Blank	95	103	97
LCS	96	102	103
LCSD	96	101	101
Limits:	44-137	62-141	51-136

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13248A20A

	Trifluorotoluene-F
7186218	88
7186219	86
Blank	88
LCS	125
LCSD	125
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13249A16A

	Trifluorotoluene-F
7186221	72
7186222	70
7186223	67
7186225	71
7186227	77

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Surrogate Quality Control

7186229	67
7186231	71
Blank	79
LCS	79
MS	70
MSD	67
Limits:	50-142

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132490029A

	2,4-Dichlorophenylacetic acid
7186220	67
7186221	89
7186222	77
7186223	70
7186225	74
Blank	63
LCS	74
MS	77
MSD	70
Limits:	50-150

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132490036A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7186218	88	42
Blank	90	58
LCS	89	36
LCSD	81	30
Limits:	60-140	20-120

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 132520027A

	2,4-Dichlorophenylacetic acid
7186218	57
Blank	59
LCS	72
LCSD	71
Limits:	50-150

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132530010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7186218	100	84
Blank	102	92
LCS	110	108

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Surrogate Quality Control

LCSD	106	101
Limits:	45-120	45-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132530015A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7186220	83	91
7186221	87	100
7186222	97	109
7186223	71	106
7186225	90	103
Blank	97	105
LCS	97	108
MS	97	109
MSD	71	106
Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132530026A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7186220	128*	104
7186221	118	107
7186222	124*	113
7186223	128*	116
7186225	129*	116
7186226	125*	112
7186227	125*	111
7186228	130*	110
7186229	125*	108
7186230	122*	113
7186231	117	109
Blank	133*	120
LCS	130*	124*
LCSD	120	124*
MS	124*	113
MSD	128*	116
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132520014A

	Chlorobenzene	Orthoterphenyl
7186218	105	92
Blank	105	93
LCS	113	94
LCSD	109	91
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132520015A

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Surrogate Quality Control

	Chlorobenzene	Orthoterphenyl
7186220	114	95
7186221	114	102
7186222	118	104
7186223	115	102
7186225	110	101
7186226	108	96
7186227	97	108
7186228	111	99
7186229	109	94
7186230	107	95
7186231	116	99
Blank	110	99
LCS	118	106
MS	119	104
MSD	115	102
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13254002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7186220	65	83	84	93	82	82
7186226	77	92	93	104	98	93
7186228	64	85	82	89	82	76
7186230	66	83	81	91	86	85
Blank	55	64	68	77	71	66
OPR	62	78	66	77	70	65
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7186220	109	84	89	76	73	72
7186226	132	91	98	87	90	88
7186228	114	83	86	79	75	76
7186230	123	84	87	78	79	79
Blank	112	79	84	65	75	77
OPR	99	67	74	80	78	76
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7186220	72	81	93	70	89
7186226	87	95	107	83	100
7186228	76	82	93	72	89
7186230	80	87	96	72	91
Blank	74	87	102	54	72
OPR	75	85	96	62	85
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 17b Dioxin/Furan by EPA 1613B

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416493
Reported: 09/24/13 at 05:48 PM

Surrogate Quality Control

Batch number: 13255004

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7186218	61	91	77	79	78	82
Blank	71	94	96	95	99	98
OPR	59	78	69	70	72	71
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7186218	79	79	69	89	75	71
Blank	95	99	82	91	97	96
OPR	79	69	63	78	79	79
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7186218	75	79	72	69	88
Blank	97	95	94	71	92
OPR	80	82	72	64	76
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1416493 7186218-31

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/4/2013
CarrierName: FedEx
AirbillNo: 796613664514

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130904-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB-090413	9/4/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB-090413	9/4/13 15:00	WQ	None	3 - 250 mL Amber	10 day							X			X						X															
EB-090413	9/4/13 15:00	WQ	None	4 - 1 L Amber	10 day									X						X																
EB-090413	9/4/13 15:00	WQ	None	4 - 250 mL Poly	10 day				X										X X																	
EB-090413	9/4/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB-090413	9/4/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
EB-090413	9/4/13 15:00	WQ	None	1 - 40 mL Vial	10 day												X																			

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shyf Mysel	09/04/2013	1600									
									Brandy	9-5-13	915

Brandy

13013 1416493 7186218-31

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/4/2013
CarrierName: FedEx
AirbillNo: 796613664514

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130904-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-090413	9/4/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-524-SA5D-SB-0.0-0.5	9/4/13 08:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X					X	X				X											
SL-524-SA5D-SB-0.0-0.5	9/4/13 08:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-524-SA5D-SB-5.5-6.5MS	9/4/13 08:35	SO	None	6 - 16 oz glass	10 day	X	X					X			X			X		X	X				X											MS/MSD
SL-524-SA5D-SB-5.5-6.5MS	9/4/13 08:35	SO	None	6 - Encore	10 day																			X												MS/MSD
SL-824-SA5D-SB-5.5-6.5	9/4/13 08:45	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X		X	X				X											
SL-824-SA5D-SB-5.5-6.5	9/4/13 08:45	SO	None	2 - Encore	10 day																			X												
SL-544-SA5D-SB-0.0-0.5	9/4/13 09:40	SO	None	2 - SS-Sleeve	10 day	X	X					X			X	X									X											
SL-544-SA5D-SB-0.0-0.5	9/4/13 09:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-544-SA5D-SB-6.5-7.5	9/4/13 09:50	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											
SL-544-SA5D-SB-6.5-7.5	9/4/13 09:50	SO	None	2 - Encore	10 day																			X												
SL-546-SA5D-SB-0.0-0.5	9/4/13 13:25	SO	None	2 - SS-Sleeve	10 day	X	X					X			X	X									X											
SL-546-SA5D-SB-0.0-0.5	9/4/13 13:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-546-SA5D-SB-4.0-5.0	9/4/13 13:45	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											
SL-546-SA5D-SB-4.0-5.0	9/4/13 13:45	SO	None	2 - Encore	10 day																			X												
SL-547-SA5D-SB-0.0-0.5	9/4/13 12:00	SO	None	2 - SS-Sleeve	10 day	X	X					X			X	X									X											
SL-547-SA5D-SB-0.0-0.5	9/4/13 12:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-547-SA5D-SB-4.0-5.0	9/4/13 12:15	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											
SL-547-SA5D-SB-4.0-5.0	9/4/13 12:15	SO	None	2 - Encore	10 day																			X												

Rec by Brandy Bandy 9-5-13 915

13013 1416493 7186218-31

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/4/2013
CarrierName: FedEx
AirbillNo: 796613664514

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130904-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Cooke

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Jeff Meyer	09/04/2013	1600									
									Brandy Bailey	9.5.13	915

COC Rev 2

COC: 20130904-02, Page 2 of 2

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Environmental Sample Administration Receipt Documentation Log

1416493

Client/Project: CDM

Date of Receipt: 9-5-13

Time of Receipt: 915

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	8013596	4.3	ST	WI	Y	B	
2	DT146	0.9	TB	WI	X	B	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Bandy 2294 **Date/Time:** 9-5-13 954

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH102

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 24, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/06/2013
Group Number: 1416870
SDG: PH102
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-090513 Water	7187850
SL-555-SA5D-SB-0.0-0.5 Soil	7187851
SL-555-SA5D-SB-4.0-5.0 Soil	7187852
SL-555-SA5D-SB-10.5-11.5 Soil	7187853
SL-556-SA5D-SB-0.0-0.5 Soil	7187854
SL-559-SA5D-SB-0.0-0.5 Soil	7187855
SL-559-SA5D-SB-6.0-7.0 Soil	7187856
SL-556-SA5D-SB-11.0-12.0 Soil	7187857
SL-556-SA5D-SB-4.0-5.0 Soil	7187858
SL-554-SA5D-SB-0.0-0.5 Soil	7187859
SL-554-SA5D-SB-4.0-5.0 Soil	7187860
SL-554-SA5D-SB-7.0-8.0 Soil	7187861

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

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-090513 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7187850
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 08:00

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB102 SDG#: PH102-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13252C94A	09/10/2013 22:02	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13252C94A	09/10/2013 22:02	Marie D Beamenderfer	1

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

Sample Description: SL-555-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187851
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 08:55 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH102-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.76	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

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

Sample Description: SL-555-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187851
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 08:55 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH102-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	4.5	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	7.2	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,900		41.1	7.42	1
06944	Antimony	7440-36-0	4.11	U	4.11	0.761	1
06935	Arsenic	7440-38-2	4.99		4.11	0.720	1
06946	Barium	7440-39-3	110		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.819	J	1.03	0.0689	1
07914	Boron	7440-42-8	10.6		10.3	0.864	1
06949	Cadmium	7440-43-9	0.177	J	1.03	0.0782	1
01650	Calcium	7440-70-2	4,050		20.6	3.44	1
06951	Chromium	7440-47-3	35.2		3.09	0.165	1
06952	Cobalt	7440-48-4	10.7		1.03	0.102	1
06953	Copper	7440-50-8	11.6		2.06	0.298	1
01654	Iron	7439-89-6	30,800		82.3	7.45	2
06955	Lead	7439-92-1	8.40		3.09	0.514	1
01656	Lithium	7439-93-2	28.3		4.1	0.35	1
01657	Magnesium	7439-95-4	7,070		10.3	1.72	1
06958	Manganese	7439-96-5	409		1.03	0.0854	1
06960	Molybdenum	7439-98-7	0.290	J	2.06	0.175	1
06961	Nickel	7440-02-0	15.9		2.06	0.134	1
10145	Phosphorus	7723-14-0	378		10.3	2.97	1
01662	Potassium	7440-09-7	4,330		103	8.58	1
01667	Sodium	7440-23-5	101	J	103	17.2	1
06969	Tin	7440-31-5	3.06	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,040		1.03	0.175	1
06971	Vanadium	7440-62-2	64.0		1.03	0.134	1
06972	Zinc	7440-66-6	66.3		4.11	0.206	1
10146	Zirconium	7440-67-7	4.90	J	5.14	0.864	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-555-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187851
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 08:55 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH102-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.251	J	0.411	0.103	2
06142	Silver	7440-22-4	0.206	U	0.206	0.0267	2
06144	Strontium	7440-24-6	34.6		0.411	0.0700	2
06145	Thallium	7440-28-0	0.330		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0100	J	0.0166	0.010	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.83	J	1.0	0.42	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.27		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-555-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187851
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 08:55 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH102-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.0682	1
11031	12378-PeCDD	40321-76-4	0.0837	JQ	5.03	0.0380	1
11031	123478-HxCDD	39227-28-6	0.0330	JB	5.03	0.0278	1
11031	123678-HxCDD	57653-85-7	0.489	J	5.03	0.0285	1
11031	123789-HxCDD	19408-74-3	0.737	JB	5.03	0.0278	1
11031	1234678-HpCDD	35822-46-9	0.442	JB	5.03	0.0380	1
11031	OCDD	3268-87-9	3.55	JB	10.1	0.0286	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.0508	1
11031	12378-PeCDF	57117-41-6	0.215	JBQ	5.03	0.0170	1
11031	23478-PeCDF	57117-31-4	0.0590	JBQ	5.03	0.0171	1
11031	123478-HxCDF	70648-26-9	0.0429	JBQ	5.03	0.0168	1
11031	123678-HxCDF	57117-44-9	0.0640	JBQ	5.03	0.0143	1
11031	123789-HxCDF	72918-21-9	0.957	JB	5.03	0.0175	1
11031	234678-HxCDF	60851-34-5	0.0475	JB	5.03	0.0165	1
11031	1234678-HpCDF	67562-39-4	0.103	JB	5.03	0.0105	1
11031	1234789-HpCDF	55673-89-7	0.0522	JBQ	5.03	0.0172	1
11031	OCDF	39001-02-0	0.247	JB	10.1	0.0283	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.233				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	88	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-555-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187851
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 08:55 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH102-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-555-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187851
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 08:55 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH102-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 09:41	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 22:23	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 04:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 03:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/16/2013 18:48	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132490637001	09/11/2013 11:56	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132490637001	09/11/2013 11:56	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132490637001	09/11/2013 12:47	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132490637001	09/11/2013 11:56	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132490637001	09/11/2013 11:56	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132490637001	09/11/2013 11:56	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132490637001	09/09/2013 20:39	Katlin N Cataldi	1

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

Sample Description: SL-555-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187851
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 08:55 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH102-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132490637001B	09/13/2013 22:45	David K Beck	2
06142	Silver	SW-846 6020A	1	132490637001A	09/13/2013 22:45	David K Beck	2
06144	Strontium	SW-846 6020A	1	132490637001A	09/13/2013 22:45	David K Beck	2
06145	Thallium	SW-846 6020A	1	132490637001A	09/13/2013 22:45	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132490638001	09/09/2013 17:49	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132490637001	09/09/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132490638001	09/09/2013 13:00	Denise K Conners	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202A	09/15/2013 02:54	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202A	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13249039401A	09/06/2013 20:13	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-555-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187852
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 09:15 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55540 SDG#: PH102-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.1	J	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	21.63
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.38	1
10590	Delta BHC	319-86-8	0.91	U	0.91	0.49	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1

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

Sample Description: SL-555-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187852
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 09:15 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55540 SDG#: PH102-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,800		43.4	7.83	1
06944	Antimony	7440-36-0	4.34	U	4.34	0.803	1
06935	Arsenic	7440-38-2	8.28		4.34	0.760	1
06946	Barium	7440-39-3	89.7		1.09	0.0358	1
06947	Beryllium	7440-41-7	0.847	J	1.09	0.0727	1
07914	Boron	7440-42-8	10.5	J	10.9	0.912	1
06949	Cadmium	7440-43-9	0.140	J	1.09	0.0825	1
01650	Calcium	7440-70-2	3,390		21.7	3.63	1
06951	Chromium	7440-47-3	36.4		3.26	0.174	1
06952	Cobalt	7440-48-4	8.48		1.09	0.107	1
06953	Copper	7440-50-8	10.9		2.17	0.315	1
01654	Iron	7439-89-6	32,700		86.9	7.86	2
06955	Lead	7439-92-1	8.56		3.26	0.543	1
01656	Lithium	7439-93-2	28.3		4.3	0.37	1
01657	Magnesium	7439-95-4	7,290		10.9	1.81	1
06958	Manganese	7439-96-5	296		1.09	0.0901	1
06960	Molybdenum	7439-98-7	0.700	J	2.17	0.185	1
06961	Nickel	7440-02-0	14.4		2.17	0.141	1
10145	Phosphorus	7723-14-0	207		10.9	3.14	1
01662	Potassium	7440-09-7	2,580		109	9.05	1
01667	Sodium	7440-23-5	119		109	18.1	1
06969	Tin	7440-31-5	3.51	J	10.9	0.239	1
06970	Titanium	7440-32-6	1,160		1.09	0.185	1

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

Sample Description: SL-555-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187852
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 09:15 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55540 SDG#: PH102-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	67.0	1.09	0.141	1
06972	Zinc	7440-66-6	61.4	4.34	0.217	1
10146	Zirconium	7440-67-7	5.26 J	5.43	0.912	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.128 J	0.434	0.109	2
06142	Silver	7440-22-4	0.0502 J	0.217	0.0282	2
06144	Strontium	7440-24-6	30.0	0.434	0.0738	2
06145	Thallium	7440-28-0	0.285	0.217	0.0326	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0131 J	0.0183	0.0110	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	2.2	1.1	0.44	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.6 C.	n.a.	7.12	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	8.8	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 10:13	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/09/2013 18:11	Laura M Krieger	21.63
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324932283	09/06/2013 14:56	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324932283	09/06/2013 14:57	Lisa J Cooke	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 22:39	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 04:22	Monica M Souders	1

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

Sample Description: SL-555-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187852
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 09:15 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55540 SDG#: PH102-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 00:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132490637001	09/11/2013 10:57	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132490637001	09/11/2013 10:57	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132490637001	09/11/2013 11:23	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132490637001	09/11/2013 10:57	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132490637001	09/11/2013 10:57	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132490637001	09/11/2013 10:57	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132490637001	09/09/2013 20:15	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132490637001B	09/13/2013 22:31	David K Beck	2
06142	Silver	SW-846 6020A	1	132490637001A	09/13/2013 22:31	David K Beck	2
06144	Strontium	SW-846 6020A	1	132490637001A	09/13/2013 22:31	David K Beck	2
06145	Thallium	SW-846 6020A	1	132490637001A	09/13/2013 22:31	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132490638001	09/09/2013 17:51	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132490637001	09/09/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132490638001	09/09/2013 13:00	Denise K Conners	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202A	09/15/2013 02:05	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202A	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13249039401A	09/06/2013 20:13	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-555-SA5D-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187853
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 09:30 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55510 SDG#: PH102-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.5
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.93	U	0.93	0.19	1
10590	Alpha BHC	319-84-6	0.93	U	0.93	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.93	U	0.93	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.93	U	0.93	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.93	U	0.93	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.93	U	0.93	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.93	U	0.93	0.19	1

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

Sample Description: SL-555-SA5D-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187853
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 09:30 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55510 SDG#: PH102-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,400		42.9	7.74	1
06944	Antimony	7440-36-0	4.29	U	4.29	0.794	1
06935	Arsenic	7440-38-2	7.84		4.29	0.751	1
06946	Barium	7440-39-3	81.9		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.875	J	1.07	0.0719	1
07914	Boron	7440-42-8	8.84	J	10.7	0.901	1
06949	Cadmium	7440-43-9	0.0891	J	1.07	0.0816	1
01650	Calcium	7440-70-2	3,900		21.5	3.58	1
06951	Chromium	7440-47-3	34.1		3.22	0.172	1
06952	Cobalt	7440-48-4	7.51		1.07	0.106	1
06953	Copper	7440-50-8	12.3		2.15	0.311	1
01654	Iron	7439-89-6	33,800		85.9	7.77	2
06955	Lead	7439-92-1	8.43		3.22	0.537	1
01656	Lithium	7439-93-2	32.1		4.3	0.36	1
01657	Magnesium	7439-95-4	6,840		10.7	1.79	1
06958	Manganese	7439-96-5	251		1.07	0.0891	1
06960	Molybdenum	7439-98-7	0.205	J	2.15	0.182	1
06961	Nickel	7440-02-0	15.2		2.15	0.140	1
10145	Phosphorus	7723-14-0	384		10.7	3.10	1
01662	Potassium	7440-09-7	2,680		107	8.95	1
01667	Sodium	7440-23-5	199		107	17.9	1
06969	Tin	7440-31-5	3.47	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,140		1.07	0.182	1

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

Sample Description: SL-555-SA5D-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187853
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 09:30 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55510 SDG#: PH102-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	60.6	1.07	0.140	1
06972	Zinc	7440-66-6	61.2	4.29	0.215	1
10146	Zirconium	7440-67-7	4.18 J	5.37	0.901	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.429 U	0.429	0.107	2
06142	Silver	7440-22-4	0.0505 J	0.215	0.0279	2
06144	Strontium	7440-24-6	28.6	0.429	0.0730	2
06145	Thallium	7440-28-0	0.314	0.215	0.0322	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0156 J	0.0173	0.0104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	2.9	1.1	0.44	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.6 C.	n.a.	7.47	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	10.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 10:45	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/09/2013 18:49	Laura M Krieger	23.5
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324932283	09/06/2013 14:55	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324932283	09/06/2013 14:55	Lisa J Cooke	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 22:54	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 04:40	Monica M Souders	1

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

Sample Description: SL-555-SA5D-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187853
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 09:30 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55510 SDG#: PH102-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 00:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132490637001	09/11/2013 12:00	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132490637001	09/11/2013 12:00	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132490637001	09/11/2013 12:51	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132490637001	09/11/2013 12:00	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132490637001	09/11/2013 12:00	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132490637001	09/11/2013 12:00	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132490637001	09/09/2013 20:43	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132490637001B	09/13/2013 22:48	David K Beck	2
06142	Silver	SW-846 6020A	1	132490637001A	09/13/2013 22:48	David K Beck	2
06144	Strontium	SW-846 6020A	1	132490637001A	09/13/2013 22:48	David K Beck	2
06145	Thallium	SW-846 6020A	1	132490637001A	09/13/2013 22:48	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132490638001	09/09/2013 18:01	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132490637001	09/09/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132490638001	09/09/2013 13:00	Denise K Conners	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202A	09/15/2013 03:10	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202A	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13249039401A	09/06/2013 20:13	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-556-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187854
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 10:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH102-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	0.99	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.3	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.2	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	0.69	J	1.7	0.68	1
12969	Naphthalene	91-20-3	0.76	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.74	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.0	J	1.7	0.68	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	92	U	92	45	1
10401	2,4-DB	94-82-6	17	U	17	11	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.2	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.2	1
10401	MCPA	94-74-6	2,600	U	2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	770	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.84	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.77	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2,4-DB						
	Reporting limits were raised due to interference from the sample matrix.						
Perchlorate	**SW-846 6850 1/2007**		ug/kg		ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.1	U	5.1	2.2	1

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

Sample Description: SL-556-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187854
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 10:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH102-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	12		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	34		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,800		39.9	7.19	1
06944	Antimony	7440-36-0	3.99	U	3.99	0.738	1
06935	Arsenic	7440-38-2	4.87		3.99	0.698	1
06946	Barium	7440-39-3	77.8		0.998	0.0329	1
06947	Beryllium	7440-41-7	0.669	J	0.998	0.0669	1
07914	Boron	7440-42-8	10.2		9.98	0.838	1
06949	Cadmium	7440-43-9	0.230	J	0.998	0.0758	1
01650	Calcium	7440-70-2	4,900		20.0	3.33	1
06951	Chromium	7440-47-3	35.7		2.99	0.160	1
06952	Cobalt	7440-48-4	7.29		0.998	0.0988	1
06953	Copper	7440-50-8	8.49		2.00	0.289	1
01654	Iron	7439-89-6	29,300		79.8	7.22	2
06955	Lead	7439-92-1	12.0		2.99	0.499	1
01656	Lithium	7439-93-2	28.8		4.0	0.34	1
01657	Magnesium	7439-95-4	7,050		9.98	1.67	1
06958	Manganese	7439-96-5	347		0.998	0.0828	1
06960	Molybdenum	7439-98-7	2.00	U	2.00	0.170	1
06961	Nickel	7440-02-0	13.8		2.00	0.130	1
10145	Phosphorus	7723-14-0	617		9.98	2.88	1
01662	Potassium	7440-09-7	4,050		99.8	8.32	1
01667	Sodium	7440-23-5	106		99.8	16.7	1
06969	Tin	7440-31-5	2.79	J	9.98	0.220	1
06970	Titanium	7440-32-6	947		0.998	0.170	1
06971	Vanadium	7440-62-2	62.7		0.998	0.130	1
06972	Zinc	7440-66-6	65.8		3.99	0.200	1
10146	Zirconium	7440-67-7	5.16		4.99	0.838	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-556-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187854
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 10:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH102-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.235 J	0.399	0.0998	2
06142	Silver	7440-22-4	0.0404 J	0.200	0.0259	2
06144	Strontium	7440-24-6	24.5	0.399	0.0679	2
06145	Thallium	7440-28-0	0.302	0.200	0.0299	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0227	0.0165	0.0099	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.97 J	1.0	0.41	1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.62	0.41	0.14	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.8 C.	n.a.	6.86	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.7	0.10	0.10	1

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

Sample Description: SL-556-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187854
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 10:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH102-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.983	U	0.983	0.0624	1
11031	12378-PeCDD	40321-76-4	0.0995	JQ	4.91	0.0378	1
11031	123478-HxCDD	39227-28-6	0.0869	JBQ	4.91	0.0353	1
11031	123678-HxCDD	57653-85-7	0.281	J	4.91	0.0366	1
11031	123789-HxCDD	19408-74-3	0.315	JB	4.91	0.0339	1
11031	1234678-HpCDD	35822-46-9	3.07	JB	4.91	0.0350	1
11031	OCDD	3268-87-9	34.7	B	9.83	0.0249	1
11031	2378-TCDF	51207-31-9	0.231	J	0.983	0.0893	1
11031	12378-PeCDF	57117-41-6	0.551	JBQ	4.91	0.0277	1
11031	23478-PeCDF	57117-31-4	0.693	JB	4.91	0.0291	1
11031	123478-HxCDF	70648-26-9	0.174	JB	4.91	0.0270	1
11031	123678-HxCDF	57117-44-9	0.173	JB	4.91	0.0230	1
11031	123789-HxCDF	72918-21-9	0.431	JB	4.91	0.0323	1
11031	234678-HxCDF	60851-34-5	0.186	JB	4.91	0.0247	1
11031	1234678-HpCDF	67562-39-4	0.636	JB	4.91	0.0126	1
11031	1234789-HpCDF	55673-89-7	0.0980	JB	4.91	0.0227	1
11031	OCDF	39001-02-0	1.40	JB	9.83	0.0323	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.436				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	86	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	105	24 - 185
13C12-23478-PeCDF	93	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	106	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-556-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187854
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 10:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH102-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-556-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187854
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 10:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH102-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 11:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132490029A	09/10/2013 14:18	Elizabeth J Marin	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132520019A	09/10/2013 19:49	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 04:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132490029A	09/08/2013 09:15	Karen L Beyer	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132520019A	09/10/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 05:45	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/16/2013 19:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132490637001	09/11/2013 12:04	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132490637001	09/11/2013 12:04	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132490637001	09/11/2013 12:55	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132490637001	09/11/2013 12:04	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132490637001	09/11/2013 12:04	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1

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

Sample Description: SL-556-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187854
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 10:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH102-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132490637001	09/11/2013 12:04	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132490637001	09/09/2013 20:55	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132490637001B	09/13/2013 22:55	David K Beck	2
06142	Silver	SW-846 6020A	1	132490637001A	09/13/2013 22:55	David K Beck	2
06144	Strontium	SW-846 6020A	1	132490637001A	09/13/2013 22:55	David K Beck	2
06145	Thallium	SW-846 6020A	1	132490637001A	09/13/2013 22:55	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132490638001	09/09/2013 18:03	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132490637001	09/09/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132490638001	09/09/2013 13:00	Denise K Conners	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202A	09/15/2013 03:26	Sandra J Miller	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13254243201A	09/13/2013 16:39	Clinton M Wilson	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202A	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13249039401A	09/06/2013 20:13	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13254243201A	09/12/2013 19:50	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-559-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187855
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 07:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH102-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	0.85	J	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.0	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	0.85	J	1.8	0.70	1
12969	Naphthalene	91-20-3	1.0	J	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.2	J	1.8	0.35	1
10590	p,p-DDT	50-29-3	0.56	J	1.8	0.37	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

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

Sample Description: SL-559-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187855
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 07:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH102-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	15		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	45		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,000		42.3	7.63	1
06944	Antimony	7440-36-0	4.23	U	4.23	0.783	1
06935	Arsenic	7440-38-2	8.05		4.23	0.740	1
06946	Barium	7440-39-3	121		1.06	0.0349	1
06947	Beryllium	7440-41-7	0.841	J	1.06	0.0709	1
07914	Boron	7440-42-8	13.8		10.6	0.889	1
06949	Cadmium	7440-43-9	0.469	J	1.06	0.0804	1
01650	Calcium	7440-70-2	8,720		21.2	3.53	1
06951	Chromium	7440-47-3	31.4		3.17	0.169	1
06952	Cobalt	7440-48-4	8.57		1.06	0.105	1
06953	Copper	7440-50-8	16.9		2.12	0.307	1
01654	Iron	7439-89-6	30,200		84.6	7.66	2
06955	Lead	7439-92-1	11.9		3.17	0.529	1
01656	Lithium	7439-93-2	26.7		4.2	0.36	1
01657	Magnesium	7439-95-4	6,950		10.6	1.77	1
06958	Manganese	7439-96-5	406		1.06	0.0878	1
06960	Molybdenum	7439-98-7	0.329	J	2.12	0.180	1
06961	Nickel	7440-02-0	20.2		2.12	0.138	1
10145	Phosphorus	7723-14-0	762		10.6	3.06	1
01662	Potassium	7440-09-7	5,110		106	8.82	1
01667	Sodium	7440-23-5	85.6	J	106	17.7	1
06969	Tin	7440-31-5	2.99	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,160		1.06	0.180	1
06971	Vanadium	7440-62-2	57.3		1.06	0.138	1
06972	Zinc	7440-66-6	78.3		4.23	0.212	1
10146	Zirconium	7440-67-7	2.71	J	5.29	0.889	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-559-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187855
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 07:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH102-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.213 J	0.423	0.106	2
06142	Silver	7440-22-4	0.0560 J	0.212	0.0275	2
06144	Strontium	7440-24-6	24.5	0.423	0.0719	2
06145	Thallium	7440-28-0	0.320	0.212	0.0317	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0195	0.0171	0.0103	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.3	1.1	0.43	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	8.09	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	6.4	0.10	0.10	1

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

Sample Description: SL-559-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187855
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 07:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH102-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0751	1
11031	12378-PeCDD	40321-76-4	0.124	JQ	5.26	0.0499	1
11031	123478-HxCDD	39227-28-6	0.0569	JB	5.26	0.0400	1
11031	123678-HxCDD	57653-85-7	0.189	JQ	5.26	0.0411	1
11031	123789-HxCDD	19408-74-3	0.301	JB	5.26	0.0387	1
11031	1234678-HpCDD	35822-46-9	1.83	JB	5.26	0.0395	1
11031	OCDD	3268-87-9	16.3	B	10.5	0.0328	1
11031	2378-TCDF	51207-31-9	0.130	J	1.05	0.0697	1
11031	12378-PeCDF	57117-41-6	0.388	JBQ	5.26	0.0247	1
11031	23478-PeCDF	57117-31-4	0.193	JBQ	5.26	0.0231	1
11031	123478-HxCDF	70648-26-9	0.0943	JBQ	5.26	0.0237	1
11031	123678-HxCDF	57117-44-9	0.0855	JBQ	5.26	0.0205	1
11031	123789-HxCDF	72918-21-9	0.147	JBQ	5.26	0.0251	1
11031	234678-HxCDF	60851-34-5	0.103	JB	5.26	0.0217	1
11031	1234678-HpCDF	67562-39-4	0.391	JBQ	5.26	0.0201	1
11031	1234789-HpCDF	55673-89-7	0.0780	JBQ	5.26	0.0341	1
11031	OCDF	39001-02-0	0.663	JB	10.5	0.0361	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0825				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	96	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	87	24 - 169
13C12-12378-PeCDF	116	24 - 185
13C12-23478-PeCDF	110	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	94	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	109	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-559-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187855
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 07:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH102-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-559-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187855
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 07:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH102-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 11:49	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 23:09	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 05:17	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 06:07	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/16/2013 20:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132490637001	09/11/2013 12:08	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132490637001	09/11/2013 12:08	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132490637001	09/11/2013 12:59	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132490637001	09/11/2013 12:08	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132490637001	09/11/2013 12:08	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132490637001	09/11/2013 12:08	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132490637001	09/09/2013 20:59	Katlin N Cataldi	1

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

Sample Description: SL-559-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187855
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 07:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH102-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132490637001B	09/13/2013 22:58	David K Beck	2
06142	Silver	SW-846 6020A	1	132490637001A	09/13/2013 22:58	David K Beck	2
06144	Strontium	SW-846 6020A	1	132490637001A	09/13/2013 22:58	David K Beck	2
06145	Thallium	SW-846 6020A	1	132490637001A	09/13/2013 22:58	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132490638001	09/09/2013 18:09	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132490637001	09/09/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132490638001	09/09/2013 13:00	Denise K Conners	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202A	09/15/2013 03:43	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202A	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13249039401A	09/06/2013 20:13	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-559-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187856
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 07:55 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55960 SDG#: PH102-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.22
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.90	U	0.90	0.18	1
10590	Alpha BHC	319-84-6	0.90	U	0.90	0.18	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.90	U	0.90	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.36	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.36	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.90	U	0.90	0.49	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.36	1
10590	Endosulfan I	959-98-8	0.90	U	0.90	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.36	1
10590	Endrin	72-20-8	1.8	U	1.8	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.65	1
10590	Heptachlor	76-44-8	0.90	U	0.90	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.90	U	0.90	0.18	1

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

Sample Description: SL-559-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187856
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 07:55 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55960 SDG#: PH102-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,300		42.9	7.73	1
06944	Antimony	7440-36-0	4.29	U	4.29	0.794	1
06935	Arsenic	7440-38-2	14.1		4.29	0.751	1
06946	Barium	7440-39-3	114		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.942	J	1.07	0.0719	1
07914	Boron	7440-42-8	6.72	J	10.7	0.901	1
06949	Cadmium	7440-43-9	0.323	J	1.07	0.0815	1
01650	Calcium	7440-70-2	72,900		42.9	7.17	2
06951	Chromium	7440-47-3	27.2		3.22	0.172	1
06952	Cobalt	7440-48-4	5.78		1.07	0.106	1
06953	Copper	7440-50-8	14.2		2.15	0.311	1
01654	Iron	7439-89-6	38,500		85.8	7.77	2
06955	Lead	7439-92-1	7.37		3.22	0.536	1
01656	Lithium	7439-93-2	26.6		4.3	0.36	1
01657	Magnesium	7439-95-4	6,340		10.7	1.79	1
06958	Manganese	7439-96-5	221		1.07	0.0890	1
06960	Molybdenum	7439-98-7	1.35	J	2.15	0.182	1
06961	Nickel	7440-02-0	16.3		2.15	0.139	1
10145	Phosphorus	7723-14-0	109		10.7	3.10	1
01662	Potassium	7440-09-7	3,200		107	8.95	1
01667	Sodium	7440-23-5	99.6	J	107	17.9	1
06969	Tin	7440-31-5	3.81	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,730		1.07	0.182	1

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

Sample Description: SL-559-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187856
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 07:55 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55960 SDG#: PH102-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	59.6	1.07	0.139	1
06972	Zinc	7440-66-6	91.6	4.29	0.215	1
10146	Zirconium	7440-67-7	5.36 U	5.36	0.901	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.216 J	0.429	0.107	2
06142	Silver	7440-22-4	0.0312 J	0.215	0.0279	2
06144	Strontium	7440-24-6	57.2	0.429	0.0729	2
06145	Thallium	7440-28-0	0.431	0.215	0.0322	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0177 U	0.0177	0.0106	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.5	1.1	0.43	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.7 C.	n.a.	8.45	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	7.7	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/13/2013 12:21	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/09/2013 19:27	Laura M Krieger	24.22
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324932283	09/06/2013 14:54	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324932283	09/06/2013 14:54	Lisa J Cooke	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 23:24	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 05:36	Monica M Souders	1

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

Sample Description: SL-559-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187856
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 07:55 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55960 SDG#: PH102-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 00:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132490637001	09/11/2013 12:13	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132490637001	09/11/2013 13:04	Eric L Eby	2
06951	Chromium	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132490637001	09/11/2013 13:04	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132490637001	09/11/2013 12:13	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132490637001	09/11/2013 12:13	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132490637001	09/11/2013 12:13	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132490637001	09/09/2013 21:04	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132490637001B	09/13/2013 23:00	David K Beck	2
06142	Silver	SW-846 6020A	1	132490637001A	09/13/2013 23:00	David K Beck	2
06144	Strontium	SW-846 6020A	1	132490637001A	09/13/2013 23:00	David K Beck	2
06145	Thallium	SW-846 6020A	1	132490637001A	09/13/2013 23:00	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132490638001	09/09/2013 18:11	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132490637001	09/09/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132490638001	09/09/2013 13:00	Denise K Conners	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202A	09/15/2013 04:31	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202A	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13249039401A	09/06/2013 20:13	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-556-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187857
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 12:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55611 SDG#: PH102-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	28.03
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	96	U	96	47	1
10401	2,4-DB	94-82-6	18	U	18	6.6	1
10401	Dicamba	1918-00-9	13	U	13	4.3	1
10401	Dinoseb	88-85-7	26	U	26	9.6	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.6	1
10401	MCPA	94-74-6	2,700	U	2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	800	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.87	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.80	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
2,4-DB

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

Sample Description: SL-556-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187857
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 12:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55611 SDG#: PH102-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.3	U	5.3	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,600		41.4	7.47	1
06944	Antimony	7440-36-0	4.14	U	4.14	0.767	1
06935	Arsenic	7440-38-2	5.62		4.14	0.725	1
06946	Barium	7440-39-3	72.5		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.543	J	1.04	0.0694	1
07914	Boron	7440-42-8	5.87	J	10.4	0.870	1
06949	Cadmium	7440-43-9	0.232	J	1.04	0.0787	1
01650	Calcium	7440-70-2	5,700		20.7	3.46	1
06951	Chromium	7440-47-3	131		3.11	0.166	1
06952	Cobalt	7440-48-4	20.9		1.04	0.103	1
06953	Copper	7440-50-8	17.7		2.07	0.300	1
01654	Iron	7439-89-6	30,000		82.9	7.50	2
06955	Lead	7439-92-1	5.32		3.11	0.518	1
01656	Lithium	7439-93-2	40.4		4.1	0.35	1
01657	Magnesium	7439-95-4	26,100		10.4	1.73	1
06958	Manganese	7439-96-5	396		1.04	0.0860	1
06960	Molybdenum	7439-98-7	2.07	U	2.07	0.176	1
06961	Nickel	7440-02-0	217		2.07	0.135	1
10145	Phosphorus	7723-14-0	481		10.4	2.99	1
01662	Potassium	7440-09-7	2,180		104	8.64	1
01667	Sodium	7440-23-5	142		104	17.3	1
06969	Tin	7440-31-5	3.27	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,230		1.04	0.176	1
06971	Vanadium	7440-62-2	48.6		1.04	0.135	1
06972	Zinc	7440-66-6	80.1		4.14	0.207	1

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

Sample Description: SL-556-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187857
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 12:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55611 SDG#: PH102-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
10146	Zirconium	7440-67-7	2.96	J	5.18	0.870	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.414	U	0.414	0.104	2
06142	Silver	7440-22-4	0.207	U	0.207	0.0269	2
06144	Strontium	7440-24-6	18.2		0.414	0.0705	2
06145	Thallium	7440-28-0	0.322		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	2.4		1.1	0.42	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.32	J	0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.6 C.	n.a.	7.71		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	6.3		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/14/2013 09:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/09/2013 20:05	Laura M Krieger	28.03
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324932283	09/06/2013 14:52	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324932283	09/06/2013 14:53	Lisa J Cooke	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132490029A	09/10/2013 14:45	Elizabeth J Marin	1

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

Sample Description: SL-556-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187857
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 12:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55611 SDG#: PH102-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132520019A	09/10/2013 20:14	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 05:54	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132490029A	09/08/2013 09:15	Karen L Beyer	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132520019A	09/10/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 01:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132490637001	09/11/2013 12:17	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132490637001	09/11/2013 12:17	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132490637001	09/11/2013 13:08	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132490637001	09/11/2013 12:17	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132490637001	09/11/2013 12:17	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132490637001	09/11/2013 12:17	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132490637001	09/09/2013 21:08	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132490637001B	09/13/2013 23:02	David K Beck	2
06142	Silver	SW-846 6020A	1	132490637001A	09/13/2013 23:02	David K Beck	2
06144	Strontium	SW-846 6020A	1	132490637001A	09/13/2013 23:02	David K Beck	2
06145	Thallium	SW-846 6020A	1	132490637001A	09/13/2013 23:02	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132490638001	09/09/2013 18:13	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132490637001	09/09/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132490638001	09/09/2013 13:00	Denise K Conners	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202A	09/15/2013 04:47	Sandra J Miller	1

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

Sample Description: SL-556-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187857
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 12:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55611 SDG#: PH102-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13254243201A	09/13/2013 17:01	Clinton M Wilson	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202A	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13249039401A	09/06/2013 20:13	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13254243201A	09/12/2013 19:50	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-556-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187858
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 12:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55640 SDG#: PH102-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	0.83	J	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.92	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.0	J	1.7	0.70	1
12969	Naphthalene	91-20-3	1.3	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.15
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	95	U	95	46	1
10401	2,4-DB	94-82-6	18	U	18	6.5	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.5	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.5	1
10401	MCPA	94-74-6	2,600	U	2,600	800	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	790	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.86	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.79	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
2,4-DB

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

Sample Description: SL-556-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187858
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 12:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55640 SDG#: PH102-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.3	U	5.3	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	4.8	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	9.8	J	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,400		42.3	7.63	1
06944	Antimony	7440-36-0	4.23	U	4.23	0.783	1
06935	Arsenic	7440-38-2	5.96		4.23	0.741	1
06946	Barium	7440-39-3	83.5		1.06	0.0349	1
06947	Beryllium	7440-41-7	0.709	J	1.06	0.0709	1
07914	Boron	7440-42-8	9.88	J	10.6	0.889	1
06949	Cadmium	7440-43-9	0.246	J	1.06	0.0804	1
01650	Calcium	7440-70-2	4,360		21.2	3.53	1
06951	Chromium	7440-47-3	36.8		3.17	0.169	1
06952	Cobalt	7440-48-4	9.13		1.06	0.105	1
06953	Copper	7440-50-8	9.47		2.12	0.307	1
01654	Iron	7439-89-6	31,500		84.7	7.66	2
06955	Lead	7439-92-1	8.56		3.17	0.529	1
01656	Lithium	7439-93-2	31.1		4.2	0.36	1
01657	Magnesium	7439-95-4	7,670		10.6	1.77	1
06958	Manganese	7439-96-5	369		1.06	0.0878	1
06960	Molybdenum	7439-98-7	0.337	J	2.12	0.180	1
06961	Nickel	7440-02-0	19.2		2.12	0.138	1
10145	Phosphorus	7723-14-0	493		10.6	3.06	1
01662	Potassium	7440-09-7	3,190		106	8.83	1
01667	Sodium	7440-23-5	148		106	17.7	1
06969	Tin	7440-31-5	2.83	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,020		1.06	0.180	1
06971	Vanadium	7440-62-2	64.8		1.06	0.138	1
06972	Zinc	7440-66-6	67.8		4.23	0.212	1

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

Sample Description: SL-556-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187858
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 12:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55640 SDG#: PH102-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
10146	Zirconium	7440-67-7	5.14	J	5.29	0.889	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.221	J	0.423	0.106	2
06142	Silver	7440-22-4	0.212	U	0.212	0.0275	2
06144	Strontium	7440-24-6	24.6		0.423	0.0720	2
06145	Thallium	7440-28-0	0.272		0.212	0.0317	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0100	J	0.0164	0.0099	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	3.0		1.1	0.42	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.55		0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	7.40		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	5.5		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/14/2013 10:13	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/09/2013 20:43	Laura M Krieger	25.15
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324932283	09/06/2013 14:51	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324932283	09/06/2013 14:52	Lisa J Cooke	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132490029A	09/10/2013 15:11	Elizabeth J Marin	1

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

Sample Description: SL-556-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187858
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 12:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55640 SDG#: PH102-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132520019A	09/10/2013 20:27	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 06:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132490029A	09/08/2013 09:15	Karen L Beyer	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132520019A	09/10/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 04:21	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132490637001	09/11/2013 12:30	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132490637001	09/11/2013 12:30	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132490637001	09/11/2013 13:20	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132490637001	09/11/2013 12:30	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132490637001	09/11/2013 12:30	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132490637001	09/11/2013 12:30	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132490637001	09/09/2013 21:12	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132490637001B	09/13/2013 23:05	David K Beck	2
06142	Silver	SW-846 6020A	1	132490637001A	09/13/2013 23:05	David K Beck	2
06144	Strontium	SW-846 6020A	1	132490637001A	09/13/2013 23:05	David K Beck	2
06145	Thallium	SW-846 6020A	1	132490637001A	09/13/2013 23:05	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132490638001	09/09/2013 18:15	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132490637001	09/09/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132490638001	09/09/2013 13:00	Denise K Conners	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202A	09/15/2013 05:04	Sandra J Miller	1

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

Sample Description: SL-556-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187858
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 12:20 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55640 SDG#: PH102-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13254243201A	09/13/2013 18:20	Clinton M Wilson	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202A	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13249039401B	09/06/2013 21:10	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13254243201A	09/12/2013 19:50	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-554-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187859
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:15 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH102-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	0.92	J	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.1	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	0.73	J	1.7	0.70	1
12969	Naphthalene	91-20-3	0.86	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

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

Sample Description: SL-554-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187859
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:15 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH102-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	7.3		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	20		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,100		41.6	7.51	1
06944	Antimony	7440-36-0	4.16	U	4.16	0.770	1
06935	Arsenic	7440-38-2	6.26		4.16	0.729	1
06946	Barium	7440-39-3	105		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.822	J	1.04	0.0698	1
07914	Boron	7440-42-8	8.80	J	10.4	0.875	1
06949	Cadmium	7440-43-9	0.281	J	1.04	0.0791	1
01650	Calcium	7440-70-2	4,080		20.8	3.48	1
06951	Chromium	7440-47-3	34.2		3.12	0.167	1
06952	Cobalt	7440-48-4	8.47		1.04	0.103	1
06953	Copper	7440-50-8	14.6		2.08	0.302	1
01654	Iron	7439-89-6	31,500		83.3	7.54	2
06955	Lead	7439-92-1	9.11		3.12	0.521	1
01656	Lithium	7439-93-2	30.5		4.2	0.35	1
01657	Magnesium	7439-95-4	6,590		10.4	1.74	1
06958	Manganese	7439-96-5	336		1.04	0.0864	1
06960	Molybdenum	7439-98-7	0.366	J	2.08	0.177	1
06961	Nickel	7440-02-0	18.3		2.08	0.135	1
10145	Phosphorus	7723-14-0	554		10.4	3.01	1
01662	Potassium	7440-09-7	4,450		104	8.68	1
01667	Sodium	7440-23-5	119		104	17.4	1
06969	Tin	7440-31-5	3.24	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,090		1.04	0.177	1
06971	Vanadium	7440-62-2	58.1		1.04	0.135	1
06972	Zinc	7440-66-6	76.2		4.16	0.208	1
10146	Zirconium	7440-67-7	4.23	J	5.21	0.875	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-554-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187859
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:15 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH102-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.206	J	0.416	0.104	2
06142	Silver	7440-22-4	0.208	U	0.208	0.0271	2
06144	Strontium	7440-24-6	26.0		0.416	0.0708	2
06145	Thallium	7440-28-0	0.342		0.208	0.0312	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0110	J	0.0165	0.0099	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.90	J	1.0	0.42	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.68		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-554-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187859
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:15 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH102-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.05 U	1.05	0.0710	1
11031	12378-PeCDD	40321-76-4	0.168 J	5.26	0.0493	1
11031	123478-HxCDD	39227-28-6	0.0372 JBQ	5.26	0.0306	1
11031	123678-HxCDD	57653-85-7	0.374 J	5.26	0.0320	1
11031	123789-HxCDD	19408-74-3	0.588 JB	5.26	0.0304	1
11031	1234678-HpCDD	35822-46-9	0.308 JB	5.26	0.0328	1
11031	OCDD	3268-87-9	2.24 JB	10.5	0.0298	1
11031	2378-TCDF	51207-31-9	1.05 U	1.05	0.0543	1
11031	12378-PeCDF	57117-41-6	0.328 JB	5.26	0.0198	1
11031	23478-PeCDF	57117-31-4	0.0864 JBQ	5.26	0.0197	1
11031	123478-HxCDF	70648-26-9	0.0460 JBQ	5.26	0.0168	1
11031	123678-HxCDF	57117-44-9	0.0547 JBQ	5.26	0.0141	1
11031	123789-HxCDF	72918-21-9	0.939 JB	5.26	0.0188	1
11031	234678-HxCDF	60851-34-5	0.0620 JB	5.26	0.0151	1
11031	1234678-HpCDF	67562-39-4	0.132 JBQ	5.26	0.0155	1
11031	1234789-HpCDF	55673-89-7	0.0465 JB	5.26	0.0266	1
11031	OCDF	39001-02-0	0.211 JBQ	10.5	0.0470	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.379			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	102	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	90	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	108	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-554-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187859
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:15 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH102-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-554-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187859
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:15 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH102-10

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/14/2013 10:45	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 23:40	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 06:32	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 04:42	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13254002	09/16/2013 21:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13254002	09/11/2013 11:50	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132490637001	09/11/2013 12:34	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132490637001	09/11/2013 12:34	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132490637001	09/11/2013 13:25	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132490637001	09/11/2013 12:34	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132490637001	09/11/2013 12:34	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132490637001	09/11/2013 12:34	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132490637001	09/09/2013 21:16	Katlin N Cataldi	1

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

Sample Description: SL-554-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187859
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:15 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH102-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132490637001B	09/13/2013 23:07	David K Beck	2
06142	Silver	SW-846 6020A	1	132490637001A	09/13/2013 23:07	David K Beck	2
06144	Strontium	SW-846 6020A	1	132490637001A	09/13/2013 23:07	David K Beck	2
06145	Thallium	SW-846 6020A	1	132490637001A	09/13/2013 23:07	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132490638001	09/09/2013 18:17	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132490637001	09/09/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132490638001	09/09/2013 13:00	Denise K Conners	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202A	09/15/2013 05:20	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202A	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13249039401A	09/06/2013 20:13	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-554-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187860
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:30 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55440 SDG#: PH102-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	0.81	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		mg/kg		mg/kg	mg/kg	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.13
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1

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

Sample Description: SL-554-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187860
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:30 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55440 SDG#: PH102-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,400		42.4	7.64	1
06944	Antimony	7440-36-0	4.24	U	4.24	0.784	1
06935	Arsenic	7440-38-2	7.24		4.24	0.742	1
06946	Barium	7440-39-3	112		1.06	0.0350	1
06947	Beryllium	7440-41-7	0.936	J	1.06	0.0710	1
07914	Boron	7440-42-8	8.83	J	10.6	0.890	1
06949	Cadmium	7440-43-9	0.268	J	1.06	0.0806	1
01650	Calcium	7440-70-2	4,080		21.2	3.54	1
06951	Chromium	7440-47-3	35.1		3.18	0.170	1
06952	Cobalt	7440-48-4	9.19		1.06	0.105	1
06953	Copper	7440-50-8	15.7		2.12	0.307	1
01654	Iron	7439-89-6	32,700		84.8	7.67	2
06955	Lead	7439-92-1	10.6		3.18	0.530	1
01656	Lithium	7439-93-2	32.7		4.2	0.36	1
01657	Magnesium	7439-95-4	6,860		10.6	1.77	1
06958	Manganese	7439-96-5	340		1.06	0.0880	1
06960	Molybdenum	7439-98-7	0.253	J	2.12	0.180	1
06961	Nickel	7440-02-0	19.9		2.12	0.138	1
10145	Phosphorus	7723-14-0	401		10.6	3.06	1
01662	Potassium	7440-09-7	3,070		106	8.84	1
01667	Sodium	7440-23-5	110		106	17.7	1
06969	Tin	7440-31-5	3.48	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,120		1.06	0.180	1

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

Sample Description: SL-554-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187860
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:30 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55440 SDG#: PH102-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	59.7	1.06	0.138	1
06972	Zinc	7440-66-6	77.2	4.24	0.212	1
10146	Zirconium	7440-67-7	4.78 J	5.30	0.890	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.168 J	0.424	0.106	2
06142	Silver	7440-22-4	0.0473 J	0.212	0.0276	2
06144	Strontium	7440-24-6	27.3	0.424	0.0721	2
06145	Thallium	7440-28-0	0.329	0.212	0.0318	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172 U	0.0172	0.0103	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	2.0	1.1	0.43	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.8 C.	n.a.	6.65	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	6.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/17/2013 02:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/09/2013 21:21	Laura M Krieger	24.13
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324932283	09/06/2013 14:50	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324932283	09/06/2013 14:50	Lisa J Cooke	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/16/2013 23:55	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 06:50	Monica M Souders	1

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

Sample Description: SL-554-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187860
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:30 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55440 SDG#: PH102-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 01:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132490637001	09/11/2013 12:38	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132490637001	09/11/2013 12:38	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132490637001	09/11/2013 13:29	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132490637001	09/11/2013 12:38	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132490637001	09/11/2013 12:38	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132490637001	09/11/2013 12:38	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132490637001	09/09/2013 21:20	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132490637001B	09/13/2013 23:09	David K Beck	2
06142	Silver	SW-846 6020A	1	132490637001A	09/13/2013 23:09	David K Beck	2
06144	Strontium	SW-846 6020A	1	132490637001A	09/13/2013 23:09	David K Beck	2
06145	Thallium	SW-846 6020A	1	132490637001A	09/13/2013 23:09	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132490638001	09/09/2013 18:19	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132490637001	09/09/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132490638001	09/09/2013 13:00	Denise K Conners	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202A	09/15/2013 05:36	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202A	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13249039401A	09/06/2013 20:13	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Sample Description: SL-554-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187861
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55470 SDG#: PH102-12*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	0.76	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.89
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.90	U	0.90	0.18	1
10590	Alpha BHC	319-84-6	0.90	U	0.90	0.18	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.90	U	0.90	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.36	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.36	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.90	U	0.90	0.49	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.36	1
10590	Endosulfan I	959-98-8	0.90	U	0.90	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.36	1
10590	Endrin	72-20-8	1.8	U	1.8	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.65	1
10590	Heptachlor	76-44-8	0.90	U	0.90	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.90	U	0.90	0.18	1

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

Sample Description: SL-554-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187861
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55470 SDG#: PH102-12*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,500		42.6	7.67	1
06944	Antimony	7440-36-0	4.26	U	4.26	0.788	1
06935	Arsenic	7440-38-2	10.4		4.26	0.745	1
06946	Barium	7440-39-3	113		1.06	0.0351	1
06947	Beryllium	7440-41-7	1.22		1.06	0.0713	1
07914	Boron	7440-42-8	8.74	J	10.6	0.894	1
06949	Cadmium	7440-43-9	0.185	J	1.06	0.0809	1
01650	Calcium	7440-70-2	6,220		21.3	3.56	1
06951	Chromium	7440-47-3	40.7		3.19	0.170	1
06952	Cobalt	7440-48-4	11.7		1.06	0.105	1
06953	Copper	7440-50-8	32.0		2.13	0.309	1
01654	Iron	7439-89-6	44,300		85.2	7.71	2
06955	Lead	7439-92-1	16.8		3.19	0.532	1
01656	Lithium	7439-93-2	66.5		4.3	0.36	1
01657	Magnesium	7439-95-4	10,600		10.6	1.78	1
06958	Manganese	7439-96-5	409		1.06	0.0884	1
06960	Molybdenum	7439-98-7	2.13	U	2.13	0.181	1
06961	Nickel	7440-02-0	30.0		2.13	0.138	1
10145	Phosphorus	7723-14-0	723		10.6	3.08	1
01662	Potassium	7440-09-7	3,810		106	8.88	1
01667	Sodium	7440-23-5	148		106	17.8	1
06969	Tin	7440-31-5	4.11	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,280		1.06	0.181	1

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

Sample Description: SL-554-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187861
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55470 SDG#: PH102-12*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	68.3	1.06	0.138	1
06972	Zinc	7440-66-6	131	4.26	0.213	1
10146	Zirconium	7440-67-7	5.14 J	5.32	0.894	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.273 J	0.426	0.106	2
06142	Silver	7440-22-4	0.0431 J	0.213	0.0277	2
06144	Strontium	7440-24-6	30.4	0.426	0.0724	2
06145	Thallium	7440-28-0	0.450	0.213	0.0319	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0212	0.0170	0.0102	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.8	1.1	0.43	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.5 C.	n.a.	7.16	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	7.9	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13249SLI026	09/17/2013 03:12	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13249SLI026	09/09/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/09/2013 21:59	Laura M Krieger	22.89
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324932283	09/06/2013 14:49	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324932283	09/06/2013 14:49	Lisa J Cooke	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/17/2013 00:10	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132530026A	09/12/2013 07:08	Monica M Souders	1

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

Sample Description: SL-554-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7187861
LL Group # 1416870
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/05/2013 13:40 by VC

Submitted: 09/06/2013 09:00
Reported: 09/24/2013 11:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55470 SDG#: PH102-12*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132530026A	09/10/2013 22:10	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 01:52	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132490637001	09/11/2013 12:42	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132490637001	09/11/2013 12:42	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132490637001	09/11/2013 13:33	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132490637001	09/11/2013 12:42	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132490637001	09/11/2013 12:42	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132490637001	09/11/2013 12:42	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132490637001	09/09/2013 21:24	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132490637001B	09/13/2013 23:12	David K Beck	2
06142	Silver	SW-846 6020A	1	132490637001A	09/13/2013 23:12	David K Beck	2
06144	Strontium	SW-846 6020A	1	132490637001A	09/13/2013 23:12	David K Beck	2
06145	Thallium	SW-846 6020A	1	132490637001A	09/13/2013 23:12	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132490638001	09/09/2013 18:21	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132490637001	09/09/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132490638001	09/09/2013 13:00	Denise K Conners	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202B	09/15/2013 06:41	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202B	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13249039401B	09/06/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13254162401B	09/11/2013 20:21	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416870
Reported: 09/24/13 at 11:20 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13249SLI026	Sample number(s): 7187851-7187861									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	96		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	96		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	97		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	100		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	99		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	112		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	100		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	103		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	102		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	103		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	98		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	102		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	97		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	101		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	99		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	99		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	99		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	90		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	104		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	95		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	97		79-112		
Batch number: 13252A16A	Sample number(s): 7187852-7187853,7187856-7187858,7187860-7187861									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	76		67-119		
Batch number: 13252C94A	Sample number(s): 7187850									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	118	115	75-135	3	30
Batch number: 132490029A	Sample number(s): 7187854,7187857-7187858									
2,4-D	36	U	36.	12	ug/kg	116		59-122		
Dalapon	90	U	90.	44	ug/kg	62		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	138*		54-131		
Dicamba	12	U	12.	4.0	ug/kg	94		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	21		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	128		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	96		56-133		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	90		54-134		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416870
Reported: 09/24/13 at 11:20 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	134		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	122		63-130		
Batch number: 132520019A	Sample number(s): 7187854,7187857-7187858									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	86		85-115		
Batch number: 132530015A	Sample number(s): 7187851-7187853,7187855-7187856,7187859-7187861									
Aldrin	0.83	U	0.83	0.17	ug/kg	92		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	109		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	93		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	104		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	108		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	99		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	115		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	96		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	117		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	111		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	100		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	101		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	108		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	95		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	102		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	109		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	95		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	114		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132530026A	Sample number(s): 7187851-7187861									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	85	82	62-87	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	107		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	109		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132530039A	Sample number(s): 7187851-7187861									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	98		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	102		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	104		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	97		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 132490637001	Sample number(s): 7187851-7187861									
Aluminum	40.0	U	40.0	7.21	mg/kg	112		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	112		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	108		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	106		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416870
Reported: 09/24/13 at 11:20 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Beryllium	1.00	U	1.00	0.0670	mg/kg	106		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	104		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	109		80-120		
Calcium	5.41	J	20.0	3.34	mg/kg	105		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	108		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	109		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	110		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	106		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	110		80-120		
Lithium	0.43	J	4.0	0.34	mg/kg	107		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	105		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	112		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	109		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	110		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	110		80-120		
Potassium	100 U		100.	8.34	mg/kg	105		80-120		
Sodium	100 U		100.	16.7	mg/kg	104		80-120		
Tin	1.48	J	10.0	0.220	mg/kg	107		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	109		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	108		80-120		
Zinc	0.466	J	4.00	0.200	mg/kg	109		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	109		80-120		
Batch number: 132490637001A	Sample number(s): 7187851-7187861									
Silver	0.200	U	0.200	0.0260	mg/kg	103		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	97		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	102		80-120		
Batch number: 132490637001B	Sample number(s): 7187851-7187861									
Selenium	0.400	U	0.400	0.100	mg/kg	104		80-120		
Batch number: 132490638001	Sample number(s): 7187851-7187861									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	107		85-120		
Batch number: 13254243201A	Sample number(s): 7187854,7187857-7187858									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	87		80-120		
Batch number: 13254254202A	Sample number(s): 7187851-7187860									
1a Anions by 300.0-Fluoride	1.0	U	1.0	0.40	mg/kg	99		90-110		
Batch number: 13254254202B	Sample number(s): 7187861									
1a Anions by 300.0-Fluoride	1.0	U	1.0	0.40	mg/kg	99		90-110		
Batch number: 13249039401A	Sample number(s): 7187851-7187857,7187859-7187860									
15a pH by 9045D						99		95-105		
Batch number: 13249039401B	Sample number(s): 7187858,7187861									
15a pH by 9045D						99		95-105		
Batch number: 13254162401B	Sample number(s): 7187851-7187861									
14a Moisture Content by 160.3						100		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416870
Reported: 09/24/13 at 11:20 AM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13254002	Sample number(s): 7187851,7187854-7187855,7187859									
2378-TCDD	1.00	U	1.00	0.115	ng/kg	101		67-158		
12378-PeCDD	5.00	U	5.00	0.0609	ng/kg	103		70-142		
123478-HxCDD	0.0390	J	5.00	0.0320	ng/kg	105		70-164		
123678-HxCDD	5.00	U	5.00	0.0325	ng/kg	106		76-134		
123789-HxCDD	0.0470	J	5.00	0.0333	ng/kg	105		64-162		
1234678-HpCDD	0.0675	J	5.00	0.0370	ng/kg	99		70-140		
OCDD	0.281	J	10.0	0.0392	ng/kg	95		78-144		
2378-TCDF	1.00	U	1.00	0.0777	ng/kg	103		75-158		
12378-PeCDF	0.0692	J	5.00	0.0397	ng/kg	92		80-134		
23478-PeCDF	0.0786	J	5.00	0.0412	ng/kg	92		68-160		
123478-HxCDF	0.0639	J	5.00	0.0250	ng/kg	94		72-134		
123678-HxCDF	0.0330	J	5.00	0.0207	ng/kg	93		84-130		
123789-HxCDF	0.0649	J	5.00	0.0253	ng/kg	93		78-130		
234678-HxCDF	0.0615	J	5.00	0.0227	ng/kg	95		70-156		
1234678-HpCDF	0.0376	J	5.00	0.0123	ng/kg	89		82-122		
1234789-HpCDF	0.0826	J	5.00	0.0194	ng/kg	92		78-138		
OCDF	0.227	J	10.0	0.0509	ng/kg	91		63-170		
TEQ WHO 2005 - EDLx0.0	0.0301				ng/kg					

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13249SLI026	Sample number(s): 7187851-7187861 UNSPK: P186221								
Acenaphthene	98	90	48-127	9	30				
Acenaphthylene	96	90	49-121	7	30				
Anthracene	96	92	52-126	5	30				
Benzo(a)anthracene	98	92	44-143	7	30				
Benzo(a)pyrene	95	89	44-140	6	30				
Benzo(b)fluoranthene	97	98	26-142	1	30				
Benzo(e)pyrene	89	83	70-130	8	30				
Benzo(g,h,i)perylene	98	93	33-141	6	30				
Benzo(k)fluoranthene	101	91	54-142	11	30				
Butylbenzylphthalate	111	101	49-151	10	30				
Di-n-butylphthalate	107	98	52-147	9	30				
Chrysene	93	88	29-148	6	30				
Dibenz(a,h)anthracene	96	92	20-137	5	30				
Diethylphthalate	101	96	43-145	5	30				
Dimethylphthalate	93	89	58-129	5	30				
Bis(2-Ethylhexyl)phthalate	171*	100	39-167	53*	30				
Fluoranthene	95	90	40-148	6	30				
Fluorene	97	92	51-137	6	30				
Indeno(1,2,3-cd)pyrene	97	92	17-136	6	30				
1-Methylnaphthalene	100	91	50-131	10	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416870
Reported: 09/24/13 at 11:20 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Methylnaphthalene	98	89	35-152	11	30				
Naphthalene	98	87	31-148	12	30				
N-Nitrosodimethylamine	91	79	48-113	15	30				
Di-n-octylphthalate	107	100	52-162	7	30				
Phenanthrene	93	89	29-142	6	30				
Pyrene	96	88	26-143	8	30				
Batch number: 13252A16A	Sample number(s): 7187852-7187853,7187856-7187858,7187860-7187861 UNSPK: P189528								
11a TPH by EPA 8015B GRO	67*	83	69-123	26	30				
Batch number: 132490029A	Sample number(s): 7187854,7187857-7187858 UNSPK: P186221								
2,4-D	120	108	42-143	11	35				
Dalapon	64	57	16-98	11	50				
2,4-DB	147	131	10-179	11	50				
Dicamba	103	94	55-133	8	50				
Dinoseb	30	25	10-52	17	35				
2,4-DP (Dichlorprop)	132	118	32-171	11	50				
MCPA	99	87	23-169	12	50				
MCPP (Mecoprop)	96	86	24-164	10	50				
2,4,5-T	141	126	12-172	10	35				
2,4,5-TP	124	111	10-142	10	35				
Batch number: 132520019A	Sample number(s): 7187854,7187857-7187858 UNSPK: P189536								
6a Perchlorate (Method 6850)	77*	74*	80-120	4	20				
Batch number: 132530015A	Sample number(s): 7187851-7187853,7187855-7187856,7187859-7187861 UNSPK: P186221								
Aldrin	96	83	16-126	14	50				
Alpha BHC	113	93	14-140	20	50				
Beta BHC	97	89	42-133	8	50				
Gamma BHC - Lindane	110	93	30-137	16	50				
p,p-DDD	112	105	43-149	6	50				
p,p-DDE	89	75	35-152	14	50				
p,p-DDT	122	112	12-193	8	50				
Delta BHC	101	94	13-153	7	50				
Dieldrin	121	114	41-153	6	50				
Endosulfan I	113	105	26-146	8	50				
Endosulfan II	103	99	34-141	4	50				
Endosulfan Sulfate	104	100	10-181	4	50				
Endrin	112	106	30-152	6	50				
Endrin Aldehyde	96	94	23-138	2	35				
Endrin Ketone	106	100	30-148	6	50				
Heptachlor	114	98	16-152	16	50				
Heptachlor Epoxide	97	91	33-144	7	50				
Methoxychlor	120	114	41-161	5	50				
Batch number: 132530026A	Sample number(s): 7187851-7187861 UNSPK: P186221								
PCB-1016	106	113	41-135	7	50				
PCB-1260	111	113	40-134	3	50				
Batch number: 132530039A	Sample number(s): 7187851-7187861 UNSPK: P189528								
EFH (C12-C14)	90	95	49-123	6	20				
EFH (C15-C20)	98	128*	49-123	27*	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416870
Reported: 09/24/13 at 11:20 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
EFH (C21-C30)	100	132*	49-123	27*	20				
EFH (C30-C40)	90	100	49-123	10	20				
EFH (C8-C11)	73	79	49-123	8	20				
Batch number: 132490637001	Sample number(s): 7187851-7187861 UNSPK: 7187852 BKG: 7187852								
Aluminum	2667 (2)	3226 (2)	75-125	4	20	22,600	23,100	2	20
Antimony	38*	35*	75-125	7	20	3.96 U	3.92 U	0 (1)	20
Arsenic	89	91	75-125	2	20	7.56	5.75	27* (1)	20
Barium	103	102	75-125	0	20	81.8	82.4	1	20
Beryllium	100	101	75-125	2	20	0.772 J	0.769 J	0 (1)	20
Boron	98	99	75-125	1	20	9.55 J	9.23 J	3 (1)	20
Cadmium	96	98	75-125	2	20	0.128 J	0.109 J	16 (1)	20
Calcium	189 (2)	194 (2)	75-125	1	20	3,090	3,180	3	20
Chromium	116	120	75-125	2	20	33.2	33.2	0	20
Cobalt	93	93	75-125	0	20	7.73	8.48	9	20
Copper	101	102	75-125	1	20	9.94	8.58	15 (1)	20
Iron	78 (2)	-2361 (2)	75-125	8	20	29,900	28,200	6	20
Lead	91	92	75-125	1	20	7.81	7.70	1 (1)	20
Lithium	101	103	75-125	3	20	25.8	26.6	3	20
Magnesium	342 (2)	425 (2)	75-125	2	20	6,650	6,850	3	20
Manganese	48 (2)	22 (2)	75-125	4	20	270	303	12	20
Molybdenum	94	94	75-125	1	20	0.639 J	0.234 J	93* (1)	20
Nickel	95	96	75-125	2	20	13.2	12.5	5	20
Phosphorus	98	97	75-125	0	20	189	170	11	20
Potassium	142*	131*	75-125	3	20	2,350	2,290	3	20
Sodium	97	98	75-125	2	20	108	109	1 (1)	20
Tin	87	87	75-125	1	20	3.20 J	3.05 J	5 (1)	20
Titanium	428 (2)	388 (2)	75-125	2	20	1,060	1,050	0	20
Vanadium	110	113	75-125	2	20	61.1	59.5	3	20
Zinc	95	98	75-125	2	20	56.0	54.2	3	20
Zirconium	99	100	75-125	2	20	4.80 J	6.06	23* (1)	20
Batch number: 132490637001A	Sample number(s): 7187851-7187861 UNSPK: 7187852 BKG: 7187852								
Silver	100	103	75-125	4	20	0.0458 J	0.0367 J	22* (1)	20
Strontium	87	105	75-125	4	20	27.3	27.3	0	20
Thallium	100	105	75-125	4	20	0.260	0.266	2 (1)	20
Batch number: 132490637001B	Sample number(s): 7187851-7187861 UNSPK: 7187852 BKG: 7187852								
Selenium	91	87	75-125	3	20	0.117 J	0.392 U	200* (1)	20
Batch number: 132490638001	Sample number(s): 7187851-7187861 UNSPK: 7187852 BKG: 7187852								
3a Mercury 7471A	112	108	65-135	4	20	0.0119 J	0.0108 J	10 (1)	20
Batch number: 13254243201A	Sample number(s): 7187854,7187857-7187858 UNSPK: 7187857 BKG: 7187857								
2a Chromium VI by EPA 7199	94		75-125			0.30 J	0.42	32* (1)	20
Batch number: 13254254202A	Sample number(s): 7187851-7187860 UNSPK: 7187852 BKG: 7187852								
1a Anions by 300.0-Fluoride	12*		80-120			2.0	1.9	7 (1)	20
Batch number: 13254254202B	Sample number(s): 7187861 UNSPK: P189536 BKG: P189536								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416870
Reported: 09/24/13 at 11:20 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1a Anions by 300.0-Fluoride	365*		80-120			13.0	13.2	2	20
Batch number: 13249039401A	Sample number(s): 7187851-7187857,7187859-7187860					BKG: 7187852			
15a pH by 9045D						7.12	7.14	0	3
Batch number: 13249039401B	Sample number(s): 7187858,7187861					BKG: 7187861			
15a pH by 9045D						7.16	7.19	0	3
Batch number: 13254162401B	Sample number(s): 7187851-7187861					BKG: P186227			
14a Moisture Content by 160.3						5.7	5.8	1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13249SLI026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7187851	67	65	74
7187852	83	88	92
7187853	82	89	85
7187854	81	85	91
7187855	84	91	98
7187856	87	93	94
7187857	74	79	80
7187858	78	82	87
7187859	74	74	87
7187860	83	88	93
7187861	73	70	88
Blank	88	94	99
LCS	87	97	95
MS	86	92	99
MSD	83	89	90
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13252A16A

	Trifluorotoluene-F
7187852	68
7187853	74
7187856	66
7187857	70
7187858	74
7187860	76

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416870
Reported: 09/24/13 at 11:20 AM

Surrogate Quality Control

7187861	73
Blank	79
LCS	77
MS	62
MSD	67
Limits:	50-142

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13252C94A

	Trifluorotoluene-F
7187850	72
Blank	68
LCS	79
LCSD	78
Limits:	63-135

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132490029A

	2,4-Dichlorophenylacetic acid
7187854	59
7187857	58
7187858	75
Blank	63
LCS	74
MS	77
MSD	70
Limits:	50-150

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132530015A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7187851	88	94
7187852	87	96
7187853	91	100
7187855	51	101
7187856	77	85
7187859	84	97
7187860	81	98
7187861	82	92
Blank	97	105
LCS	97	108
MS	97	109
MSD	71	106
Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132530026A

	Tetrachloro-m-xylene	Decachlorobiphenyl

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1416870
Reported: 09/24/13 at 11:20 AM

Surrogate Quality Control

7187851	128*	113
7187852	121*	107
7187853	108	95
7187854	121*	105
7187855	124*	103
7187856	96	86
7187857	117	99
7187858	115	104
7187859	117	104
7187860	128*	104
7187861	119	102
Blank	133*	120
LCS	130*	124*
LCSD	120	124*
MS	124*	113
MSD	128*	116
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132530039A

	Chlorobenzene	Orthoterphenyl
7187851	102	89
7187852	102	92
7187853	100	92
7187854	96	86
7187855	102	90
7187856	100	89
7187857	97	89
7187858	104	94
7187859	102	93
7187860	99	91
7187861	100	91
Blank	107	97
LCS	108	100
MS	98	90
MSD	105	94
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13254002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7187851	64	88	73	81	74	70
7187854	65	93	75	86	77	64
7187855	75	110	85	94	85	79
7187859	66	90	79	90	80	69
Blank	55	64	68	77	71	66
OPR	62	78	66	77	70	65
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD

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Quality Control Summary

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Reported: 09/24/13 at 11:20 AM

Surrogate Quality Control

7187851	95	66	63	78	70	71
7187854	106	66	63	86	77	76
7187855	109	75	72	96	81	80
7187859	108	69	65	83	76	76
Blank	112	79	84	65	75	77
OPR	99	67	74	80	78	76
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7187851	70	73	73	72	95
7187854	74	77	79	74	105
7187855	79	80	83	87	116
7187859	75	79	80	76	102
Blank	74	87	102	54	72
OPR	75	85	96	62	85
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1416870 7187850-61

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/5/2013
CarrierName: FedEx
AirbillNo: 796624710146

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130905-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-090513	9/5/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-555-SA5D-SB-0.0-0.5	9/5/13 08:55	SO	None	2 - SS-Sleeve	10 day	X	X		X			X			X	X						X				X										
SL-555-SA5D-SB-0.0-0.5	9/5/13 08:55	SO	None	1 - 4 oz glass	10 day													X																		
SL-555-SA5D-SB-4.0-5.0	9/5/13 09:15	SO	None	2 - 16 oz glass	10 day	X	X		X			X				X		X				X				X										
SL-555-SA5D-SB-4.0-5.0	9/5/13 09:15	SO	None	2 - Encore	10 day																			X												
SL-555-SA5D-SB-10.5-11.5	9/5/13 09:30	SO	None	2 - 16 oz glass	10 day	X	X		X			X				X			X			X				X										
SL-555-SA5D-SB-10.5-11.5	9/5/13 09:30	SO	None	2 - Encore	10 day																			X												
SL-556-SA5D-SB-0.0-0.5	9/5/13 10:20	SO	None	2 - SS-Sleeve	10 day	X	X		X			X			X	X		X			X					X										
SL-556-SA5D-SB-0.0-0.5	9/5/13 10:20	SO	None	2 - 4 oz glass	10 day														X	X																
SL-559-SA5D-SB-0.0-0.5	9/5/13 07:40	SO	None	2 - SS-Sleeve	10 day	X	X		X			X			X	X						X				X										
SL-559-SA5D-SB-0.0-0.5	9/5/13 07:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-559-SA5D-SB-6.0-7.0	9/5/13 07:55	SO	None	2 - 16 oz glass	10 day	X	X		X			X				X		X				X				X										
SL-559-SA5D-SB-6.0-7.0	9/5/13 07:55	SO	None	2 - Encore	10 day																			X												
SL-554-SA5D-SB-4.0-5.0	9/5/13 13:30	SO	None	2 - Encore	10 day																			X												
SL-554-SA5D-SB-7.0-8.0	9/5/13 13:40	SO	None	2 - Encore	10 day																			X												
SL-556-SA5D-SB-4.0-5.0	9/5/13 12:20	SO	None	2 - Encore	10 day																			X												
SL-556-SA5D-SB-11.0-12.0	9/5/13 12:40	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X	X	X	X			X					X										
SL-556-SA5D-SB-11.0-12.0	9/5/13 12:40	SO	None	1 - 4 oz glass	10 day															X																
SL-556-SA5D-SB-11.0-12.0	9/5/13 12:40	SO	None	2 - Encore	10 day																			X												
SL-556-SA5D-SB-4.0-5.0	9/5/13 12:20	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X	X	X	X			X					X										
SL-556-SA5D-SB-4.0-5.0	9/5/13 12:20	SO	None	1 - 4 oz glass	10 day															X																

Brandy Bandy 9-6-13 900

13013 1416870 7187850-61

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/5/2013
CarrierName: FedEx
AirbillNo: 796624710146

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130905-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Cheryl Myers	09/5/2013	1000									
									Brenely Bang	9613	900

COC Rev 2

COC: 20130905-01, Page 2 of 2 2 of 2

13013 1416870 7187850-61

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/5/2013
CarrierName: FedEx
AirbillNo: 796624710146

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130905-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-554-SA5D-SB-0.0-0.5	9/5/13 13:15	SO	None	2 - SS-Sleeve	10 day	X	X		X			X		X	X						X				X											
SL-554-SA5D-SB-0.0-0.5	9/5/13 13:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-554-SA5D-SB-4.0-5.0	9/5/13 13:30	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X			X			X				X											
SL-554-SA5D-SB-7.0-8.0	9/5/13 13:40	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X			X			X				X											

Special Instructions:

Sampler: V. Cabe

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	09/05/2013	1600									
									Brandy Barry	9/6/13	900

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

14116870

Client/Project: CDM

Date of Receipt: 9-6-13

Time of Receipt: 900

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	D#146	0.7	TB	WI	Y	B	
2	↓	1.5	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

SL-SS4-SASD-SB-7.0-8.0 = SL-SS4-SASD-SB 7.0-8.0

Unpacker Signature/Emp#: Brianely Baez 2299 **Date/Time:** 9-6-13 934

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH103

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 24, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/07/2013
Group Number: 1417194
SDG: PH103
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-090613 Water	7189526
SL-550-SA5D-SB-0.0-0.5 Soil	7189527
SL-550-SA5D-SB-4.0-5.0 Soil	7189528
SL-550-SA5D-SB-4.0-5.0MS Soil	7189529
SL-550-SA5D-SB-4.0-5.0MSD Soil	7189530
SL-550-SA5D-SB-4.0-5.0DUP Soil	7189531
SL-850-SA5D-SB-4.0-5.0 Soil	7189532
SL-552-SA5D-SB-0.0-0.5 Soil	7189533
SL-552-SA5D-SB-4.0-5.0 Soil	7189534
SL-590-SA5D-SB-0.0-0.5 Soil	7189535
SL-590-SA5D-SB-4.0-5.0 Soil	7189536
SL-590-SA5D-SB-4.0-5.0MS Soil	7189537
SL-590-SA5D-SB-4.0-5.0MSD Soil	7189538
SL-590-SA5D-SB-4.0-5.0DUP Soil	7189539
SL-890-SA5D-SB-4.0-5.0 Soil	7189540
SL-590-SA5D-SB-11.0-12.0 Soil	7189541

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

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-090613 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7189526
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 08:00

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB906 SDG#: PH103-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13255B94A	09/16/2013 11:33	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13255B94A	09/16/2013 11:33	Catherine J Schwarz	1

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

Sample Description: SL-550-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189527
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 08:40 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-0 SDG#: PH103-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	0.74	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.88	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	8.1		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	15		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-550-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189527
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 08:40 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-0 SDG#: PH103-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,100		40.3	7.27	1
06944	Antimony	7440-36-0	4.03	U	4.03	0.746	1
06935	Arsenic	7440-38-2	5.28		4.03	0.706	1
06946	Barium	7440-39-3	99.8		1.01	0.0333	1
06947	Beryllium	7440-41-7	0.712	J	1.01	0.0675	1
07914	Boron	7440-42-8	5.31	J	10.1	0.847	1
06949	Cadmium	7440-43-9	0.190	J	1.01	0.0766	1
01650	Calcium	7440-70-2	3,670		20.2	3.37	1
06951	Chromium	7440-47-3	28.5		3.02	0.161	1
06952	Cobalt	7440-48-4	7.96		1.01	0.0998	1
06953	Copper	7440-50-8	13.8		2.02	0.292	1
01654	Iron	7439-89-6	27,000		40.3	3.65	1
06955	Lead	7439-92-1	7.90		3.02	0.504	1
01656	Lithium	7439-93-2	23.8		4.0	0.34	1
01657	Magnesium	7439-95-4	5,830		10.1	1.68	1
06958	Manganese	7439-96-5	375		1.01	0.0837	1
06960	Molybdenum	7439-98-7	0.354	J	2.02	0.171	1
06961	Nickel	7440-02-0	14.7		2.02	0.131	1
10145	Phosphorus	7723-14-0	441		10.1	2.91	1
01662	Potassium	7440-09-7	4,970		101	8.41	1
01667	Sodium	7440-23-5	100	J	101	16.8	1
06969	Tin	7440-31-5	2.37	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,010		1.01	0.171	1
06971	Vanadium	7440-62-2	52.9		1.01	0.131	1
06972	Zinc	7440-66-6	61.3		4.03	0.202	1
10146	Zirconium	7440-67-7	6.74		5.04	0.847	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.224	J	0.403	0.101	2
06142	Silver	7440-22-4	0.0269	J	0.202	0.0262	2
06144	Strontium	7440-24-6	25.8		0.403	0.0686	2
06145	Thallium	7440-28-0	0.321		0.202	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.05		0.0100	0.0100	1
	The pH was measured in water at 20.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-550-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189527
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 08:40 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-0 SDG#: PH103-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.0952	1
11031	12378-PeCDD	40321-76-4	0.217	JQ	5.06	0.0719	1
11031	123478-HxCDD	39227-28-6	0.108	JQ	5.06	0.0531	1
11031	123678-HxCDD	57653-85-7	0.599	J	5.06	0.0555	1
11031	123789-HxCDD	19408-74-3	0.747	J	5.06	0.0518	1
11031	1234678-HpCDD	35822-46-9	1.89	J	5.06	0.0866	1
11031	OCDD	3268-87-9	23.7	B	10.1	0.113	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.0970	1
11031	12378-PeCDF	57117-41-6	0.403	JQ	5.06	0.0574	1
11031	23478-PeCDF	57117-31-4	0.0913	JQ	5.06	0.0543	1
11031	123478-HxCDF	70648-26-9	0.104	JQ	5.06	0.0457	1
11031	123678-HxCDF	57117-44-9	0.229	J	5.06	0.0442	1
11031	123789-HxCDF	72918-21-9	1.38	J	5.06	0.0515	1
11031	234678-HxCDF	60851-34-5	0.0947	JBQ	5.06	0.0402	1
11031	1234678-HpCDF	67562-39-4	0.357	JB	5.06	0.0355	1
11031	1234789-HpCDF	55673-89-7	0.0610	JBQ	5.06	0.0562	1
11031	OCDF	39001-02-0	0.772	JB	10.1	0.0971	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.325				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	49	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-550-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189527
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 08:40 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-0 SDG#: PH103-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-550-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189527
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 08:40 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-0 SDG#: PH103-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLA026	09/14/2013 05:28	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLA026	09/12/2013 18:45	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132550012A	09/15/2013 20:41	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132550012A	09/13/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 05:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13255003	09/14/2013 14:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13255003	09/12/2013 12:00	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132500637002	09/11/2013 04:24	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132500637002B	09/13/2013 21:06	David K Beck	2
06142	Silver	SW-846 6020A	1	132500637002A	09/13/2013 21:06	David K Beck	2
06144	Strontium	SW-846 6020A	1	132500637002A	09/13/2013 21:06	David K Beck	2

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

Sample Description: SL-550-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189527
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 08:40 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-0 SDG#: PH103-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132500637002A	09/13/2013 21:06	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132500638002	09/11/2013 07:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132500637002	09/10/2013 09:25	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132500638002	09/10/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13250039402A	09/07/2013 13:20	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401B	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-550-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189528
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.55
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

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

Sample Description: SL-550-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189528
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,600		43.3	7.81	1
06944	Antimony	7440-36-0	4.33	U	4.33	0.802	1
06935	Arsenic	7440-38-2	5.72		4.33	0.758	1
06946	Barium	7440-39-3	113		1.08	0.0358	1
06947	Beryllium	7440-41-7	0.865	J	1.08	0.0726	1
07914	Boron	7440-42-8	4.63	J	10.8	0.910	1
06949	Cadmium	7440-43-9	0.119	J	1.08	0.0824	1
01650	Calcium	7440-70-2	3,350		21.7	3.62	1
06951	Chromium	7440-47-3	31.4		3.25	0.173	1
06952	Cobalt	7440-48-4	8.28		1.08	0.107	1
06953	Copper	7440-50-8	13.8		2.17	0.314	1
01654	Iron	7439-89-6	29,400		86.7	7.85	2
06955	Lead	7439-92-1	7.37		3.25	0.542	1
01656	Lithium	7439-93-2	28.8		4.3	0.37	1
01657	Magnesium	7439-95-4	6,460		10.8	1.81	1
06958	Manganese	7439-96-5	359		1.08	0.0899	1
06960	Molybdenum	7439-98-7	0.304	J	2.17	0.184	1
06961	Nickel	7440-02-0	18.1		2.17	0.141	1
10145	Phosphorus	7723-14-0	344		10.8	3.13	1
01662	Potassium	7440-09-7	3,430		108	9.04	1
01667	Sodium	7440-23-5	99.0	J	108	18.1	1
06969	Tin	7440-31-5	2.82	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,010		1.08	0.184	1
06971	Vanadium	7440-62-2	56.8		1.08	0.141	1
06972	Zinc	7440-66-6	62.3		4.33	0.217	1
10146	Zirconium	7440-67-7	7.16		5.42	0.910	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.142	J	0.433	0.108	2
06142	Silver	7440-22-4	0.0367	J	0.217	0.0282	2
06144	Strontium	7440-24-6	28.2		0.433	0.0737	2
06145	Thallium	7440-28-0	0.295		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.74		0.0100	0.0100	1
	The pH was measured in water at 19.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.4		0.10	0.10	1

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

Sample Description: SL-550-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189528
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLA026	09/14/2013 03:52	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLA026	09/12/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/09/2013 23:53	Laura M Krieger	21.55
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325032310	09/07/2013 20:19	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132550012A	09/15/2013 21:00	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132550012A	09/13/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 02:13	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132500637002	09/12/2013 04:25	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1

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

Sample Description: SL-550-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189528
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132500637002	09/11/2013 04:00	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132500637002B	09/13/2013 20:51	David K Beck	2
06142	Silver	SW-846 6020A	1	132500637002A	09/13/2013 20:51	David K Beck	2
06144	Strontium	SW-846 6020A	1	132500637002A	09/13/2013 20:51	David K Beck	2
06145	Thallium	SW-846 6020A	1	132500637002A	09/13/2013 20:51	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132500638002	09/11/2013 07:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132500637002	09/10/2013 09:25	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132500638002	09/10/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13250039402A	09/07/2013 13:20	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401B	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-550-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189529
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	35		1.9	0.74	1
12969	Acenaphthylene	208-96-8	35		1.9	0.37	1
12969	Anthracene	120-12-7	36		1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	35		1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	34		1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	37		1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	32		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	36		1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	35		1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	38		20	6.7	1
12969	Di-n-butylphthalate	84-74-2	38		20	6.7	1
12969	Chrysene	218-01-9	35		1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	36		1.9	0.74	1
12969	Diethylphthalate	84-66-2	37		20	6.7	1
12969	Dimethylphthalate	131-11-3	35		20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	38		20	6.7	1
12969	Fluoranthene	206-44-0	35		1.9	0.74	1
12969	Fluorene	86-73-7	35		1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	36		1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	36		1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	35		1.9	0.74	1
12969	Naphthalene	91-20-3	35		1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	39		20	6.7	1
12969	Phenanthrene	85-01-8	35		1.9	0.74	1
12969	Pyrene	129-00-0	33		1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	6.9		0.9	0.2	20.97
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	190		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	200		19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	2.7	J	5.6	2.2	1

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

Sample Description: SL-550-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189529
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	4.7	J	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	5.0	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,800		43.3	7.81	1
06944	Antimony	7440-36-0	14.5		4.33	0.802	1
06935	Arsenic	7440-38-2	23.4		4.33	0.758	1
06946	Barium	7440-39-3	333		1.08	0.0358	1
06947	Beryllium	7440-41-7	6.40		1.08	0.0726	1
07914	Boron	7440-42-8	213		10.8	0.910	1
06949	Cadmium	7440-43-9	5.19		1.08	0.0824	1
01650	Calcium	7440-70-2	4,240		21.7	3.62	1
06951	Chromium	7440-47-3	58.8		3.25	0.173	1
06952	Cobalt	7440-48-4	58.5		1.08	0.107	1
06953	Copper	7440-50-8	42.4		2.17	0.314	1
01654	Iron	7439-89-6	32,000		86.7	7.85	2
06955	Lead	7439-92-1	23.2		3.25	0.542	1
01656	Lithium	7439-93-2	141		4.3	0.37	1
01657	Magnesium	7439-95-4	7,140		10.8	1.81	1
06958	Manganese	7439-96-5	433		1.08	0.0899	1
06960	Molybdenum	7439-98-7	197		2.17	0.184	1
06961	Nickel	7440-02-0	69.5		2.17	0.141	1
10145	Phosphorus	7723-14-0	495		10.8	3.13	1
01662	Potassium	7440-09-7	5,160		108	9.04	1
01667	Sodium	7440-23-5	1,170		108	18.1	1
06969	Tin	7440-31-5	364		10.8	0.238	1
06970	Titanium	7440-32-6	1,580		1.08	0.184	1
06971	Vanadium	7440-62-2	122		1.08	0.141	1
06972	Zinc	7440-66-6	117		4.33	0.217	1
10146	Zirconium	7440-67-7	113		5.42	0.910	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.29		0.433	0.108	2
06142	Silver	7440-22-4	10.8		0.217	0.0282	2
06144	Strontium	7440-24-6	36.8		0.433	0.0737	2
06145	Thallium	7440-28-0	0.786		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.196		0.0178	0.0107	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	10.4		0.10	0.10	1

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

Sample Description: SL-550-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189529
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLA026	09/14/2013 04:24	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLA026	09/12/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/10/2013 00:31	Laura M Krieger	20.97
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325032310	09/07/2013 20:21	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325032310	09/07/2013 20:21	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132550012A	09/15/2013 21:18	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132550012A	09/13/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 02:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132500637002	09/12/2013 04:37	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132500637002	09/11/2013 04:12	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132500637002B	09/13/2013 20:58	David K Beck	2
06142	Silver	SW-846 6020A	1	132500637002A	09/13/2013 20:58	David K Beck	2
06144	Strontium	SW-846 6020A	1	132500637002A	09/13/2013 20:58	David K Beck	2
06145	Thallium	SW-846 6020A	1	132500637002A	09/13/2013 20:58	David K Beck	2

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

Sample Description: SL-550-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189529
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132500638002	09/11/2013 07:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132500637002	09/10/2013 09:25	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132500638002	09/10/2013 11:40	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401B	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-550-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189530
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	35		1.9	0.74	1
12969	Acenaphthylene	208-96-8	35		1.9	0.37	1
12969	Anthracene	120-12-7	35		1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	36		1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	35		1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	37		1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	32		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	36		1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	36		1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	39		20	6.7	1
12969	Di-n-butylphthalate	84-74-2	38		20	6.7	1
12969	Chrysene	218-01-9	35		1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	37		1.9	0.74	1
12969	Diethylphthalate	84-66-2	37		20	6.7	1
12969	Dimethylphthalate	131-11-3	35		20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	40		20	6.7	1
12969	Fluoranthene	206-44-0	35		1.9	0.74	1
12969	Fluorene	86-73-7	36		1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	37		1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	37		1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	36		1.9	0.74	1
12969	Naphthalene	91-20-3	36		1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	39		20	6.7	1
12969	Phenanthrene	85-01-8	35		1.9	0.74	1
12969	Pyrene	129-00-0	34		1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.9		1	0.2	21.74
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	190		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	200		19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	3.6	J	5.6	2.2	1

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

Sample Description: SL-550-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189530
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	6.2		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	5.6	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,500		44.6	8.05	1
06944	Antimony	7440-36-0	13.0		4.46	0.826	1
06935	Arsenic	7440-38-2	22.5		4.46	0.781	1
06946	Barium	7440-39-3	344		1.12	0.0368	1
06947	Beryllium	7440-41-7	6.63		1.12	0.0748	1
07914	Boron	7440-42-8	222		11.2	0.938	1
06949	Cadmium	7440-43-9	5.43		1.12	0.0848	1
01650	Calcium	7440-70-2	4,210		22.3	3.73	1
06951	Chromium	7440-47-3	59.9		3.35	0.179	1
06952	Cobalt	7440-48-4	61.4		1.12	0.110	1
06953	Copper	7440-50-8	44.1		2.23	0.324	1
01654	Iron	7439-89-6	29,800		89.3	8.08	2
06955	Lead	7439-92-1	23.4		3.35	0.558	1
01656	Lithium	7439-93-2	146		4.5	0.38	1
01657	Magnesium	7439-95-4	7,390		11.2	1.86	1
06958	Manganese	7439-96-5	431		1.12	0.0926	1
06960	Molybdenum	7439-98-7	206		2.23	0.190	1
06961	Nickel	7440-02-0	72.2		2.23	0.145	1
10145	Phosphorus	7723-14-0	482		11.2	3.23	1
01662	Potassium	7440-09-7	5,580		112	9.31	1
01667	Sodium	7440-23-5	1,210		112	18.6	1
06969	Tin	7440-31-5	382		11.2	0.246	1
06970	Titanium	7440-32-6	1,530		1.12	0.190	1
06971	Vanadium	7440-62-2	125		1.12	0.145	1
06972	Zinc	7440-66-6	122		4.46	0.223	1
10146	Zirconium	7440-67-7	119		5.58	0.938	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.29		0.446	0.112	2
06142	Silver	7440-22-4	10.9		0.223	0.0290	2
06144	Strontium	7440-24-6	35.8		0.446	0.0759	2
06145	Thallium	7440-28-0	0.773		0.223	0.0335	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.199		0.0179	0.0107	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	10.4		0.10	0.10	1

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

Sample Description: SL-550-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189530
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLA026	09/14/2013 04:56	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLA026	09/12/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/10/2013 01:09	Laura M Krieger	21.74
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325032310	09/07/2013 20:21	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325032310	09/07/2013 20:22	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132550012A	09/15/2013 21:37	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132550012A	09/13/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 02:56	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132500637002	09/12/2013 04:41	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132500637002	09/11/2013 04:16	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132500637002B	09/13/2013 21:01	David K Beck	2
06142	Silver	SW-846 6020A	1	132500637002A	09/13/2013 21:01	David K Beck	2
06144	Strontium	SW-846 6020A	1	132500637002A	09/13/2013 21:01	David K Beck	2
06145	Thallium	SW-846 6020A	1	132500637002A	09/13/2013 21:01	David K Beck	2

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

Sample Description: SL-550-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189530
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132500638002	09/11/2013 08:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132500637002	09/10/2013 09:25	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132500638002	09/10/2013 11:40	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401B	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-550-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189531
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,100		44.2	7.97	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.818	1
06935	Arsenic	7440-38-2	6.16		4.42	0.774	1
06946	Barium	7440-39-3	116		1.11	0.0365	1
06947	Beryllium	7440-41-7	0.904	J	1.11	0.0740	1
07914	Boron	7440-42-8	4.25	J	11.1	0.928	1
06949	Cadmium	7440-43-9	0.101	J	1.11	0.0840	1
01650	Calcium	7440-70-2	3,450		22.1	3.69	1
06951	Chromium	7440-47-3	32.5		3.32	0.177	1
06952	Cobalt	7440-48-4	8.21		1.11	0.109	1
06953	Copper	7440-50-8	14.5		2.21	0.320	1
01654	Iron	7439-89-6	30,300		88.4	8.00	2
06955	Lead	7439-92-1	7.41		3.32	0.553	1
01656	Lithium	7439-93-2	30.0		4.4	0.38	1
01657	Magnesium	7439-95-4	6,630		11.1	1.85	1
06958	Manganese	7439-96-5	362		1.11	0.0917	1
06960	Molybdenum	7439-98-7	0.265	J	2.21	0.188	1
06961	Nickel	7440-02-0	18.7		2.21	0.144	1
10145	Phosphorus	7723-14-0	358		11.1	3.19	1
01662	Potassium	7440-09-7	3,650		111	9.22	1
01667	Sodium	7440-23-5	104	J	111	18.5	1
06969	Tin	7440-31-5	3.00	J	11.1	0.243	1
06970	Titanium	7440-32-6	1,100		1.11	0.188	1
06971	Vanadium	7440-62-2	58.9		1.11	0.144	1
06972	Zinc	7440-66-6	63.8		4.42	0.221	1
10146	Zirconium	7440-67-7	8.19		5.53	0.928	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.120	J	0.442	0.111	2
06142	Silver	7440-22-4	0.0434	J	0.221	0.0287	2
06144	Strontium	7440-24-6	28.3		0.442	0.0751	2
06145	Thallium	7440-28-0	0.337		0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182	U	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.52		0.0100	0.0100	1
	The pH was measured in water at 20.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	10.4		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	10.3		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

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

Sample Description: SL-550-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189531
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

550-4 SDG#: PH103-03DUP

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132500637002	09/12/2013 04:33	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132500637002	09/11/2013 04:08	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132500637002B	09/13/2013 20:56	David K Beck	2
06142	Silver	SW-846 6020A	1	132500637002A	09/13/2013 20:56	David K Beck	2
06144	Strontium	SW-846 6020A	1	132500637002A	09/13/2013 20:56	David K Beck	2
06145	Thallium	SW-846 6020A	1	132500637002A	09/13/2013 20:56	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132500638002	09/11/2013 07:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132500637002	09/10/2013 09:25	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132500638002	09/10/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13250039402A	09/07/2013 13:20	Noah M Rainbow	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401B	09/10/2013 22:35	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401B	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-850-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189532
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

850-4 SDG#: PH103-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	21.15
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

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

Sample Description: SL-850-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189532
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

850-4 SDG#: PH103-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,600		43.4	7.83	1
06944	Antimony	7440-36-0	4.34	U	4.34	0.804	1
06935	Arsenic	7440-38-2	6.06		4.34	0.760	1
06946	Barium	7440-39-3	115		1.09	0.0358	1
06947	Beryllium	7440-41-7	0.925	J	1.09	0.0728	1
07914	Boron	7440-42-8	5.46	J	10.9	0.912	1
06949	Cadmium	7440-43-9	0.0934	J	1.09	0.0825	1
01650	Calcium	7440-70-2	3,570		21.7	3.63	1
06951	Chromium	7440-47-3	35.2		3.26	0.174	1
06952	Cobalt	7440-48-4	8.55		1.09	0.108	1
06953	Copper	7440-50-8	14.1		2.17	0.315	1
01654	Iron	7439-89-6	28,200		86.9	7.86	2
06955	Lead	7439-92-1	8.02		3.26	0.543	1
01656	Lithium	7439-93-2	30.2		4.3	0.37	1
01657	Magnesium	7439-95-4	6,830		10.9	1.81	1
06958	Manganese	7439-96-5	387		1.09	0.0901	1
06960	Molybdenum	7439-98-7	0.275	J	2.17	0.185	1
06961	Nickel	7440-02-0	18.8		2.17	0.141	1
10145	Phosphorus	7723-14-0	390		10.9	3.14	1
01662	Potassium	7440-09-7	3,660		109	9.06	1
01667	Sodium	7440-23-5	108	J	109	18.1	1
06969	Tin	7440-31-5	2.96	J	10.9	0.239	1
06970	Titanium	7440-32-6	1,240		1.09	0.185	1
06971	Vanadium	7440-62-2	63.8		1.09	0.141	1
06972	Zinc	7440-66-6	62.1		4.34	0.217	1
10146	Zirconium	7440-67-7	8.09		5.43	0.912	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.135	J	0.434	0.109	2
06142	Silver	7440-22-4	0.0360	J	0.217	0.0282	2
06144	Strontium	7440-24-6	28.3		0.434	0.0738	2
06145	Thallium	7440-28-0	0.290		0.217	0.0326	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182	U	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.63		0.0100	0.0100	1
	The pH was measured in water at 20.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.6		0.10	0.10	1

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

Sample Description: SL-850-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189532
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

850-4 SDG#: PH103-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLA026	09/14/2013 06:00	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLA026	09/12/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/09/2013 22:37	Laura M Krieger	21.15
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325032310	09/07/2013 20:23	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325032310	09/07/2013 20:23	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132550012A	09/15/2013 21:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132550012A	09/13/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 03:17	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132500637002	09/12/2013 04:49	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1

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

Sample Description: SL-850-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189532
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 09:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

850-4 SDG#: PH103-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132500637002	09/11/2013 04:28	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132500637002B	09/13/2013 21:08	David K Beck	2
06142	Silver	SW-846 6020A	1	132500637002A	09/13/2013 21:08	David K Beck	2
06144	Strontium	SW-846 6020A	1	132500637002A	09/13/2013 21:08	David K Beck	2
06145	Thallium	SW-846 6020A	1	132500637002A	09/13/2013 21:08	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132500638002	09/11/2013 08:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132500637002	09/10/2013 09:25	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132500638002	09/10/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13250039402A	09/07/2013 13:20	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401B	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-552-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189533
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 13:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

552-0 SDG#: PH103-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.4	J	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.6	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8		1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	0.78	J	1.7	0.70	1
12969	Naphthalene	91-20-3	1.9		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.4	J	1.7	0.70	1
12969	Pyrene	129-00-0	1.5	J	1.7	0.70	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	0.46	J	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

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

Sample Description: SL-552-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189533
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 13:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

552-0 SDG#: PH103-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	6.9		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	15		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,400		41.9	7.56	1
06944	Antimony	7440-36-0	4.19	U	4.19	0.776	1
06935	Arsenic	7440-38-2	5.08		4.19	0.734	1
06946	Barium	7440-39-3	89.6		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.686	J	1.05	0.0702	1
07914	Boron	7440-42-8	4.88	J	10.5	0.881	1
06949	Cadmium	7440-43-9	0.189	J	1.05	0.0797	1
01650	Calcium	7440-70-2	3,400		21.0	3.50	1
06951	Chromium	7440-47-3	32.1		3.14	0.168	1
06952	Cobalt	7440-48-4	8.63		1.05	0.104	1
06953	Copper	7440-50-8	13.7		2.10	0.304	1
01654	Iron	7439-89-6	28,000		41.9	3.79	1
06955	Lead	7439-92-1	7.94		3.14	0.524	1
01656	Lithium	7439-93-2	25.6		4.2	0.36	1
01657	Magnesium	7439-95-4	6,330		10.5	1.75	1
06958	Manganese	7439-96-5	383		1.05	0.0870	1
06960	Molybdenum	7439-98-7	0.284	J	2.10	0.178	1
06961	Nickel	7440-02-0	20.2		2.10	0.136	1
10145	Phosphorus	7723-14-0	595		10.5	3.03	1
01662	Potassium	7440-09-7	5,400		105	8.74	1
01667	Sodium	7440-23-5	87.4	J	105	17.5	1
06969	Tin	7440-31-5	2.58	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,030		1.05	0.178	1
06971	Vanadium	7440-62-2	55.6		1.05	0.136	1
06972	Zinc	7440-66-6	64.4		4.19	0.210	1
10146	Zirconium	7440-67-7	6.61		5.24	0.881	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-552-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189533
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 13:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

552-0 SDG#: PH103-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.183	J	0.419	0.105	2
06142	Silver	7440-22-4	0.210	U	0.210	0.0273	2
06144	Strontium	7440-24-6	23.0		0.419	0.0713	2
06145	Thallium	7440-28-0	0.299		0.210	0.0314	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0162	U	0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.67		0.0100	0.0100	1
	The pH was measured in water at 20.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-552-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189533
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 13:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

552-0 SDG#: PH103-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0906	1
11031	12378-PeCDD	40321-76-4	5.23	U	5.23	0.0867	1
11031	123478-HxCDD	39227-28-6	0.0823	J	5.23	0.0782	1
11031	123678-HxCDD	57653-85-7	0.514	J	5.23	0.0856	1
11031	123789-HxCDD	19408-74-3	0.723	J	5.23	0.0807	1
11031	1234678-HpCDD	35822-46-9	3.18	J	5.23	0.124	1
11031	OCDD	3268-87-9	42.0	B	10.5	0.115	1
11031	2378-TCDF	51207-31-9	1.05	U	1.05	0.104	1
11031	12378-PeCDF	57117-41-6	0.250	J	5.23	0.0634	1
11031	23478-PeCDF	57117-31-4	5.23	U	5.23	0.0603	1
11031	123478-HxCDF	70648-26-9	0.0940	JQ	5.23	0.0547	1
11031	123678-HxCDF	57117-44-9	0.0544	JQ	5.23	0.0499	1
11031	123789-HxCDF	72918-21-9	1.12	J	5.23	0.0532	1
11031	234678-HxCDF	60851-34-5	0.0952	JBQ	5.23	0.0512	1
11031	1234678-HpCDF	67562-39-4	0.546	JB	5.23	0.0419	1
11031	1234789-HpCDF	55673-89-7	0.0773	JBQ	5.23	0.0626	1
11031	OCDF	39001-02-0	1.54	JB	10.5	0.0972	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.302				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	61	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	62	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-552-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189533
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 13:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

552-0 SDG#: PH103-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-552-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189533
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 13:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

552-0 SDG#: PH103-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLA026	09/14/2013 06:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLA026	09/12/2013 18:45	Nicholas W Shroyer	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/17/2013 00:26	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132550012A	09/15/2013 22:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132550012A	09/13/2013 03:00	Sherry L Morrow	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 05:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13255003	09/14/2013 15:11	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13255003	09/12/2013 12:00	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1

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

Sample Description: SL-552-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189533
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 13:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

552-0 SDG#: PH103-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132500637002	09/11/2013 04:39	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132500637002B	09/13/2013 21:15	David K Beck	2
06142	Silver	SW-846 6020A	1	132500637002A	09/13/2013 21:15	David K Beck	2
06144	Strontium	SW-846 6020A	1	132500637002A	09/13/2013 21:15	David K Beck	2
06145	Thallium	SW-846 6020A	1	132500637002A	09/13/2013 21:15	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132500638002	09/11/2013 08:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132500637002	09/10/2013 09:25	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132500638002	09/10/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13250039402A	09/07/2013 13:20	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401B	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-552-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189534
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 13:25 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

552-4 SDG#: PH103-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.74
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.94	U	0.94	0.19	1
10590	Alpha BHC	319-84-6	0.94	U	0.94	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.94	U	0.94	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.40	1
10590	Delta BHC	319-86-8	0.94	U	0.94	0.51	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.94	U	0.94	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.68	1
10590	Heptachlor	76-44-8	0.94	U	0.94	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.94	U	0.94	0.19	1

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

Sample Description: SL-552-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189534
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 13:25 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

552-4 SDG#: PH103-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.6	U	7.6	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.40	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,800		44.8	8.08	1
06944	Antimony	7440-36-0	4.48	U	4.48	0.829	1
06935	Arsenic	7440-38-2	6.51		4.48	0.784	1
06946	Barium	7440-39-3	95.1		1.12	0.0370	1
06947	Beryllium	7440-41-7	0.820	J	1.12	0.0750	1
07914	Boron	7440-42-8	3.94	J	11.2	0.941	1
06949	Cadmium	7440-43-9	0.0885	J	1.12	0.0851	1
01650	Calcium	7440-70-2	3,740		22.4	3.74	1
06951	Chromium	7440-47-3	38.9		3.36	0.179	1
06952	Cobalt	7440-48-4	9.45		1.12	0.111	1
06953	Copper	7440-50-8	15.1		2.24	0.325	1
01654	Iron	7439-89-6	32,000		89.6	8.11	2
06955	Lead	7439-92-1	7.72		3.36	0.560	1
01656	Lithium	7439-93-2	33.2		4.5	0.38	1
01657	Magnesium	7439-95-4	7,840		11.2	1.87	1
06958	Manganese	7439-96-5	365		1.12	0.0930	1
06960	Molybdenum	7439-98-7	0.253	J	2.24	0.190	1
06961	Nickel	7440-02-0	28.6		2.24	0.146	1
10145	Phosphorus	7723-14-0	489		11.2	3.24	1
01662	Potassium	7440-09-7	3,710		112	9.34	1
01667	Sodium	7440-23-5	100	J	112	18.7	1
06969	Tin	7440-31-5	2.90	J	11.2	0.246	1
06970	Titanium	7440-32-6	1,010		1.12	0.190	1

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

Sample Description: SL-552-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189534
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 13:25 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

552-4 SDG#: PH103-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	62.1	1.12	0.146	1
06972	Zinc	7440-66-6	68.8	4.48	0.224	1
10146	Zirconium	7440-67-7	7.67	5.60	0.941	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.162 J	0.448	0.112	2
06142	Silver	7440-22-4	0.224 U	0.224	0.0291	2
06144	Strontium	7440-24-6	26.3	0.448	0.0762	2
06145	Thallium	7440-28-0	0.320	0.224	0.0336	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0188 U	0.0188	0.0113	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.31	0.0100	0.0100	1
	The pH was measured in water at 21.6 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.6	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLA026	09/14/2013 08:07	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLA026	09/12/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13252A16A	09/09/2013 23:15	Laura M Krieger	21.74
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325032310	09/07/2013 20:24	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325032310	09/07/2013 20:24	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132530015A	09/17/2013 00:41	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132550012A	09/15/2013 22:32	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132550012A	09/13/2013 03:00	Sherry L Morrow	1

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

Sample Description: SL-552-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189534
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 13:25 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

552-4 SDG#: PH103-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132530015A	09/10/2013 16:45	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132530039A	09/12/2013 03:38	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132530039A	09/11/2013 11:40	Kelli M Barto	1
01643	Aluminum	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132500637002	09/12/2013 04:53	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132500637002	09/11/2013 04:43	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132500637002B	09/13/2013 21:17	David K Beck	2
06142	Silver	SW-846 6020A	1	132500637002A	09/13/2013 21:17	David K Beck	2
06144	Strontium	SW-846 6020A	1	132500637002A	09/13/2013 21:17	David K Beck	2
06145	Thallium	SW-846 6020A	1	132500637002A	09/13/2013 21:17	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132500638002	09/11/2013 08:11	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132500637002	09/10/2013 09:25	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132500638002	09/10/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13250039402A	09/07/2013 13:20	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162401B	09/10/2013 22:35	Scott W Freisher	1

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

Sample Description: SL-590-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189535
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 11:50 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

590-0 SDG#: PH103-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.2	U	5.2	2.2	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.92	J	1.0	0.41	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.3 C.	n.a.	6.83		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	3.3		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132520019A	09/10/2013 20:39	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132520019A	09/10/2013 06:40	Maria Davenport	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202B	09/15/2013 06:57	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202B	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13250039402A	09/07/2013 13:20	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402B	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-590-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189536
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 12:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

590-4 SDG#: PH103-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	8.2	5.5	2.3	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	14.2	1.1	0.44	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.4 C.	n.a.	7.23	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	8.3	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132520019A	09/10/2013 20:52	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132520019A	09/10/2013 06:40	Maria Davenport	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202B	09/15/2013 05:52	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202B	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13250039402B	09/07/2013 13:20	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402B	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-590-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189537
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 12:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

590-4 SDG#: PH103-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	93	5.5	2.3	1
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	mg/kg	
07332	1a Anions by 300.0-Fluoride	16984-48-8	34.0	5.4	2.2	5
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	8.3	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132520019A	09/10/2013 21:05	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132520019A	09/10/2013 06:40	Maria Davenport	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	3	13254254202B	09/16/2013 08:40	Christopher D Meeks	5
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202B	09/11/2013 08:45	Nancy J Shoop	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402B	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-590-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189538
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 12:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

590-4 SDG#: PH103-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	89	5.5	2.3	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	8.3	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132520019A	09/10/2013 21:18	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132520019A	09/10/2013 06:40	Maria Davenport	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402B	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-590-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189539
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 12:00 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

590-4 SDG#: PH103-08DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	14.4	1.1	0.44	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.5 C.	n.a.	7.30	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	8.3	0.10	0.10	1
11626	14a Moisture Content by 160.3 The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.	n.a.	8.0	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202B	09/15/2013 06:08	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202B	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13250039402B	09/07/2013 13:20	Noah M Rainbow	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402B	09/10/2013 22:01	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402B	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-890-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189540
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 12:10 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

890-4 SDG#: PH103-09

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate		**SW-846 6850 1/2007**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)		14797-73-0	7.5	5.4	2.3	1
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	13.4	1.1	0.43	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.6 C.		n.a.	7.27	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	8.1	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132520019A	09/10/2013 21:30	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132520019A	09/10/2013 06:40	Maria Davenport	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202B	09/15/2013 07:46	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202B	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13250039402A	09/07/2013 13:20	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402B	09/10/2013 22:01	Scott W Freisher	1

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

Sample Description: SL-590-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7189541
LL Group # 1417194
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/06/2013 12:20 by VC

Submitted: 09/07/2013 09:20
Reported: 09/24/2013 11:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59011 SDG#: PH103-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	3.4	J	5.3	2.2	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	9.1		1.1	0.43	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.1 C.	n.a.	7.04		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	6.5		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132520019A	09/10/2013 21:43	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132520019A	09/10/2013 06:40	Maria Davenport	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13254254202B	09/15/2013 08:02	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13254254202B	09/11/2013 08:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13250039402A	09/07/2013 13:20	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13253162402B	09/10/2013 22:01	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417194
Reported: 09/24/13 at 11:24 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13255SLA026	Sample number(s): 7189527-7189530,7189532-7189534									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	101		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	99		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	99		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	98		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	99		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	115		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	92		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	99		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	97		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	101		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	103		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	97		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	102		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	97		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	102		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	99		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	98		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	100		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	94		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	105		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	97		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	95		79-112		
Batch number: 13252A16A	Sample number(s): 7189528-7189530,7189532,7189534									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	76		67-119		
Batch number: 13255B94A	Sample number(s): 7189526									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	115	115	75-135	0	30
Batch number: 132520019A	Sample number(s): 7189535-7189538,7189540-7189541									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	86		85-115		
Batch number: 132530015A	Sample number(s): 7189533-7189534									
Aldrin	0.83	U	0.83	0.17	ug/kg	92		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	109		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	93		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	104		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	108		69-141		

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417194
Reported: 09/24/13 at 11:24 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
p,p-DDE	1.7	U	1.7	0.33	ug/kg	99		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	115		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	96		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	117		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	111		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	100		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	101		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	108		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	95		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	102		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	109		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	95		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	114		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132550012A	Sample number(s): 7189527-7189530,7189532-7189534									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	91*	90*	62-87	2	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	101		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	110		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132530039A	Sample number(s): 7189527-7189530,7189532-7189534									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	98		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	102		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	104		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	97		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 132500637002	Sample number(s): 7189527-7189534									
Aluminum	40.0	U	40.0	7.21	mg/kg	102		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	103		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	102		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	105		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	103		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	101		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		
Calcium	4.05	J	20.0	3.34	mg/kg	104		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	105		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	106		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	108		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	107		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	104		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	101		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	107		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417194
Reported: 09/24/13 at 11:24 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	101		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.50	J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	104		80-120		
Zinc	0.454	J	4.00	0.200	mg/kg	104		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	104		80-120		
Batch number: 132500637002A	Sample number(s): 7189527-7189534									
Silver	0.200	U	0.200	0.0260	mg/kg	101		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	93		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	118		80-120		
Batch number: 132500637002B	Sample number(s): 7189527-7189534									
Selenium	0.400	U	0.400	0.100	mg/kg	100		80-120		
Batch number: 132500638002	Sample number(s): 7189527-7189534									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	108		85-120		
Batch number: 13254254202B	Sample number(s): 7189535-7189537,7189539-7189541									
1a Anions by 300.0-Fluoride	1.0	U	1.0	0.40	mg/kg	99		90-110		
Batch number: 13250039402A	Sample number(s): 7189527-7189528,7189531-7189535,7189540-7189541									
15a pH by 9045D						100		95-105		
Batch number: 13250039402B	Sample number(s): 7189536,7189539									
15a pH by 9045D						100		95-105		
Batch number: 13253162401B	Sample number(s): 7189527-7189534									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
Batch number: 13253162402B	Sample number(s): 7189535-7189541									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13255003	Sample number(s): 7189527,7189533									
2378-TCDD	1.00	U	1.00	0.0854	ng/kg	107		67-158		
12378-PeCDD	5.00	U	5.00	0.0596	ng/kg	101		70-142		
123478-HxCDD	5.00	U	5.00	0.0332	ng/kg	111		70-164		
123678-HxCDD	5.00	U	5.00	0.0340	ng/kg	102		76-134		
123789-HxCDD	5.00	U	5.00	0.0332	ng/kg	102		64-162		
1234678-HpCDD	5.00	U	5.00	0.0452	ng/kg	107		70-140		
OCDD	0.194	J	10.0	0.0505	ng/kg	97		78-144		
2378-TCDF	1.00	U	1.00	0.0751	ng/kg	119		75-158		
12378-PeCDF	5.00	U	5.00	0.0497	ng/kg	104		80-134		
23478-PeCDF	5.00	U	5.00	0.0447	ng/kg	103		68-160		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417194
Reported: 09/24/13 at 11:24 AM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123478-HxCDF	5.00	U	5.00	0.0275	ng/kg	107		72-134		
123678-HxCDF	5.00	U	5.00	0.0258	ng/kg	103		84-130		
123789-HxCDF	5.00	U	5.00	0.0348	ng/kg	108		78-130		
234678-HxCDF	0.0500	J	5.00	0.0253	ng/kg	109		70-156		
1234678-HpCDF	0.0282	J	5.00	0.0192	ng/kg	103		82-122		
1234789-HpCDF	0.0482	J	5.00	0.0325	ng/kg	99		78-138		
OCDF	0.0941	J	10.0	0.0745	ng/kg	100		63-170		
TEQ WHO 2005 - EDLx0.0	U				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13255SLA026	Sample number(s): 7189527-7189530,7189532-7189534 UNSPK: 7189528								
Acenaphthene	94	95	48-127	1	30				
Acenaphthylene	94	95	49-121	2	30				
Anthracene	96	94	52-126	1	30				
Benzo(a)anthracene	94	96	44-143	2	30				
Benzo(a)pyrene	93	95	44-140	2	30				
Benzo(b)fluoranthene	100	99	26-142	1	30				
Benzo(e)pyrene	86	87	70-130	1	30				
Benzo(g,h,i)perylene	97	97	33-141	0	30				
Benzo(k)fluoranthene	94	97	54-142	3	30				
Butylbenzylphthalate	102	104	49-151	2	30				
Di-n-butylphthalate	101	103	52-147	2	30				
Chrysene	93	95	29-148	2	30				
Dibenz(a,h)anthracene	97	99	20-137	2	30				
Diethylphthalate	100	100	43-145	0	30				
Dimethylphthalate	94	94	58-129	0	30				
Bis(2-Ethylhexyl)phthalate	103	107	39-167	4	30				
Fluoranthene	94	94	40-148	1	30				
Fluorene	95	96	51-137	1	30				
Indeno(1,2,3-cd)pyrene	98	98	17-136	1	30				
1-Methylnaphthalene	97	99	50-131	1	30				
2-Methylnaphthalene	95	96	35-152	1	30				
Naphthalene	95	97	31-148	2	30				
N-Nitrosodimethylamine	89	89	48-113	0	30				
Di-n-octylphthalate	104	106	52-162	2	30				
Phenanthrene	93	93	29-142	0	30				
Pyrene	90	92	26-143	3	30				
Batch number: 13252A16A	Sample number(s): 7189528-7189530,7189532,7189534 UNSPK: 7189528								
11a TPH by EPA 8015B GRO	67*	83	69-123	26	30				
Batch number: 132520019A	Sample number(s): 7189535-7189538,7189540-7189541 UNSPK: 7189536								
6a Perchlorate (Method 6850)	77*	74*	80-120	4	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417194
Reported: 09/24/13 at 11:24 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132530015A	Sample number(s): 7189533-7189534 UNSPK: P186221								
Aldrin	96	83	16-126	14	50				
Alpha BHC	113	93	14-140	20	50				
Beta BHC	97	89	42-133	8	50				
Gamma BHC - Lindane	110	93	30-137	16	50				
p,p-DDD	112	105	43-149	6	50				
p,p-DDE	89	75	35-152	14	50				
p,p-DDT	122	112	12-193	8	50				
Delta BHC	101	94	13-153	7	50				
Dieldrin	121	114	41-153	6	50				
Endosulfan I	113	105	26-146	8	50				
Endosulfan II	103	99	34-141	4	50				
Endosulfan Sulfate	104	100	10-181	4	50				
Endrin	112	106	30-152	6	50				
Endrin Aldehyde	96	94	23-138	2	35				
Endrin Ketone	106	100	30-148	6	50				
Heptachlor	114	98	16-152	16	50				
Heptachlor Epoxide	97	91	33-144	7	50				
Methoxychlor	120	114	41-161	5	50				
Batch number: 132550012A	Sample number(s): 7189527-7189530,7189532-7189534 UNSPK: 7189528								
PCB-1016	100	101	41-135	1	50				
PCB-1260	108	108	40-134	0	50				
Batch number: 132530039A	Sample number(s): 7189527-7189530,7189532-7189534 UNSPK: 7189528								
EFH (C12-C14)	90	95	49-123	6	20				
EFH (C15-C20)	98	128*	49-123	27*	20				
EFH (C21-C30)	100	132*	49-123	27*	20				
EFH (C30-C40)	90	100	49-123	10	20				
EFH (C8-C11)	73	79	49-123	8	20				
Batch number: 132500637002	Sample number(s): 7189527-7189534 UNSPK: 7189528 BKG: 7189528								
Aluminum	3315 (2)	3521 (2)	75-125	2	20	20,300	21,600	6	20
Antimony	27*	23*	75-125	11	20	3.88 U	3.96 U	0 (1)	20
Arsenic	109	100	75-125	4	20	5.12	5.52	8 (1)	20
Barium	101	103	75-125	3	20	102	104	3	20
Beryllium	102	103	75-125	4	20	0.775 J	0.810 J	4 (1)	20
Boron	96	97	75-125	4	20	4.15 J	3.81 J	9 (1)	20
Cadmium	94	95	75-125	5	20	0.107 J	0.0901 J	17 (1)	20
Calcium	206 (2)	193 (2)	75-125	1	20	3,000	3,090	3	20
Chromium	126*	127*	75-125	2	20	28.2	29.2	4	20
Cobalt	93	95	75-125	5	20	7.42	7.35	1	20
Copper	105	108	75-125	4	20	12.4	12.9	4	20
Iron	2419 (2)	402 (2)	75-125	7	20	26,300	27,200	3	20
Lead	97	96	75-125	1	20	6.60	6.64	1 (1)	20
Lithium	104	105	75-125	4	20	25.8	26.9	4	20
Magnesium	312 (2)	414 (2)	75-125	3	20	5,790	5,940	3	20
Manganese	136 (2)	129 (2)	75-125	0	20	322	324	1	20
Molybdenum	91	92	75-125	4	20	0.273 J	0.238 J	14 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417194
Reported: 09/24/13 at 11:24 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Nickel	95	97	75-125	4	20	16.2	16.8	4	20
Phosphorus	140*	124	75-125	3	20	308	321	4	20
Potassium	159*	193*	75-125	8	20	3,070	3,270	6	20
Sodium	98	100	75-125	4	20	88.7 J	92.8 J	5 (1)	20
Tin	83	85	75-125	5	20	2.52 J	2.68 J	6 (1)	20
Titanium	530 (2)	471 (2)	75-125	3	20	902	982	8	20
Vanadium	120	122	75-125	2	20	50.9	52.7	4	20
Zinc	102	107	75-125	4	20	55.8	57.1	2	20
Zirconium	98	100	75-125	5	20	6.42	7.34	13 (1)	20
Batch number: 132500637002A	Sample number(s): 7189527-7189534 UNSPK: 7189528 BKG: 7189528								
Silver	100	97	75-125	0	20	0.0329 J	0.0389 J	17 (1)	20
Strontium	99	85	75-125	3	20	25.3	25.4	0	20
Thallium	113	107	75-125	2	20	0.264	0.302	13 (1)	20
Batch number: 132500637002B	Sample number(s): 7189527-7189534 UNSPK: 7189528 BKG: 7189528								
Selenium	99	96	75-125	0	20	0.127 J	0.107 J	17 (1)	20
Batch number: 132500638002	Sample number(s): 7189527-7189534 UNSPK: 7189528 BKG: 7189528								
3a Mercury 7471A	110	112	65-135	1	20	0.0165 U	0.0163 U	0 (1)	20
Batch number: 13254254202B	Sample number(s): 7189535-7189537,7189539-7189541 UNSPK: 7189536 BKG: 7189536								
1a Anions by 300.0-Fluoride	365*		80-120			13.0	13.2	2	20
Batch number: 13250039402A	Sample number(s): 7189527-7189528,7189531-7189535,7189540-7189541 BKG: 7189528								
15a pH by 9045D						7.74	7.52	3	3
Batch number: 13250039402B	Sample number(s): 7189536,7189539 BKG: 7189536								
15a pH by 9045D						7.23	7.30	1	3
Batch number: 13253162401B	Sample number(s): 7189527-7189534 BKG: 7189528								
14a Moisture Content by 160.3						10.4	10.3	1	20
14a Moisture Content by 160.3						10.4	10.3	1	20
14a Moisture Content by 160.3						10.4	10.3	1	20
Batch number: 13253162402B	Sample number(s): 7189535-7189541 BKG: 7189536								
14a Moisture Content by 160.3						8.3	8.0	4	20
14a Moisture Content by 160.3						8.3	8.0	4	20
14a Moisture Content by 160.3						8.3	8.0	4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13255SLA026

Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417194
Reported: 09/24/13 at 11:24 AM

Surrogate Quality Control

7189527	65	65	77
7189528	88	92	99
7189529	93	99	105
7189530	93	100	107
7189532	90	97	103
7189533	80	77	91
7189534	89	95	102
Blank	95	104	111
LCS	97	107	113
MS	93	99	105
MSD	93	100	107
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13252A16A

	Trifluorotoluene-F
7189528	66
7189529	62
7189530	67
7189532	69
7189534	72
Blank	79
LCS	77
MS	62
MSD	67
Limits:	50-142

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13255B94A

	Trifluorotoluene-F
7189526	72
Blank	72
LCS	79
LCSD	80
Limits:	63-135

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132530015A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7189533	79	96
7189534	83	97
Blank	97	105
LCS	97	108
MS	97	109
MSD	71	106
Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417194
Reported: 09/24/13 at 11:24 AM

Surrogate Quality Control

Batch number: 132550012A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7189527	113	101
7189528	113	103
7189529	112	103
7189530	116	101
7189532	112	102
7189533	107	96
7189534	108	102
Blank	113	104
LCS	112	109
LCSD	111	111
MS	112	103
MSD	116	101
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132530039A

	Chlorobenzene	Orthoterphenyl
7189527	103	94
7189528	98	90
7189529	98	90
7189530	105	94
7189532	104	99
7189533	90	84
7189534	102	94
Blank	107	97
LCS	108	100
MS	98	90
MSD	105	94
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13255003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7189527	60	68	64	72	75	73
7189533	61	63	60	66	65	78
Blank	60	61	60	69	68	64
OPR	81	103	79	82	82	76
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7189527	89	70	57	79	76	85
7189533	75	63	49	72	68	73
Blank	78	59	49	74	70	80
OPR	99	74	74	114	83	88
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417194
Reported: 09/24/13 at 11:24 AM

Surrogate Quality Control

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7189527	85	86	70	49	68
7189533	74	76	61	52	62
Blank	79	73	63	47	59
OPR	87	89	91	87	113
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Gp# 1417194 Sample# 7189526-41

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/6/2013
CarrierName: FedEx
AirbillNo: 796631299388

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130906-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-090613	9/6/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X												
SL-550-SA5D-SB-0.0-0.5	9/6/13 08:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-550-SA5D-SB-0.0-0.5	9/6/13 08:40	SO	None	1 - 4 oz glass	10 day													X																			
SL-550-SA5D-SB-4.0-5.0MS	9/6/13 09:00	SO	None	6 - 16 oz glass	10 day	X	X					X			X			X								X										MS/MSD
SL-550-SA5D-SB-4.0-5.0MS	9/6/13 09:00	SO	None	6 - Encore	10 day																				X											MS/MSD
SL-850-SA5D-SB-4.0-5.0	9/6/13 09:10	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-850-SA5D-SB-4.0-5.0	9/6/13 09:10	SO	None	2 - Encore	10 day																				X											
SL-552-SA5D-SB-0.0-0.5	9/6/13 13:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X				X										
SL-552-SA5D-SB-0.0-0.5	9/6/13 13:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-552-SA5D-SB-4.0-5.0	9/6/13 13:25	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X				X				X										
SL-552-SA5D-SB-4.0-5.0	9/6/13 13:25	SO	None	2 - Encore	10 day																				X											
SL-590-SA5D-SB-0.0-0.5	9/6/13 11:50	SO	None	1 - SS-Sleeve	10 day				X								X																			
SL-590-SA5D-SB-0.0-0.5	9/6/13 11:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-590-SA5D-SB-4.0-5.0MS	9/6/13 12:00	SO	None	3 - 16 oz glass	10 day				X								X	X																		MS/MSD
SL-890-SA5D-SB-4.0-5.0	9/6/13 12:10	SO	None	1 - 16 oz glass	10 day				X								X	X																		
SL-590-SA5D-SB-11.0-12.0	9/6/13 12:20	SO	None	1 - 16 oz glass	10 day				X								X	X																		

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Myers	09/06/2013	1600									
										9-7-13	0925

COC Rev 2

COC 20130906-01, Page 1 of 1

1 of 1

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C# 1417194

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 9-7-13

Time of Receipt: 0925

Source Code: So

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	2.2	TB	WI	Y	B	
2	DT131	3.1	TB	WI	Y	B	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 5200 **Date/Time:** 9-7-13 1200

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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SAMPLE DELIVERY GROUP

PH104

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 25, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/10/2013
Group Number: 1417506
SDG: PH104
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-090913 Water	7191081
SL-515-SA5D-SB-0.0-0.5 Soil	7191082
SL-515-SA5D-SB-0.0-0.5MS Soil	7191083
SL-515-SA5D-SB-0.0-0.5MSD Soil	7191084
SL-515-SA5D-SB-0.0-0.5DUP Soil	7191085
SL-815-SA5D-SB-0.0-0.5 Soil	7191086
SL-515-SA5D-SB-4.0-5.0 Soil	7191087
SL-515-SA5D-SB-9.0-10.0 Soil	7191088
SL-515-SA5D-SB-22.0-23.0 Soil	7191089
SL-599-SA5D-SB-0.0-0.5 Soil	7191090
SL-599-SA5D-SB-4.0-5.0 Soil	7191091
SL-599-SA5D-SB-9.0-10.0 Soil	7191092
SL-599-SA5D-SB-14.0-15.0 Soil	7191093
SL-599-SA5D-SB-19.0-20.0 Soil	7191094
SL-599-SA5D-SB-22.0-23.0 Soil	7191095
SL-601-SA5D-SB-0.0-0.5 Soil	7191096
SL-601-SA5D-SB-4.0-5.0 Soil	7191097
SL-601-SA5D-SB-9.0-10.0 Soil	7191098
SL-601-SA5D-SB-14.0-15.0 Soil	7191099
SL-601-SA5D-SB-20.5-21.5 Soil	7191100

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

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-090913 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7191081
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 08:00

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB104 SDG#: PH104-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13255B94A	09/16/2013 11:59	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13255B94A	09/16/2013 11:59	Catherine J Schwarz	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191082
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.5	J	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.2	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	0.65	J	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.91	U	0.91	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1
10590	Methoxychlor	72-43-5	7.4	U	7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	36	U	36	15	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191082
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,700		42.8	7.71	1
06944	Antimony	7440-36-0	1.25	J	4.28	0.791	1
06935	Arsenic	7440-38-2	5.42		4.28	0.748	1
06946	Barium	7440-39-3	102		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.841	J	1.07	0.0716	1
07914	Boron	7440-42-8	20.1		10.7	0.898	1
06949	Cadmium	7440-43-9	0.623	J	1.07	0.0813	1
01650	Calcium	7440-70-2	45,600		21.4	3.57	1
06951	Chromium	7440-47-3	34.7		3.21	0.171	1
06952	Cobalt	7440-48-4	9.13		1.07	0.106	1
06953	Copper	7440-50-8	17.6		2.14	0.310	1
01654	Iron	7439-89-6	33,100		85.5	7.74	2
06955	Lead	7439-92-1	9.92		3.21	0.535	1
01656	Lithium	7439-93-2	23.8		4.3	0.36	1
01657	Magnesium	7439-95-4	7,600		10.7	1.79	1
06958	Manganese	7439-96-5	421		1.07	0.0887	1
06960	Molybdenum	7439-98-7	0.504	J	2.14	0.182	1
06961	Nickel	7440-02-0	18.4		2.14	0.139	1
10145	Phosphorus	7723-14-0	720		10.7	3.09	1
01662	Potassium	7440-09-7	6,910		107	8.92	1
01667	Sodium	7440-23-5	111		107	17.9	1
06969	Tin	7440-31-5	3.34	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,250		1.07	0.182	1
06971	Vanadium	7440-62-2	65.9		1.07	0.139	1
06972	Zinc	7440-66-6	81.6		4.28	0.214	1
10146	Zirconium	7440-67-7	2.64	J	5.35	0.898	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-515-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191082
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.327 J	0.428	0.107	2
06142	Silver	7440-22-4	0.0315 J	0.214	0.0278	2
06144	Strontium	7440-24-6	89.4	0.428	0.0727	2
06145	Thallium	7440-28-0	0.329	0.214	0.0321	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0176 U	0.0176	0.0106	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.91 J	1.1	0.44	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.60	0.0100	0.0100	1
	The pH was measured in water at 21.4 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-515-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191082
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0816	1
11031	12378-PeCDD	40321-76-4	0.0657	JQ	5.24	0.0602	1
11031	123478-HxCDD	39227-28-6	5.24	U	5.24	0.0393	1
11031	123678-HxCDD	57653-85-7	5.24	U	5.24	0.0392	1
11031	123789-HxCDD	19408-74-3	0.0862	JQ	5.24	0.0416	1
11031	1234678-HpCDD	35822-46-9	0.403	J	5.24	0.0568	1
11031	OCDD	3268-87-9	3.47	JB	10.5	0.0626	1
11031	2378-TCDF	51207-31-9	1.05	U	1.05	0.0803	1
11031	12378-PeCDF	57117-41-6	0.156	JQ	5.24	0.0465	1
11031	23478-PeCDF	57117-31-4	5.24	U	5.24	0.0469	1
11031	123478-HxCDF	70648-26-9	0.0599	JQ	5.24	0.0290	1
11031	123678-HxCDF	57117-44-9	5.24	U	5.24	0.0280	1
11031	123789-HxCDF	72918-21-9	0.174	JQ	5.24	0.0365	1
11031	234678-HxCDF	60851-34-5	5.24	U	5.24	0.0259	1
11031	1234678-HpCDF	67562-39-4	0.159	JBQ	5.24	0.0224	1
11031	1234789-HpCDF	55673-89-7	0.0746	JBQ	5.24	0.0383	1
11031	OCDF	39001-02-0	0.321	JB	10.5	0.0644	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00518				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	47	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	59	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	56	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-515-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191082
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-515-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191082
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLB026	09/18/2013 05:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLB026	09/12/2013 18:45	Nicholas W Shroyer	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 13:04	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570034A	09/18/2013 03:36	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570034A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570030A	09/17/2013 21:29	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132570030A	09/17/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13255003	09/14/2013 19:05	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13255003	09/12/2013 12:00	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 06:26	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191082
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 15:07	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:03	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:03	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:03	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:03	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 06:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 00:01	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403A	09/10/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191083
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	34		1.8	0.73	1
12969	Acenaphthylene	208-96-8	35		1.8	0.37	1
12969	Anthracene	120-12-7	37		1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	35		1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	36		1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	45		1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	32		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	35		1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	35		1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	41		20	6.6	1
12969	Di-n-butylphthalate	84-74-2	44		20	6.6	1
12969	Chrysene	218-01-9	34		1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	38		1.8	0.73	1
12969	Diethylphthalate	84-66-2	38		20	6.6	1
12969	Dimethylphthalate	131-11-3	36		20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	41		20	6.6	1
12969	Fluoranthene	206-44-0	36		1.8	0.73	1
12969	Fluorene	86-73-7	35		1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	37		1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	38		1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	37		1.8	0.73	1
12969	Naphthalene	91-20-3	35		1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	65		1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	41		20	6.6	1
12969	Phenanthrene	85-01-8	36		1.8	0.73	1
12969	Pyrene	129-00-0	32		1.8	0.73	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	3.8		0.91	0.19	1
10590	Alpha BHC	319-84-6	4.4		0.91	0.19	1
10590	Beta BHC	319-85-7	3.8		2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	4.2		0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	10		1.9	0.36	1
10590	p,p-DDE	72-55-9	8.1		1.9	0.36	1
10590	p,p-DDT	50-29-3	9.1		1.9	0.39	1
10590	Delta BHC	319-86-8	3.5		0.91	0.50	1
10590	Dieldrin	60-57-1	9.6		1.9	0.36	1
10590	Endosulfan I	959-98-8	4.4		0.91	0.24	1
10590	Endosulfan II	33213-65-9	8.4		1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	8.1		1.9	0.36	1
10590	Endrin	72-20-8	9.4		1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	7.5		1.9	0.36	1
10590	Endrin Ketone	53494-70-5	7.7		2.0	0.66	1
10590	Heptachlor	76-44-8	4.5		0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	3.8		0.91	0.19	1
10590	Methoxychlor	72-43-5	43		7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	36	U	36	15	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191083
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	160		18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	160		18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	4.0	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	11		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	18		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,800		42.8	7.71	1
06944	Antimony	7440-36-0	27.0		4.28	0.791	1
06935	Arsenic	7440-38-2	21.2		4.28	0.748	1
06946	Barium	7440-39-3	321		1.07	0.0353	1
06947	Beryllium	7440-41-7	6.20		1.07	0.0716	1
07914	Boron	7440-42-8	232		10.7	0.898	1
06949	Cadmium	7440-43-9	5.55		1.07	0.0813	1
01650	Calcium	7440-70-2	44,600		21.4	3.57	1
06951	Chromium	7440-47-3	62.0		3.21	0.171	1
06952	Cobalt	7440-48-4	57.7		1.07	0.106	1
06953	Copper	7440-50-8	46.3		2.14	0.310	1
01654	Iron	7439-89-6	35,200		85.5	7.74	2
06955	Lead	7439-92-1	24.5		3.21	0.535	1
01656	Lithium	7439-93-2	138		4.3	0.36	1
01657	Magnesium	7439-95-4	8,710		10.7	1.79	1
06958	Manganese	7439-96-5	476		1.07	0.0887	1
06960	Molybdenum	7439-98-7	198		2.14	0.182	1
06961	Nickel	7440-02-0	67.9		2.14	0.139	1
10145	Phosphorus	7723-14-0	827		10.7	3.09	1
01662	Potassium	7440-09-7	9,010		107	8.92	1
01667	Sodium	7440-23-5	1,180		107	17.9	1
06969	Tin	7440-31-5	380		10.7	0.235	1
06970	Titanium	7440-32-6	1,900		1.07	0.182	1
06971	Vanadium	7440-62-2	135		1.07	0.139	1
06972	Zinc	7440-66-6	137		4.28	0.214	1
10146	Zirconium	7440-67-7	85.5		5.35	0.898	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191083
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.22	0.428	0.107	2
06142	Silver	7440-22-4	10.6	0.214	0.0278	2
06144	Strontium	7440-24-6	99.3	1.07	0.182	5
06145	Thallium	7440-28-0	0.753	0.214	0.0321	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.200	0.0173	0.0104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	4.6	1.1	0.44	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.2	0.10	0.10	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191083
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.1		1.10	0.159	1
11031	12378-PeCDD	40321-76-4	105		5.50	0.149	1
11031	123478-HxCDD	39227-28-6	107		5.50	0.144	1
11031	123678-HxCDD	57653-85-7	108		5.50	0.156	1
11031	123789-HxCDD	19408-74-3	106		5.50	0.152	1
11031	1234678-HpCDD	35822-46-9	105		5.50	0.119	1
11031	OCDD	3268-87-9	221	B	11.0	0.116	1
11031	2378-TCDF	51207-31-9	21.2		1.10	0.149	1
11031	12378-PeCDF	57117-41-6	103		5.50	0.131	1
11031	23478-PeCDF	57117-31-4	105		5.50	0.118	1
11031	123478-HxCDF	70648-26-9	112		5.50	0.149	1
11031	123678-HxCDF	57117-44-9	107		5.50	0.127	1
11031	123789-HxCDF	72918-21-9	106		5.50	0.170	1
11031	234678-HxCDF	60851-34-5	110	B	5.50	0.132	1
11031	1234678-HpCDF	67562-39-4	109	B	5.50	0.0949	1
11031	1234789-HpCDF	55673-89-7	109	B	5.50	0.149	1
11031	OCDF	39001-02-0	220	B	11.0	0.122	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	55	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191083
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLB026	09/18/2013 05:35	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLB026	09/12/2013 18:45	Nicholas W Shroyer	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 13:20	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570034A	09/18/2013 03:54	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570034A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570030A	09/17/2013 21:50	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132570030A	09/17/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13255003	09/14/2013 20:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13255003	09/12/2013 12:00	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 06:39	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191083
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 15:20	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:11	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:11	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 15:17	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:11	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 06:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 00:33	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191084
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	35		1.8	0.73	1
12969	Acenaphthylene	208-96-8	35		1.8	0.37	1
12969	Anthracene	120-12-7	34		1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	33		1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	33		1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	38		1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	31		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	28		1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	32		1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	42		20	6.6	1
12969	Di-n-butylphthalate	84-74-2	43		20	6.6	1
12969	Chrysene	218-01-9	34		1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	31		1.8	0.73	1
12969	Diethylphthalate	84-66-2	38		20	6.6	1
12969	Dimethylphthalate	131-11-3	36		20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	42		20	6.6	1
12969	Fluoranthene	206-44-0	36		1.8	0.73	1
12969	Fluorene	86-73-7	35		1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	30		1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	37		1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	37		1.8	0.73	1
12969	Naphthalene	91-20-3	35		1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	63		1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	41		20	6.6	1
12969	Phenanthrene	85-01-8	35		1.8	0.73	1
12969	Pyrene	129-00-0	31		1.8	0.73	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	3.4		0.91	0.19	1
10590	Alpha BHC	319-84-6	4.0		0.91	0.19	1
10590	Beta BHC	319-85-7	3.5		2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	3.8		0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	9.1		1.9	0.36	1
10590	p,p-DDE	72-55-9	10		1.9	0.36	1
10590	p,p-DDT	50-29-3	9.4		1.9	0.39	1
10590	Delta BHC	319-86-8	3.4		0.91	0.50	1
10590	Dieldrin	60-57-1	8.8		1.9	0.36	1
10590	Endosulfan I	959-98-8	4.0		0.91	0.24	1
10590	Endosulfan II	33213-65-9	7.4		1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	7.2		1.9	0.36	1
10590	Endrin	72-20-8	8.4		1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	6.7		1.9	0.36	1
10590	Endrin Ketone	53494-70-5	6.8		2.0	0.66	1
10590	Heptachlor	76-44-8	4.0		0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	3.5		0.91	0.19	1
10590	Methoxychlor	72-43-5	40		7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	36	U	36	15	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191084
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	160		19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	170		19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.0	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	18		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	32		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,000		42.8	7.71	1
06944	Antimony	7440-36-0	27.2		4.28	0.791	1
06935	Arsenic	7440-38-2	21.2		4.28	0.748	1
06946	Barium	7440-39-3	320		1.07	0.0353	1
06947	Beryllium	7440-41-7	6.15		1.07	0.0716	1
07914	Boron	7440-42-8	231		10.7	0.898	1
06949	Cadmium	7440-43-9	5.59		1.07	0.0813	1
01650	Calcium	7440-70-2	48,300		21.4	3.57	1
06951	Chromium	7440-47-3	60.7		3.21	0.171	1
06952	Cobalt	7440-48-4	57.9		1.07	0.106	1
06953	Copper	7440-50-8	45.7		2.14	0.310	1
01654	Iron	7439-89-6	34,200		85.5	7.74	2
06955	Lead	7439-92-1	24.7		3.21	0.535	1
01656	Lithium	7439-93-2	138		4.3	0.36	1
01657	Magnesium	7439-95-4	8,540		10.7	1.79	1
06958	Manganese	7439-96-5	475		1.07	0.0887	1
06960	Molybdenum	7439-98-7	199		2.14	0.182	1
06961	Nickel	7440-02-0	67.9		2.14	0.139	1
10145	Phosphorus	7723-14-0	801		10.7	3.09	1
01662	Potassium	7440-09-7	8,860		107	8.92	1
01667	Sodium	7440-23-5	1,200		107	17.9	1
06969	Tin	7440-31-5	380		10.7	0.235	1
06970	Titanium	7440-32-6	1,840		1.07	0.182	1
06971	Vanadium	7440-62-2	132		1.07	0.139	1
06972	Zinc	7440-66-6	136		4.28	0.214	1
10146	Zirconium	7440-67-7	85.3		5.35	0.898	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191084
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.33	0.428	0.107	2
06142	Silver	7440-22-4	10.8	0.214	0.0278	2
06144	Strontium	7440-24-6	102	1.07	0.182	5
06145	Thallium	7440-28-0	0.744	0.214	0.0321	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.210	0.0176	0.0106	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.2	0.10	0.10	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191084
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.9		1.09	0.126	1
11031	12378-PeCDD	40321-76-4	105		5.47	0.158	1
11031	123478-HxCDD	39227-28-6	108		5.47	0.153	1
11031	123678-HxCDD	57653-85-7	106		5.47	0.162	1
11031	123789-HxCDD	19408-74-3	103		5.47	0.157	1
11031	1234678-HpCDD	35822-46-9	107		5.47	0.152	1
11031	OCDD	3268-87-9	237	B	10.9	0.120	1
11031	2378-TCDF	51207-31-9	20.6		1.09	0.201	1
11031	12378-PeCDF	57117-41-6	104		5.47	0.139	1
11031	23478-PeCDF	57117-31-4	108		5.47	0.137	1
11031	123478-HxCDF	70648-26-9	109		5.47	0.179	1
11031	123678-HxCDF	57117-44-9	111		5.47	0.165	1
11031	123789-HxCDF	72918-21-9	106		5.47	0.194	1
11031	234678-HxCDF	60851-34-5	107	B	5.47	0.151	1
11031	1234678-HpCDF	67562-39-4	108	B	5.47	0.116	1
11031	1234789-HpCDF	55673-89-7	109	B	5.47	0.179	1
11031	OCDF	39001-02-0	218	B	10.9	0.146	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191084
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLB026	09/18/2013 06:08	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLB026	09/12/2013 18:45	Nicholas W Shroyer	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 13:35	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570034A	09/18/2013 04:13	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570034A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570030A	09/17/2013 22:11	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132570030A	09/17/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13255003	09/14/2013 20:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13255003	09/12/2013 12:00	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 06:43	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191084
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 15:25	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:13	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:13	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 15:24	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:13	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 06:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191085
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,300		42.8	7.71	1
06944	Antimony	7440-36-0	1.07	J	4.28	0.791	1
06935	Arsenic	7440-38-2	5.21		4.28	0.748	1
06946	Barium	7440-39-3	102		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.850	J	1.07	0.0716	1
07914	Boron	7440-42-8	19.3		10.7	0.898	1
06949	Cadmium	7440-43-9	0.626	J	1.07	0.0813	1
01650	Calcium	7440-70-2	46,800		21.4	3.57	1
06951	Chromium	7440-47-3	34.5		3.21	0.171	1
06952	Cobalt	7440-48-4	9.39		1.07	0.106	1
06953	Copper	7440-50-8	17.7		2.14	0.310	1
01654	Iron	7439-89-6	33,200		85.5	7.74	2
06955	Lead	7439-92-1	9.95		3.21	0.535	1
01656	Lithium	7439-93-2	24.3		4.3	0.36	1
01657	Magnesium	7439-95-4	7,750		10.7	1.79	1
06958	Manganese	7439-96-5	420		1.07	0.0887	1
06960	Molybdenum	7439-98-7	0.234	J	2.14	0.182	1
06961	Nickel	7440-02-0	18.4		2.14	0.139	1
10145	Phosphorus	7723-14-0	719		10.7	3.09	1
01662	Potassium	7440-09-7	7,060		107	8.92	1
01667	Sodium	7440-23-5	114		107	17.9	1
06969	Tin	7440-31-5	3.62	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,280		1.07	0.182	1
06971	Vanadium	7440-62-2	66.3		1.07	0.139	1
06972	Zinc	7440-66-6	82.1		4.28	0.214	1
10146	Zirconium	7440-67-7	3.73	J	5.35	0.898	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.315	J	0.428	0.107	2
06142	Silver	7440-22-4	0.0330	J	0.214	0.0278	2
06144	Strontium	7440-24-6	84.3		1.07	0.182	5
06145	Thallium	7440-28-0	0.362		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0174	U	0.0174	0.0104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.80	J	1.1	0.44	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.63		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.2		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	9.2		0.10	0.10	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191085
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 06:34	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 15:16	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:08	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:08	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 15:15	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:08	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 06:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1

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

Sample Description: SL-515-SA5D-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191085
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH104-02DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 00:17	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403A	09/10/2013 21:30	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-815-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191086
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:40 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81500 SDG#: PH104-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.4	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.5	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	0.89	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	0.79	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	0.81	J	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.90	U	0.90	0.18	1
10590	Alpha BHC	319-84-6	0.90	U	0.90	0.18	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.90	U	0.90	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.36	1
10590	p,p-DDE	72-55-9	0.58	J	1.8	0.36	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.90	U	0.90	0.49	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.36	1
10590	Endosulfan I	959-98-8	0.90	U	0.90	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.36	1
10590	Endrin	72-20-8	1.8	U	1.8	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.65	1
10590	Heptachlor	76-44-8	0.90	U	0.90	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.90	U	0.90	0.18	1
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1

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

Sample Description: SL-815-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191086
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:40 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81500 SDG#: PH104-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	10		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	22		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,600		42.5	7.66	1
06944	Antimony	7440-36-0	1.25	J	4.25	0.786	1
06935	Arsenic	7440-38-2	5.34		4.25	0.744	1
06946	Barium	7440-39-3	100		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.829	J	1.06	0.0712	1
07914	Boron	7440-42-8	19.1		10.6	0.892	1
06949	Cadmium	7440-43-9	0.648	J	1.06	0.0807	1
01650	Calcium	7440-70-2	37,200		21.2	3.55	1
06951	Chromium	7440-47-3	33.8		3.19	0.170	1
06952	Cobalt	7440-48-4	9.08		1.06	0.105	1
06953	Copper	7440-50-8	17.6		2.12	0.308	1
01654	Iron	7439-89-6	31,800		85.0	7.69	2
06955	Lead	7439-92-1	9.96		3.19	0.531	1
01656	Lithium	7439-93-2	23.6		4.2	0.36	1
01657	Magnesium	7439-95-4	7,620		10.6	1.77	1
06958	Manganese	7439-96-5	424		1.06	0.0882	1
06960	Molybdenum	7439-98-7	0.247	J	2.12	0.181	1
06961	Nickel	7440-02-0	18.4		2.12	0.138	1
10145	Phosphorus	7723-14-0	737		10.6	3.07	1
01662	Potassium	7440-09-7	7,150		106	8.86	1
01667	Sodium	7440-23-5	109		106	17.7	1
06969	Tin	7440-31-5	3.54	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,250		1.06	0.181	1
06971	Vanadium	7440-62-2	64.7		1.06	0.138	1
06972	Zinc	7440-66-6	81.2		4.25	0.212	1
10146	Zirconium	7440-67-7	1.93	J	5.31	0.892	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-815-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191086
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:40 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81500 SDG#: PH104-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.346 J	0.425	0.106	2
06142	Silver	7440-22-4	0.0321 J	0.212	0.0276	2
06144	Strontium	7440-24-6	82.8	0.425	0.0722	2
06145	Thallium	7440-28-0	0.356	0.212	0.0319	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0178 U	0.0178	0.0107	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.0 J	1.1	0.43	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.05	0.0100	0.0100	1
	The pH was measured in water at 21.5 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.7	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-815-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191086
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:40 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81500 SDG#: PH104-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0971	1
11031	12378-PeCDD	40321-76-4	5.40	U	5.40	0.0686	1
11031	123478-HxCDD	39227-28-6	0.0610	JQ	5.40	0.0440	1
11031	123678-HxCDD	57653-85-7	0.151	J	5.40	0.0471	1
11031	123789-HxCDD	19408-74-3	0.133	JQ	5.40	0.0475	1
11031	1234678-HpCDD	35822-46-9	0.529	J	5.40	0.0620	1
11031	OCDD	3268-87-9	3.63	JB	10.8	0.0783	1
11031	2378-TCDF	51207-31-9	1.08	U	1.08	0.0912	1
11031	12378-PeCDF	57117-41-6	5.40	U	5.40	0.0585	1
11031	23478-PeCDF	57117-31-4	0.112	JQ	5.40	0.0573	1
11031	123478-HxCDF	70648-26-9	0.194	JQ	5.40	0.0402	1
11031	123678-HxCDF	57117-44-9	0.101	JQ	5.40	0.0365	1
11031	123789-HxCDF	72918-21-9	0.192	JQ	5.40	0.0486	1
11031	234678-HxCDF	60851-34-5	0.149	JBQ	5.40	0.0364	1
11031	1234678-HpCDF	67562-39-4	0.196	JBQ	5.40	0.0297	1
11031	1234789-HpCDF	55673-89-7	0.114	JB	5.40	0.0479	1
11031	OCDF	39001-02-0	0.382	JB	10.8	0.0758	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0229				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	47	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-815-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191086
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:40 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81500 SDG#: PH104-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-815-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191086
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:40 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81500 SDG#: PH104-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLB026	09/18/2013 06:41	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLB026	09/12/2013 18:45	Nicholas W Shroyer	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 13:50	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570034A	09/18/2013 04:31	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570034A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570030A	09/17/2013 22:32	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132570030A	09/17/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13255003	09/14/2013 21:55	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13255003	09/12/2013 12:00	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 06:51	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1

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

Sample Description: SL-815-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191086
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:40 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81500 SDG#: PH104-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 15:33	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:18	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:18	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:18	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:18	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 06:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 00:49	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403A	09/10/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-515-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191087
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:50 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH104-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.78	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.78	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	21	7.0	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.78	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.78	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.78	1
12969	2-Methylnaphthalene	91-57-6	2.0	U	2.0	0.78	1
12969	Naphthalene	91-20-3	2.0	U	2.0	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.78	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.01
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.97	U	0.97	0.20	1
10590	Alpha BHC	319-84-6	0.97	U	0.97	0.20	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.97	U	0.97	0.20	1
10590	Chlordane	57-74-9	20	U	20	4.7	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.41	1
10590	Delta BHC	319-86-8	0.97	U	0.97	0.53	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.97	U	0.97	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.70	1
10590	Heptachlor	76-44-8	0.97	U	0.97	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.97	U	0.97	0.20	1

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

Sample Description: SL-515-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191087
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:50 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH104-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.9	U	7.9	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.41	1
10590	Toxaphene	8001-35-2	39	U	39	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.9	U	5.9	2.3	1
12952	EFH (C15-C20)	n.a.	5.9	U	5.9	2.3	1
12952	EFH (C21-C30)	n.a.	4.4	J	5.9	2.3	1
12952	EFH (C30-C40)	n.a.	9.0	J	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.9	U	5.9	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,700		46.9	8.46	1
06944	Antimony	7440-36-0	1.17	J	4.69	0.869	1
06935	Arsenic	7440-38-2	5.81		4.69	0.822	1
06946	Barium	7440-39-3	136		1.17	0.0387	1
06947	Beryllium	7440-41-7	1.03	J	1.17	0.0786	1
07914	Boron	7440-42-8	17.8		11.7	0.986	1
06949	Cadmium	7440-43-9	0.558	J	1.17	0.0892	1
01650	Calcium	7440-70-2	17,700		23.5	3.92	1
06951	Chromium	7440-47-3	40.0		3.52	0.188	1
06952	Cobalt	7440-48-4	10.5		1.17	0.116	1
06953	Copper	7440-50-8	17.0		2.35	0.340	1
01654	Iron	7439-89-6	37,800		93.9	8.50	2
06955	Lead	7439-92-1	10.5		3.52	0.587	1
01656	Lithium	7439-93-2	27.1		4.7	0.40	1
01657	Magnesium	7439-95-4	7,470		11.7	1.96	1
06958	Manganese	7439-96-5	447		1.17	0.0974	1
06960	Molybdenum	7439-98-7	2.35	U	2.35	0.200	1
06961	Nickel	7440-02-0	20.4		2.35	0.153	1
10145	Phosphorus	7723-14-0	300		11.7	3.39	1
01662	Potassium	7440-09-7	5,320		117	9.79	1
01667	Sodium	7440-23-5	116	J	117	19.6	1
06969	Tin	7440-31-5	4.04	J	11.7	0.258	1
06970	Titanium	7440-32-6	1,530		1.17	0.200	1

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

Sample Description: SL-515-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191087
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:50 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH104-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	78.8		1.17	0.153	1
06972	Zinc	7440-66-6	77.6		4.69	0.235	1
10146	Zirconium	7440-67-7	4.45	J	5.87	0.986	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.220	J	0.469	0.117	2
06142	Silver	7440-22-4	0.0433	J	0.235	0.0305	2
06144	Strontium	7440-24-6	49.2		0.469	0.0798	2
06145	Thallium	7440-28-0	0.396		0.235	0.0352	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.5		1.2	0.47	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.5 C.	n.a.	7.99		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	14.8		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLB026	09/18/2013 07:14	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLB026	09/12/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 15:01	Laura M Krieger	21.01
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325332337	09/10/2013 22:49	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325332337	09/10/2013 22:50	Lois E Hiltz	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 14:06	Jamie L Brillhart	1

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

Sample Description: SL-515-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191087
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:50 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH104-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570034A	09/18/2013 04:50	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570034A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570030A	09/17/2013 22:54	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132570030A	09/17/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 06:55	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 15:37	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:20	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:20	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:20	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:20	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 06:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 01:05	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403A	09/10/2013 21:30	Luz M Groff	1

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

Sample Description: SL-515-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191087
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 09:50 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH104-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-515-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191088
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 10:00 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH104-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.79	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.79	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.79	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.79	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.79	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.79	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.1	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.1	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.79	1
12969	Diethylphthalate	84-66-2	21	U	21	7.1	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.1	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.79	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.79	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.79	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.79	1
12969	2-Methylnaphthalene	91-57-6	2.0	U	2.0	0.79	1
12969	Naphthalene	91-20-3	2.0	U	2.0	0.79	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.79	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.1	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.79	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.79	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	21.48
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.98	U	0.98	0.20	1
10590	Alpha BHC	319-84-6	0.98	U	0.98	0.20	1
10590	Beta BHC	319-85-7	2.3	U	2.3	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.98	U	0.98	0.20	1
10590	Chlordane	57-74-9	20	U	20	4.7	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.41	1
10590	Delta BHC	319-86-8	0.98	U	0.98	0.53	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.98	U	0.98	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.71	1
10590	Heptachlor	76-44-8	0.98	U	0.98	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.98	U	0.98	0.20	1

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

Sample Description: SL-515-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191088
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 10:00 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH104-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.9	U	7.9	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.41	1
10590	Toxaphene	8001-35-2	39	U	39	17	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.2	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C15-C20)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C21-C30)	n.a.	2.8	J	5.9	2.4	1
12952	EFH (C30-C40)	n.a.	6.9	J	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.9	U	5.9	2.4	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,600		46.0	8.29	1
06944	Antimony	7440-36-0	0.958	J	4.60	0.851	1
06935	Arsenic	7440-38-2	5.30		4.60	0.805	1
06946	Barium	7440-39-3	127		1.15	0.0380	1
06947	Beryllium	7440-41-7	0.929	J	1.15	0.0771	1
07914	Boron	7440-42-8	13.1		11.5	0.966	1
06949	Cadmium	7440-43-9	0.508	J	1.15	0.0874	1
01650	Calcium	7440-70-2	46,200		23.0	3.84	1
06951	Chromium	7440-47-3	34.2		3.45	0.184	1
06952	Cobalt	7440-48-4	9.88		1.15	0.114	1
06953	Copper	7440-50-8	15.8		2.30	0.334	1
01654	Iron	7439-89-6	34,700		92.0	8.33	2
06955	Lead	7439-92-1	9.81		3.45	0.575	1
01656	Lithium	7439-93-2	26.2		4.6	0.39	1
01657	Magnesium	7439-95-4	7,480		11.5	1.92	1
06958	Manganese	7439-96-5	390		1.15	0.0955	1
06960	Molybdenum	7439-98-7	2.30	U	2.30	0.196	1
06961	Nickel	7440-02-0	18.7		2.30	0.150	1
10145	Phosphorus	7723-14-0	279		11.5	3.32	1
01662	Potassium	7440-09-7	4,010		115	9.59	1
01667	Sodium	7440-23-5	263		115	19.2	1
06969	Tin	7440-31-5	3.43	J	11.5	0.253	1
06970	Titanium	7440-32-6	958		1.15	0.196	1

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

Sample Description: SL-515-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191088
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 10:00 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH104-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	63.5	1.15	0.150	1
06972	Zinc	7440-66-6	70.5	4.60	0.230	1
10146	Zirconium	7440-67-7	2.56 J	5.75	0.966	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.140 J	0.460	0.115	2
06142	Silver	7440-22-4	0.0376 J	0.230	0.0299	2
06144	Strontium	7440-24-6	49.0	0.460	0.0782	2
06145	Thallium	7440-28-0	0.359	0.230	0.0345	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0122 J	0.0191	0.0115	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	6.5	1.2	0.47	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.6 C.	n.a.	8.12	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	15.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLB026	09/18/2013 07:48	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLB026	09/12/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 15:37	Laura M Krieger	21.48
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325332337	09/10/2013 22:51	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325332337	09/10/2013 22:52	Lois E Hiltz	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 14:21	Jamie L Brillhart	1

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

Sample Description: SL-515-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191088
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 10:00 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH104-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570034A	09/18/2013 05:08	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570034A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570030A	09/17/2013 23:15	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132570030A	09/17/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 06:59	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 15:50	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:27	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:27	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:27	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:27	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 06:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 01:21	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403A	09/10/2013 21:30	Luz M Groff	1

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

Sample Description: SL-515-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191088
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 10:00 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH104-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-515-SA5D-SB-22.0-23.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191089
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 10:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51522 SDG#: PH104-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.78	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.78	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.6	J	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.78	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.78	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.78	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.78	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.97	U	0.97	0.20	1
10590	Alpha BHC	319-84-6	0.97	U	0.97	0.20	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.97	U	0.97	0.20	1
10590	Chlordane	57-74-9	20	U	20	4.7	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.41	1
10590	Delta BHC	319-86-8	0.97	U	0.97	0.53	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.97	U	0.97	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.70	1
10590	Heptachlor	76-44-8	0.97	U	0.97	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.97	U	0.97	0.20	1

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

Sample Description: SL-515-SA5D-SB-22.0-23.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191089
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 10:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51522 SDG#: PH104-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.8	U	7.8	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.41	1
10590	Toxaphene	8001-35-2	39	U	39	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,900		46.7	8.42	1
06944	Antimony	7440-36-0	4.67	U	4.67	0.864	1
06935	Arsenic	7440-38-2	6.25		4.67	0.818	1
06946	Barium	7440-39-3	102		1.17	0.0386	1
06947	Beryllium	7440-41-7	0.915	J	1.17	0.0783	1
07914	Boron	7440-42-8	11.6	J	11.7	0.981	1
06949	Cadmium	7440-43-9	0.504	J	1.17	0.0888	1
01650	Calcium	7440-70-2	31,600		23.4	3.90	1
06951	Chromium	7440-47-3	32.9		3.50	0.187	1
06952	Cobalt	7440-48-4	9.46		1.17	0.116	1
06953	Copper	7440-50-8	11.7		2.34	0.339	1
01654	Iron	7439-89-6	31,700		93.5	8.46	2
06955	Lead	7439-92-1	10.0		3.50	0.584	1
01656	Lithium	7439-93-2	25.6		4.7	0.40	1
01657	Magnesium	7439-95-4	5,980		11.7	1.95	1
06958	Manganese	7439-96-5	298		1.17	0.0970	1
06960	Molybdenum	7439-98-7	2.34	U	2.34	0.199	1
06961	Nickel	7440-02-0	18.2		2.34	0.152	1
10145	Phosphorus	7723-14-0	180		11.7	3.38	1
01662	Potassium	7440-09-7	2,370		117	9.74	1
01667	Sodium	7440-23-5	543		117	19.5	1
06969	Tin	7440-31-5	3.66	J	11.7	0.257	1
06970	Titanium	7440-32-6	916		1.17	0.199	1

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

Sample Description: SL-515-SA5D-SB-22.0-23.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191089
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 10:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51522 SDG#: PH104-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	61.3	1.17	0.152	1
06972	Zinc	7440-66-6	57.3	4.67	0.234	1
10146	Zirconium	7440-67-7	2.13 J	5.84	0.981	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.467 U	0.467	0.117	2
06142	Silver	7440-22-4	0.0505 J	0.234	0.0304	2
06144	Strontium	7440-24-6	37.4	0.467	0.0794	2
06145	Thallium	7440-28-0	0.307	0.234	0.0350	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0191 U	0.0191	0.0115	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	3.7	1.2	0.47	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.6 C.	n.a.	8.46	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	14.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLB026	09/18/2013 08:21	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLB026	09/12/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 16:12	Laura M Krieger	20
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325332337	09/10/2013 22:53	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325332337	09/10/2013 22:53	Lois E Hiltz	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 14:36	Jamie L Brillhart	1

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

Sample Description: SL-515-SA5D-SB-22.0-23.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191089
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 10:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51522 SDG#: PH104-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570034A	09/18/2013 05:26	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570034A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/23/2013 20:19	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 07:04	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 15:54	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:30	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:30	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:30	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:30	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 06:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 01:38	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403A	09/10/2013 21:30	Luz M Groff	1

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

Sample Description: SL-515-SA5D-SB-22.0-23.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191089
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 10:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51522 SDG#: PH104-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-599-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191090
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 07:45 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59900 SDG#: PH104-07

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	0.55	J	1.1	0.44	1
		SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.6 C.		n.a.	8.06		0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	8.6		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 01:54	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403A	09/10/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-599-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191091
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 07:55 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59940 SDG#: PH104-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.4	1.2	0.46	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.6 C.	n.a.	7.93	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	14.3	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 02:42	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403A	09/10/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-599-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191092
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 08:05 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59990 SDG#: PH104-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	10.9	1.2	0.46	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.5 C.	n.a.	7.96	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	14.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 02:58	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403A	09/10/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-599-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191093
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 08:15 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59914 SDG#: PH104-10

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	9.2	1.2	0.47	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.8 C.		n.a.	8.27	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	14.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 03:15	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403A	09/10/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-599-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191094
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 08:25 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59919 SDG#: PH104-11

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	6.9	1.2	0.46	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.8 C.		n.a.	8.27	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	14.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201A	09/15/2013 03:31	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201A	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403B	09/10/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-599-SA5D-SB-22.0-23.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191095
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 08:35 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59922 SDG#: PH104-12

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	6.1	1.1	0.45	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.8 C.		n.a.	8.52	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	10.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201B	09/15/2013 03:47	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201B	09/13/2013 07:45	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13253039403B	09/10/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-601-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191096
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 13:10 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60100 SDG#: PH104-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.8	1.1	0.44	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.7	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201B	09/15/2013 04:35	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201B	09/13/2013 07:45	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-601-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191097
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 13:20 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60140 SDG#: PH104-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	2.5	1.1	0.45	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.7	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201B	09/15/2013 04:51	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201B	09/13/2013 07:45	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-601-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191098
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 13:30 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60190 SDG#: PH104-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	9.0	1.1	0.45	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.3	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201B	09/15/2013 05:08	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201B	09/13/2013 07:45	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-601-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191099
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 13:40 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60114 SDG#: PH104-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	10.7	1.1	0.45	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.4	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201B	09/15/2013 05:56	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201B	09/13/2013 07:45	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Sample Description: SL-601-SA5D-SB-20.5-21.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7191100
LL Group # 1417506
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/09/2013 13:45 by VC

Submitted: 09/10/2013 09:15
Reported: 09/25/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60120 SDG#: PH104-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	4.4	1.0	0.41	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.4	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13256256201B	09/15/2013 06:12	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13256256201B	09/13/2013 07:45	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401A	09/13/2013 20:58	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417506
Reported: 09/25/13 at 03:04 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13255SLB026	Sample number(s): 7191082-7191084,7191086-7191089									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	95		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	100		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	98		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	93		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	99		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	90		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	100		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	106		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	110		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	95		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	101		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	104		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	101		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	101		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	98		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	92		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	189*		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	106		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	94		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	91		79-112		
Batch number: 13255B94A	Sample number(s): 7191081									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	115	115	75-135	0	30
Batch number: 13256A34A	Sample number(s): 7191087-7191089									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	79	79	67-119	0	30
Batch number: 132570021A	Sample number(s): 7191082-7191084,7191086-7191089									
Aldrin	0.83	U	0.83	0.17	ug/kg	96		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	116		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	96		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	110		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	121		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	100		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	107		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	99		51-141		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417506
Reported: 09/25/13 at 03:04 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dieldrin	1.7	U	1.7	0.33	ug/kg	121		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	112		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	107		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	104		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	109		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	94		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	102		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	113		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	99		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	102		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132570034A	Sample number(s): 7191082-7191084,7191086-7191089									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	83	84	62-87	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	102		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	106		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132570030A	Sample number(s): 7191082-7191084,7191086-7191088									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	84		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	103		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	89		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	78		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	70		49-107		
Batch number: 132640003A	Sample number(s): 7191089									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	102		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	110		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	106		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	84		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	84		49-107		
Batch number: 132560637002	Sample number(s): 7191082-7191089									
Aluminum	40.0	U	40.0	7.21	mg/kg	106		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	109		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	102		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	101		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	99		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	97		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	103		80-120		
Calcium	5.14	J	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	105		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	102		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	103		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417506
Reported: 09/25/13 at 03:04 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Magnesium	10.0	U	10.0	1.67	mg/kg	101		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	101		80-120		
Sodium	100 U		100.	16.7	mg/kg	100		80-120		
Tin	1.20	J	10.0	0.220	mg/kg	104		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	106		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	104		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	104		80-120		
Batch number: 132560637002A	Sample number(s): 7191082-7191089									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	106		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	104		80-120		
Batch number: 132560637002B	Sample number(s): 7191082-7191089									
Selenium	0.400	U	0.400	0.100	mg/kg	113		80-120		
Batch number: 132560638002	Sample number(s): 7191082-7191089									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	108		85-120		
Batch number: 13256256201A	Sample number(s): 7191082-7191083,7191085-7191094									
1a Anions by 300.0-Fluoride	1.0	U	1.0	0.40	mg/kg	106		90-110		
Batch number: 13256256201B	Sample number(s): 7191095-7191100									
1a Anions by 300.0-Fluoride	1.0	U	1.0	0.40	mg/kg	106		90-110		
Batch number: 13253039403A	Sample number(s): 7191082,7191085-7191093									
15a pH by 9045D						99		95-105		
Batch number: 13253039403B	Sample number(s): 7191094-7191095									
15a pH by 9045D						99		95-105		
Batch number: 13256162401A	Sample number(s): 7191082-7191100									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13255003	Sample number(s): 7191082-7191084,7191086									
2378-TCDD	1.00	U	1.00	0.0854	ng/kg	107		67-158		
12378-PeCDD	5.00	U	5.00	0.0596	ng/kg	101		70-142		
123478-HxCDD	5.00	U	5.00	0.0332	ng/kg	111		70-164		
123678-HxCDD	5.00	U	5.00	0.0340	ng/kg	102		76-134		
123789-HxCDD	5.00	U	5.00	0.0332	ng/kg	102		64-162		
1234678-HpCDD	5.00	U	5.00	0.0452	ng/kg	107		70-140		
OCDD	0.194	J	10.0	0.0505	ng/kg	97		78-144		
2378-TCDF	1.00	U	1.00	0.0751	ng/kg	119		75-158		

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417506
Reported: 09/25/13 at 03:04 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
12378-PeCDF	5.00	U	5.00	0.0497	ng/kg	104		80-134		
23478-PeCDF	5.00	U	5.00	0.0447	ng/kg	103		68-160		
123478-HxCDF	5.00	U	5.00	0.0275	ng/kg	107		72-134		
123678-HxCDF	5.00	U	5.00	0.0258	ng/kg	103		84-130		
123789-HxCDF	5.00	U	5.00	0.0348	ng/kg	108		78-130		
234678-HxCDF	0.0500	J	5.00	0.0253	ng/kg	109		70-156		
1234678-HpCDF	0.0282	J	5.00	0.0192	ng/kg	103		82-122		
1234789-HpCDF	0.0482	J	5.00	0.0325	ng/kg	99		78-138		
OCDF	0.0941	J	10.0	0.0745	ng/kg	100		63-170		
TEQ WHO 2005 - EDLx0.0	U				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13255SLB026	Sample number(s): 7191082-7191084,7191086-7191089 UNSPK: 7191082								
Acenaphthene	92	94	48-127	2	30				
Acenaphthylene	96	96	49-121	0	30				
Anthracene	101	94	52-126	8	30				
Benzo(a)anthracene	94	91	44-143	4	30				
Benzo(a)pyrene	97	91	44-140	6	30				
Benzo(b)fluoranthene	118	101	26-142	15	30				
Benzo(e)pyrene	88	84	70-130	5	30				
Benzo(g,h,i)perylene	96	76	33-141	22	30				
Benzo(k)fluoranthene	96	88	54-142	9	30				
Butylbenzylphthalate	112	114	49-151	2	30				
Di-n-butylphthalate	119	117	52-147	2	30				
Chrysene	90	89	29-148	1	30				
Dibenz(a,h)anthracene	102	83	20-137	20	30				
Diethylphthalate	104	104	43-145	0	30				
Dimethylphthalate	99	99	58-129	1	30				
Bis(2-Ethylhexyl)phthalate	112	115	39-167	3	30				
Fluoranthene	99	97	40-148	1	30				
Fluorene	96	94	51-137	2	30				
Indeno(1,2,3-cd)pyrene	101	82	17-136	20	30				
1-Methylnaphthalene	102	101	50-131	1	30				
2-Methylnaphthalene	102	100	35-152	2	30				
Naphthalene	97	96	31-148	0	30				
N-Nitrosodimethylamine	177*	171*	48-113	3	30				
Di-n-octylphthalate	113	111	52-162	1	30				
Phenanthrene	98	95	29-142	4	30				
Pyrene	88	84	26-143	4	30				
Batch number: 132570021A	Sample number(s): 7191082-7191084,7191086-7191089 UNSPK: 7191082								
Aldrin	101	92	16-126	10	50				
Alpha BHC	116	107	14-140	9	50				

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417506
Reported: 09/25/13 at 03:04 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Beta BHC	101	93	42-133	9	50				
Gamma BHC - Lindane	112	101	30-137	10	50				
p,p-DDD	126	115	43-149	9	50				
p,p-DDE	100	130	35-152	24	50				
p,p-DDT	116	119	12-193	3	50				
Delta BHC	95	92	13-153	3	50				
Dieldrin	123	113	41-153	9	50				
Endosulfan I	115	104	26-146	10	50				
Endosulfan II	113	100	34-141	12	50				
Endosulfan Sulfate	109	98	10-181	12	50				
Endrin	117	105	30-152	11	50				
Endrin Aldehyde	98	87	23-138	12	35				
Endrin Ketone	103	91	30-148	13	50				
Heptachlor	118	106	16-152	11	50				
Heptachlor Epoxide	102	93	33-144	8	50				
Methoxychlor	109	102	41-161	7	50				
Batch number: 132570034A	Sample number(s): 7191082-7191084,7191086-7191089 UNSPK: 7191082								
PCB-1016	87	89	41-135	4	50				
PCB-1260	88	93	40-134	7	50				
Batch number: 132570030A	Sample number(s): 7191082-7191084,7191086-7191088 UNSPK: 7191082								
EFH (C12-C14)	96	96	49-123	0	20				
EFH (C15-C20)	145*	182*	49-123	22*	20				
EFH (C21-C30)	127*	273*	49-123	46*	20				
EFH (C30-C40)	127*	384*	49-123	57*	20				
EFH (C8-C11)	89	83	49-123	8	20				
Batch number: 132640003A	Sample number(s): 7191089 UNSPK: P201708								
EFH (C12-C14)	79	78	49-123	1	20				
EFH (C15-C20)	89	85	49-123	4	20				
EFH (C21-C30)	91	88	49-123	3	20				
EFH (C30-C40)	75	74	49-123	0	20				
EFH (C8-C11)	73	70	49-123	4	20				
Batch number: 132560637002	Sample number(s): 7191082-7191089 UNSPK: 7191082 BKG: 7191082								
Aluminum	4743 (2)	4362 (2)	75-125	2	20	22,400	22,900	2	20
Antimony	48*	48*	75-125	1	20	1.14 J	0.971 J	16 (1)	20
Arsenic	98	98	75-125	0	20	4.92	4.73	4 (1)	20
Barium	102	102	75-125	0	20	93.1	92.6	1	20
Beryllium	100	99	75-125	1	20	0.764 J	0.772 J	1 (1)	20
Boron	99	98	75-125	1	20	18.2	17.5	4 (1)	20
Cadmium	92	93	75-125	1	20	0.566 J	0.568 J	0 (1)	20
Calcium	-243 (2)	618 (2)	75-125	8	20	41,400	42,500	3	20
Chromium	128*	122	75-125	2	20	31.5	31.3	1	20
Cobalt	91	91	75-125	0	20	8.29	8.53	3	20
Copper	107	105	75-125	1	20	15.9	16.1	1	20
Iron	1924 (2)	1020 (2)	75-125	3	20	30,100	30,200	0	20
Lead	91	92	75-125	1	20	9.00	9.03	0 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417506
Reported: 09/25/13 at 03:04 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Lithium	106	107	75-125	1	20	21.6	22.0	2	20
Magnesium	519 (2)	442 (2)	75-125	2	20	6,900	7,040	2	20
Manganese	103 (2)	102 (2)	75-125	0	20	382	381	0	20
Molybdenum	92	93	75-125	0	20	0.457 J	0.213 J	73* (1)	20
Nickel	93	93	75-125	0	20	16.7	16.7	0	20
Phosphorus	100 (2)	75 (2)	75-125	3	20	654	653	0	20
Potassium	196 (2)	183 (2)	75-125	2	20	6,270	6,410	2	20
Sodium	100	101	75-125	1	20	101	104	3 (1)	20
Tin	88	88	75-125	0	20	3.04 J	3.28 J	8 (1)	20
Titanium	605 (2)	550 (2)	75-125	3	20	1,140	1,160	3	20
Vanadium	130*	124	75-125	2	20	59.8	60.2	1	20
Zinc	103	101	75-125	1	20	74.1	74.6	1	20
Zirconium	78	77	75-125	0	20	2.40 J	3.38 J	34* (1)	20
Batch number: 132560637002A	Sample number(s): 7191082-7191089 UNSPK: 7191082 BKG: 7191082								
Silver	99	101	75-125	2	20	0.0286 J	0.0299 J	4 (1)	20
Strontium	116 (2)	144 (2)	75-125	2	20	81.2	76.5	6	20
Thallium	99	97	75-125	1	20	0.299	0.329	9 (1)	20
Batch number: 132560637002B	Sample number(s): 7191082-7191089 UNSPK: 7191082 BKG: 7191082								
Selenium	88	94	75-125	5	20	0.297 J	0.286 J	4 (1)	20
Batch number: 132560638002	Sample number(s): 7191082-7191089 UNSPK: 7191082 BKG: 7191082								
3a Mercury 7471A	116	119	65-135	4	20	0.0160 U	0.0158 U	0 (1)	20
Batch number: 13256256201A	Sample number(s): 7191082-7191083,7191085-7191094 UNSPK: 7191082 BKG: 7191082								
1a Anions by 300.0-Fluoride	67*		80-120			0.83 J	0.73 J	12 (1)	20
Batch number: 13256256201B	Sample number(s): 7191095-7191100 UNSPK: 7191095 BKG: 7191095								
1a Anions by 300.0-Fluoride	58*		80-120			5.4	5.5	0	20
Batch number: 13253039403A	Sample number(s): 7191082,7191085-7191093 BKG: 7191082								
15a pH by 9045D						7.60	7.63	0	3
Batch number: 13253039403B	Sample number(s): 7191094-7191095 BKG: 7191094								
15a pH by 9045D						8.27	8.27	0	3
Batch number: 13256162401A	Sample number(s): 7191082-7191100 BKG: 7191082								
14a Moisture Content by 160.3						9.2	9.2	0	20
14a Moisture Content by 160.3						9.2	9.2	0	20
14a Moisture Content by 160.3						9.2	9.2	0	20
Batch number: 13255003	Sample number(s): 7191082-7191084,7191086 UNSPK: 7191082								
2378-TCDD	87	86	40-135	1	20				
12378-PeCDD	96	96	40-135	0	20				
123478-HxCDD	98	99	40-135	1	20				
123678-HxCDD	99	97	40-135	2	20				
123789-HxCDD	97	94	40-135	3	20				
1234678-HpCDD	96	98	40-135	2	20				
OCDD	99	107	40-135	7	20				
2378-TCDF	96	94	40-135	3	20				
12378-PeCDF	94	95	40-135	1	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417506
Reported: 09/25/13 at 03:04 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
23478-PeCDF	95	99	40-135	3	20				
123478-HxCDF	102	100	40-135	3	20				
123678-HxCDF	98	102	40-135	3	20				
123789-HxCDF	97	96	40-135	1	20				
234678-HxCDF	100	98	40-135	3	20				
1234678-HpCDF	99	99	40-135	1	20				
1234789-HpCDF	99	100	40-135	0	20				
OCDF	100	99	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13255SLB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7191082	88	94	106
7191083	93	98	108
7191084	90	94	109
7191086	91	97	108
7191087	87	93	104
7191088	93	99	106
7191089	93	99	110
Blank	96	108	115
LCS	96	106	114
MS	93	98	108
MSD	90	94	109
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13255B94A

	Trifluorotoluene-F
7191081	72
Blank	72
LCS	79
LCSD	80
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13256A34A

	Trifluorotoluene-F

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417506
Reported: 09/25/13 at 03:04 PM

Surrogate Quality Control

7191087	84
7191088	88
7191089	78
Blank	95
LCS	91
LCSD	90
Limits:	50-142

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132570021A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7191082	99	104
7191083	105	111
7191084	98	100
7191086	90	90
7191087	95	97
7191088	94	99
7191089	93	94
Blank	97	101
LCS	104	112
MS	105	111
MSD	98	100
Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132570034A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7191082	102	92
7191083	94	85
7191084	98	87
7191086	107	93
7191087	108	90
7191088	106	93
7191089	104	94
Blank	109	98
LCS	112	103
LCSD	111	105
MS	94	85
MSD	98	87
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132570030A

	Chlorobenzene	Orthoterphenyl
7191082	112	95
7191083	116	97
7191084	114	90
7191086	110	92
7191087	108	75
7191088	113	79

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417506
Reported: 09/25/13 at 03:04 PM

Surrogate Quality Control

Blank	112	95
LCS	101	86
MS	116	97
MSD	114	90
Limits:	37-125	66-123

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132640003A

	Chlorobenzene	Orthoterphenyl
7191089	102	68
Blank	111	99
LCS	120	100
MS	103	79
MSD	98	81
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13255003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7191082	57	59	61	69	69	65
7191083	68	72	65	72	71	70
7191084	64	61	66	72	75	72
7191086	57	58	59	66	65	62
Blank	60	61	60	69	68	64
MS	68	72	65	72	71	70
MSD	64	61	66	72	75	72
OPR	81	103	79	82	82	76
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7191082	76	56	49	70	71	82
7191083	83	68	55	82	77	82
7191084	76	63	54	69	76	81
7191086	78	61	50	69	71	76
Blank	78	59	49	74	70	80
MS	83	68	55	82	77	82
MSD	76	63	54	69	76	81
OPR	99	74	74	114	83	88
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7191082	77	71	62	47	60
7191083	82	84	67	55	73
7191084	82	79	65	55	63
7191086	76	80	63	47	60
Blank	79	73	63	47	59
MS	82	84	67	55	73
MSD	82	79	65	55	63

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417506
Reported: 09/25/13 at 03:04 PM

Surrogate Quality Control

OPR	87	89	91	87	113
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

13013 1417506 7191081-100

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/9/2013
CarrierName: FedEx
AirbillNo: 796646381657

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130909-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Herbicides 8151	Hex Cr 7196/7199	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-090913	9/9/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											
SL-515-SA5D-SB-0.0-0.5MS	9/9/13 09:30	SO	None	6 - SS-Sleeve	10 day	X	X		X			X		X	X							X				X										MS/MSD
SL-515-SA5D-SB-0.0-0.5MS	9/9/13 09:30	SO	None	1 - 8 oz glass	10 day														X																MS/MSD
SL-815-SA5D-SB-0.0-0.5	9/9/13 09:40	SO	None	2 - SS-Sleeve	10 day	X	X		X			X		X	X							X				X										
SL-815-SA5D-SB-0.0-0.5	9/9/13 09:40	SO	None	1 - 4 oz glass	10 day														X																	
SL-515-SA5D-SB-4.0-5.0	9/9/13 09:50	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X				X			X				X										
SL-515-SA5D-SB-4.0-5.0	9/9/13 09:50	SO	None	2 - Encore	10 day																				X											
SL-515-SA5D-SB-9.0-10.0	9/9/13 10:00	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X				X			X				X										
SL-515-SA5D-SB-9.0-10.0	9/9/13 10:00	SO	None	2 - Encore	10 day																				X											
SL-515-SA5D-SB-22.0-23.0	9/9/13 10:30	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X				X			X				X										
SL-515-SA5D-SB-22.0-23.0	9/9/13 10:30	SO	None	2 - Encore	10 day																				X											
SL-599-SA5D-SB-0.0-0.5	9/9/13 07:45	SO	None	1 - SS-Sleeve	10 day				X																											
SL-599-SA5D-SB-0.0-0.5	9/9/13 07:45	SO	None	1 - 4 oz glass	10 day														X																	
SL-599-SA5D-SB-4.0-5.0	9/9/13 07:55	SO	None	1 - 16 oz glass	10 day				X										X																	
SL-599-SA5D-SB-9.0-10.0	9/9/13 08:05	SO	None	1 - 16 oz glass	10 day				X										X																	
SL-599-SA5D-SB-14.0-15.0	9/9/13 08:15	SO	None	1 - 16 oz glass	10 day				X										X																	
SL-599-SA5D-SB-19.0-20.0	9/9/13 08:25	SO	None	1 - 16 oz glass	10 day				X										X																	

Rec by Brandy Barry ELLE 9.10.13 915

13013 1417506 7191081-100

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/9/2013
CarrierName: FedEx
AirbillNo: 796646381657

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130909-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-601-SA5D-SB-0.0-0.5	9/9/13 13:10	SO	None	1 - SS-Sleeve	10 day				X																											
SL-601-SA5D-SB-4.0-5.0	9/9/13 13:20	SO	None	1 - 16 oz glass	10 day				X																											
SL-601-SA5D-SB-9.0-10.0	9/9/13 13:30	SO	None	1 - 16 oz glass	10 day				X																											
SL-601-SA5D-SB-14.0-15.0	9/9/13 13:40	SO	None	1 - 16 oz glass	10 day				X																											
SL-601-SA5D-SB-20.5-21.5	9/9/13 13:45	SO	None	1 - 16 oz glass	10 day				X																											

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Sergio Mupo	09/09/2013	1600									
									Brenely	9.10.13	915

Ben

COC Rev 2

COC: 20130909-02, Page 1 of 1

1 of 1

Nicole Maljovec

From: Mysel, Stefanie [MyselSJ@cdmsmith.com]
Sent: Tuesday, September 10, 2013 10:33 AM
To: Nicole Maljovec; Burgesser, Todd
Cc: Hartman, Pamela
Subject: RE: 9/9 Sampling: Received Extra Sample, SL-599-SA5D-SB-220.-23.0

Nicole. Thanks for letting us know. Yes that sample should be analyzed for fluoride and pH like the rest of the 599 samples. I will send a revised coc in a few minutes.

Sent from my Verizon Wireless 4G LTE Smartphone

-------- Original message --------
From: Nicole Maljovec <nmaljovec@lancasterlabs.com>
Date: 09/10/2013 7:05 AM (GMT-08:00)
To: "Mysel, Stefanie" <MyselSJ@cdmsmith.com>,"Burgesser, Todd" <BurgesserTE@cdmsmith.com>
Cc: "Hartman, Pamela" <HartmanPM@cdmsmith.com>
Subject: 9/9 Sampling: Received Extra Sample, SL-599-SA5D-SB-220.-23.0

Good morning all,
We received the samples that were shipped last night. There was one extra sample in the cooler that wasn't listed on the COC, SL-599-SA5D-SB-22.0-23.0 (collected 9/9 at 8:35). I'm assuming it should be analyzed for pH and Fluoride like the other SL-599 samples.

Please let me know if it should be analyzed and if so, which analyses are needed.

Thanks!
Nicole

Nicole Maljovec
Eurofins Lancaster Labs
Phone: 717-556-7259

-----Original Message-----
From: Mysel, Stefanie [mailto:MyselSJ@cdmsmith.com]
Sent: Monday, September 09, 2013 6:00 PM
To: !US19_SSFLShip; Burgesser, Todd
Cc: Hartman, Pamela; Mysel, Stefanie
Subject: SSFL 09/09/2013 COC

2 coolers were shipped to your lab for delivery tomorrow. These samples are from today's sampling. Samples were collected from subarea 5D. The airbill number for today's shipment is 796646381657. Let me know if you have any questions or issues. Attached is an excel table with sample names, dates and times from today's sampling. We will be sending 1 equipment blank on Wednesday for Thursday delivery.

Regards,

Stefanie

Stefanie J. Mysel
Geologist

CDM Smith
111 Academy Way
Suite 150
Irvine, CA 92617
Main: 949-752-5452
Cell: 610-248-2430

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Environmental Sample Administration Receipt Documentation Log

1417506

Client/Project: CDM

Date of Receipt: 9-10-13

Time of Receipt: 915

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	2.3	TB	WI	Y	B	
2	↓	0.8	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Rec 1 Jar not on COC
SL 599-SASD-SB-22.0-23.0
Date 9.9.13 Time 835

Unpacker Signature/Emp#: Brandy Bauer 2299 **Date/Time:** 9-10-13 9:47

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH105

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 24, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/11/2013
Group Number: 1417898
SDG: PH105
PO Number: 1204-002-001-AL
State of Sample Origin: CA

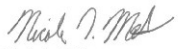
Client Sample Description	Lancaster Labs (LL) #
TB-091013 Water	7192780
SL-603-SA5D-SB-0.0-0.5 Soil	7192781
SL-603-SA5D-SB-4.0-5.0 Soil	7192782
SL-603-SA5D-SB-9.0-10.0 Soil	7192783
SL-603-SA5D-SB-13.0-14.0 Soil	7192784
SL-604-SA5D-SB-0.0-0.5 Soil	7192785
SL-604-SA5D-SB-4.0-5.0 Soil	7192786
SL-604-SA5D-SB-9.0-10.0 Soil	7192787
SL-604-SA5D-SB-16.5-17.5 Soil	7192788
SL-605-SA5D-SB-0.0-0.5 Soil	7192789
SL-605-SA5D-SB-4.0-5.0 Soil	7192790
SL-605-SA5D-SB-4.0-5.0MS Soil	7192791
SL-605-SA5D-SB-4.0-5.0DUP Soil	7192792
SL-905-SA5D-SB-4.0-5.0 Soil	7192793
SL-605-SA5D-SB-9.0-10.0 Soil	7192794
SL-605-SA5D-SB-14.5-15.5 Soil	7192795
SL-518-SA5D-SB-0.0-0.5 Soil	7192796
SL-518-SA5D-SB-4.0-5.0 Soil	7192797
SL-518-SA5D-SB-9.0-10.0 Soil	7192798
SL-518-SA5D-SB-15.0-16.0 Soil	7192799
SL-606-SA5D-SB-0.0-0.5 Soil	7192800
SL-606-SA5D-SB-4.0-5.0 Soil	7192801
SL-606-SA5D-SB-9.0-10.0 Soil	7192802
SL-606-SA5D-SB-13.0-14.0 Soil	7192803

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

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,



Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-091013 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7192780
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 08:00

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB105 SDG#: PH105-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13255B94A	09/16/2013 12:25	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13255B94A	09/16/2013 12:25	Catherine J Schwarz	1

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

Sample Description: SL-603-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192781
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 10:10 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60300 SDG#: PH105-02

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	1.2	1.0	0.42	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.3 C.		n.a.	8.22	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	4.8	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 11:02	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403A	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401A	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-603-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192782
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 10:20 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60340 SDG#: PH105-03

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	3.3	1.1	0.45	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.4 C.		n.a.	7.97	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	11.5	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 11:18	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403A	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401A	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-603-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192783
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 10:30 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60390 SDG#: PH105-04

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	6.5	1.1	0.46	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.3 C.		n.a.	7.98	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	12.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 11:34	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403A	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401A	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-603-SA5D-SB-13.0-14.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192784
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 10:40 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60313 SDG#: PH105-05

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	2.3	1.1	0.44	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.1 C.		n.a.	7.99	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	9.1	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 11:51	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403A	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401A	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-604-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192785
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 08:55 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60400 SDG#: PH105-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.6	1.1	0.44	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.8	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 12:07	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401A	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-604-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192786
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 09:05 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60440 SDG#: PH105-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	2.0	1.1	0.45	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.4	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 12:55	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401A	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-604-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192787
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 09:15 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60490 SDG#: PH105-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	5.7	1.1	0.45	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.6	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 13:12	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401A	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-604-SA5D-SB-16.5-17.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192788
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 09:25 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60416 SDG#: PH105-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	2.3	1.1	0.45	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.3	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 13:28	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401A	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-605-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192789
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 07:45 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60500 SDG#: PH105-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.9	0.56	0.45	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.4	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 15:21	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401A	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-605-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192790
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 07:55 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60540 SDG#: PH105-11BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	3.2	1.2	0.46	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.9	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 10:13	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-605-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192791
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 07:55 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60540 SDG#: PH105-11MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	6.9	1.2	0.46	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	13.9	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 10:46	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-605-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192792
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 07:55 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60540 SDG#: PH105-11DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	4.1	1.2	0.46	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	13.9	0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	13.7	0.10	0.10	1

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13261261202A	09/20/2013 10:30	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13261261202A	09/18/2013 08:35	Nancy J Shoop	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-905-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192793
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 08:00 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

90540 SDG#: PH105-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.5	1.2	0.46	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.5	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201A	09/20/2013 12:59	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201A	09/19/2013 17:00	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-605-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192794
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 08:05 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60590 SDG#: PH105-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	2.6	1.1	0.45	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.9	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201A	09/20/2013 13:50	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201A	09/19/2013 17:00	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-605-SA5D-SB-14.5-15.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192795
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 08:15 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60514 SDG#: PH105-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.6	1.1	0.43	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.4	0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201A	09/20/2013 19:11	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201A	09/19/2013 17:00	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-518-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192796
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:20 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH105-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	0.84	J	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	J	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.9		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	J	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	0.76	J	1.8	0.73	1
12969	Naphthalene	91-20-3	0.99	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.4	J	1.8	0.73	1
12969	Pyrene	129-00-0	1.4	J	1.8	0.73	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	39	U	39	13	1
10401	Dalapon	75-99-0	98	U	98	48	1
10401	2,4-DB	94-82-6	19	U	19	6.8	1
10401	Dicamba	1918-00-9	13	U	13	4.4	1
10401	Dinoseb	88-85-7	26	U	26	9.8	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	9.8	1
10401	MCPA	94-74-6	2,700	U	2,700	830	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	820	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.90	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.82	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.2	J	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.38	1

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

Sample Description: SL-518-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192796
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:20 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH105-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	0.91	U	0.91	0.49	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	10		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	21		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,900		43.2	7.79	1
06944	Antimony	7440-36-0	4.32	U	4.32	0.800	1
06935	Arsenic	7440-38-2	4.96		4.32	0.757	1
06946	Barium	7440-39-3	121		1.08	0.0357	1
06947	Beryllium	7440-41-7	0.983	J	1.08	0.0724	1
07914	Boron	7440-42-8	5.36	J	10.8	0.908	1
06949	Cadmium	7440-43-9	0.513	J	1.08	0.0821	1
01650	Calcium	7440-70-2	7,670		21.6	3.61	1
06951	Chromium	7440-47-3	33.5		3.24	0.173	1
06952	Cobalt	7440-48-4	9.33		1.08	0.107	1
06953	Copper	7440-50-8	21.1		2.16	0.313	1
01654	Iron	7439-89-6	33,800		86.5	7.83	2
06955	Lead	7439-92-1	15.4		3.24	0.540	1

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

Sample Description: SL-518-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192796
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:20 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH105-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	24.0		4.3	0.37	1
01657	Magnesium	7439-95-4	7,280		10.8	1.81	1
06958	Manganese	7439-96-5	504		1.08	0.0897	1
06960	Molybdenum	7439-98-7	0.351	J	2.16	0.184	1
06961	Nickel	7440-02-0	20.1		2.16	0.141	1
10145	Phosphorus	7723-14-0	647		10.8	3.12	1
01662	Potassium	7440-09-7	6,920		108	9.01	1
01667	Sodium	7440-23-5	90.4	J	108	18.1	1
06969	Tin	7440-31-5	3.02	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,270		1.08	0.184	1
06971	Vanadium	7440-62-2	63.4		1.08	0.141	1
06972	Zinc	7440-66-6	84.0		4.32	0.216	1
10146	Zirconium	7440-67-7	6.36		5.40	0.908	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.265	J	0.432	0.108	2
06142	Silver	7440-22-4	0.0639	J	0.216	0.0281	2
06144	Strontium	7440-24-6	36.2		0.432	0.0735	2
06145	Thallium	7440-28-0	0.437		0.216	0.0324	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0218		0.0181	0.0109	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.7	J	3.8	1.5	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.88		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-518-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192796
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:20 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH105-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.100	1
11031	12378-PeCDD	40321-76-4	5.32	U	5.32	0.0794	1
11031	123478-HxCDD	39227-28-6	0.0869	JQ	5.32	0.0521	1
11031	123678-HxCDD	57653-85-7	0.163	JQ	5.32	0.0544	1
11031	123789-HxCDD	19408-74-3	0.209	J	5.32	0.0520	1
11031	1234678-HpCDD	35822-46-9	2.68	J	5.32	0.0989	1
11031	OCDD	3268-87-9	29.0	B	10.6	0.0856	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.106	1
11031	12378-PeCDF	57117-41-6	0.487	JQ	5.32	0.0678	1
11031	23478-PeCDF	57117-31-4	0.105	JQ	5.32	0.0645	1
11031	123478-HxCDF	70648-26-9	0.121	JQ	5.32	0.0476	1
11031	123678-HxCDF	57117-44-9	0.165	J	5.32	0.0437	1
11031	123789-HxCDF	72918-21-9	0.338	J	5.32	0.0588	1
11031	234678-HxCDF	60851-34-5	0.131	JBQ	5.32	0.0447	1
11031	1234678-HpCDF	67562-39-4	0.450	JB	5.32	0.0343	1
11031	1234789-HpCDF	55673-89-7	0.126	JBQ	5.32	0.0561	1
11031	OCDF	39001-02-0	0.774	JB	10.6	0.0731	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.111				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	47	24 - 169
13C12-12378-PeCDF	57	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-518-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192796
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:20 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH105-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-518-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192796
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:20 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH105-15

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLB026	09/18/2013 08:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLB026	09/12/2013 18:45	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132570033A	09/21/2013 02:43	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 14:52	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570034A	09/18/2013 05:45	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570034A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132570033A	09/17/2013 09:00	William H Saadeh	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570030A	09/17/2013 23:57	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132570030A	09/17/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13255003	09/14/2013 22:52	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13255003	09/12/2013 12:00	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/23/2013 06:45	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1

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

Sample Description: SL-518-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192796
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:20 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH105-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 20:55	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 10:53	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 10:53	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 10:53	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 10:53	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:08	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201A	09/20/2013 14:57	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201A	09/19/2013 17:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403A	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-518-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192797
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:30 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH105-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.78	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.78	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.78	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.78	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.78	1
12969	2-Methylnaphthalene	91-57-6	2.0	U	2.0	0.78	1
12969	Naphthalene	91-20-3	2.0	U	2.0	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.78	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	22.48
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	42	U	42	14	1
10401	Dalapon	75-99-0	110	U	110	52	1
10401	2,4-DB	94-82-6	20	U	20	7.3	1
10401	Dicamba	1918-00-9	14	U	14	4.7	1
10401	Dinoseb	88-85-7	28	U	28	11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	20	U	20	11	1
10401	MCPA	94-74-6	2,900	U	2,900	890	1
10401	MCPP (Mecoprop)	93-65-2	2,900	U	2,900	880	1
10401	2,4,5-T	93-76-5	2.0	U	2.0	0.96	1
10401	2,4,5-TP	93-72-1	2.0	U	2.0	0.88	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.97	U	0.97	0.20	1
10590	Alpha BHC	319-84-6	0.97	U	0.97	0.20	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.97	U	0.97	0.20	1

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

Sample Description: SL-518-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192797
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:30 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH105-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	20	U	20	4.7	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.41	1
10590	Delta BHC	319-86-8	0.97	U	0.97	0.53	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.97	U	0.97	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.70	1
10590	Heptachlor	76-44-8	0.97	U	0.97	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.97	U	0.97	0.20	1
10590	Methoxychlor	72-43-5	7.8	U	7.8	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.41	1
10590	Toxaphene	8001-35-2	39	U	39	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	5.1	J	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	8.6	J	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,100		45.9	8.28	1
06944	Antimony	7440-36-0	4.59	U	4.59	0.850	1
06935	Arsenic	7440-38-2	5.13		4.59	0.804	1
06946	Barium	7440-39-3	153		1.15	0.0379	1
06947	Beryllium	7440-41-7	1.07	J	1.15	0.0769	1
07914	Boron	7440-42-8	2.63	J	11.5	0.964	1
06949	Cadmium	7440-43-9	0.352	J	1.15	0.0872	1
01650	Calcium	7440-70-2	21,200		23.0	3.83	1
06951	Chromium	7440-47-3	33.8		3.44	0.184	1

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

Sample Description: SL-518-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192797
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:30 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH105-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	7.61		1.15	0.114	1
06953	Copper	7440-50-8	14.6		2.30	0.333	1
01654	Iron	7439-89-6	34,200		91.8	8.31	2
06955	Lead	7439-92-1	9.52		3.44	0.574	1
01656	Lithium	7439-93-2	25.2		4.6	0.39	1
01657	Magnesium	7439-95-4	6,440		11.5	1.92	1
06958	Manganese	7439-96-5	356		1.15	0.0953	1
06960	Molybdenum	7439-98-7	0.240	J	2.30	0.195	1
06961	Nickel	7440-02-0	19.5		2.30	0.149	1
10145	Phosphorus	7723-14-0	292		11.5	3.32	1
01662	Potassium	7440-09-7	3,740		115	9.57	1
01667	Sodium	7440-23-5	99.5	J	115	19.2	1
06969	Tin	7440-31-5	3.29	J	11.5	0.253	1
06970	Titanium	7440-32-6	1,210		1.15	0.195	1
06971	Vanadium	7440-62-2	63.7		1.15	0.149	1
06972	Zinc	7440-66-6	68.7		4.59	0.230	1
10146	Zirconium	7440-67-7	7.16		5.74	0.964	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.116	J	0.459	0.115	2
06142	Silver	7440-22-4	0.0557	J	0.230	0.0298	2
06144	Strontium	7440-24-6	54.0		0.459	0.0781	2
06145	Thallium	7440-28-0	0.453		0.230	0.0344	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	J	0.0186	0.0111	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.75	J	1.2	0.47	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.96		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

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

Sample Description: SL-518-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192797
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:30 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH105-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLB026	09/18/2013 09:27	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLB026	09/12/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 16:48	Laura M Krieger	22.48
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325432357	09/11/2013 13:41	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325432357	09/11/2013 13:41	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132570033A	09/21/2013 03:10	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 15:07	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570034A	09/18/2013 06:03	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570034A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132570033A	09/17/2013 09:00	William H Saadeh	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570030A	09/18/2013 00:19	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132570030A	09/17/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/23/2013 06:49	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 20:59	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 10:55	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 10:55	Choon Y Tian	2

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

Sample Description: SL-518-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192797
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:30 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH105-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 10:55	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 10:55	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:10	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201A	09/20/2013 15:14	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201A	09/19/2013 17:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403A	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-518-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192798
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:40 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51890 SDG#: PH105-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.78	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.78	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.78	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.78	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.78	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.78	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	20.83
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	42	U	42	14	1
10401	Dalapon	75-99-0	110	U	110	51	1
10401	2,4-DB	94-82-6	20	U	20	7.2	1
10401	Dicamba	1918-00-9	14	U	14	4.7	1
10401	Dinoseb	88-85-7	28	U	28	11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	20	U	20	11	1
10401	MCPA	94-74-6	2,900	U	2,900	890	1
10401	MCPP (Mecoprop)	93-65-2	2,900	U	2,900	880	1
10401	2,4,5-T	93-76-5	2.0	U	2.0	0.96	1
10401	2,4,5-TP	93-72-1	2.0	U	2.0	0.88	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.97	U	0.97	0.20	1
10590	Alpha BHC	319-84-6	0.97	U	0.97	0.20	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.97	U	0.97	0.20	1

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

Sample Description: SL-518-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192798
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:40 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51890 SDG#: PH105-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	20	U	20	4.7	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.41	1
10590	Delta BHC	319-86-8	0.97	U	0.97	0.53	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.97	U	0.97	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.70	1
10590	Heptachlor	76-44-8	0.97	U	0.97	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.97	U	0.97	0.20	1
10590	Methoxychlor	72-43-5	7.8	U	7.8	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.41	1
10590	Toxaphene	8001-35-2	39	U	39	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,500		46.3	8.34	1
06944	Antimony	7440-36-0	4.63	U	4.63	0.856	1
06935	Arsenic	7440-38-2	6.30		4.63	0.810	1
06946	Barium	7440-39-3	110		1.16	0.0382	1
06947	Beryllium	7440-41-7	1.04	J	1.16	0.0775	1
07914	Boron	7440-42-8	11.6	U	11.6	0.972	1
06949	Cadmium	7440-43-9	0.212	J	1.16	0.0879	1
01650	Calcium	7440-70-2	6,290		23.1	3.86	1
06951	Chromium	7440-47-3	31.5		3.47	0.185	1

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

Sample Description: SL-518-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192798
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:40 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51890 SDG#: PH105-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	10.1		1.16	0.115	1
06953	Copper	7440-50-8	16.2		2.31	0.335	1
01654	Iron	7439-89-6	32,300		92.5	8.37	2
06955	Lead	7439-92-1	9.67		3.47	0.578	1
01656	Lithium	7439-93-2	23.1		4.6	0.39	1
01657	Magnesium	7439-95-4	5,810		11.6	1.93	1
06958	Manganese	7439-96-5	554		1.16	0.0960	1
06960	Molybdenum	7439-98-7	0.296	J	2.31	0.197	1
06961	Nickel	7440-02-0	18.8		2.31	0.150	1
10145	Phosphorus	7723-14-0	317		11.6	3.34	1
01662	Potassium	7440-09-7	3,190		116	9.65	1
01667	Sodium	7440-23-5	98.0	J	116	19.3	1
06969	Tin	7440-31-5	3.35	J	11.6	0.254	1
06970	Titanium	7440-32-6	1,340		1.16	0.197	1
06971	Vanadium	7440-62-2	59.1		1.16	0.150	1
06972	Zinc	7440-66-6	63.9		4.63	0.231	1
10146	Zirconium	7440-67-7	5.90		5.78	0.972	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.463	U	0.463	0.116	2
06142	Silver	7440-22-4	0.0508	J	0.231	0.0301	2
06144	Strontium	7440-24-6	36.8		0.463	0.0787	2
06145	Thallium	7440-28-0	0.345		0.231	0.0347	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0181	J	0.0186	0.0112	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.3		1.2	0.47	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.90		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

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

Sample Description: SL-518-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192798
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:40 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51890 SDG#: PH105-17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLB026	09/18/2013 10:00	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLB026	09/12/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 17:24	Laura M Krieger	20.83
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325432357	09/11/2013 13:43	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132570033A	09/21/2013 03:37	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 15:22	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570034A	09/18/2013 07:36	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570034A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132570033A	09/17/2013 09:00	William H Saadeh	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570030A	09/18/2013 00:40	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132570030A	09/17/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/23/2013 06:53	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 21:11	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 11:02	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 11:02	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 11:02	Choon Y Tian	2

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

Sample Description: SL-518-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192798
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:40 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51890 SDG#: PH105-17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 11:02	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:12	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201A	09/20/2013 15:31	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201A	09/19/2013 17:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403A	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-518-SA5D-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192799
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:50 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH105-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.67
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	99	U	99	49	1
10401	2,4-DB	94-82-6	19	U	19	6.8	1
10401	Dicamba	1918-00-9	13	U	13	4.4	1
10401	Dinoseb	88-85-7	26	U	26	9.9	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	9.9	1
10401	MCPA	94-74-6	2,800	U	2,800	840	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	830	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.90	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.83	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.92	U	0.92	0.19	1
10590	Alpha BHC	319-84-6	0.92	U	0.92	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.92	U	0.92	0.19	1

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

Sample Description: SL-518-SA5D-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192799
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:50 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH105-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.92	U	0.92	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.92	U	0.92	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.92	U	0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.92	U	0.92	0.19	1
10590	Methoxychlor	72-43-5	7.4	U	7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,600		43.2	7.79	1
06944	Antimony	7440-36-0	4.32	U	4.32	0.800	1
06935	Arsenic	7440-38-2	4.38		4.32	0.757	1
06946	Barium	7440-39-3	75.9		1.08	0.0357	1
06947	Beryllium	7440-41-7	0.665	J	1.08	0.0724	1
07914	Boron	7440-42-8	10.8	U	10.8	0.908	1
06949	Cadmium	7440-43-9	0.196	J	1.08	0.0821	1
01650	Calcium	7440-70-2	3,650		21.6	3.61	1
06951	Chromium	7440-47-3	22.5		3.24	0.173	1

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

Sample Description: SL-518-SA5D-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192799
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:50 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH105-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	4.38		1.08	0.107	1
06953	Copper	7440-50-8	8.66		2.16	0.313	1
01654	Iron	7439-89-6	24,600		43.2	3.91	1
06955	Lead	7439-92-1	4.42		3.24	0.540	1
01656	Lithium	7439-93-2	18.1		4.3	0.37	1
01657	Magnesium	7439-95-4	4,520		10.8	1.81	1
06958	Manganese	7439-96-5	229		1.08	0.0897	1
06960	Molybdenum	7439-98-7	2.16	U	2.16	0.184	1
06961	Nickel	7440-02-0	10.6		2.16	0.141	1
10145	Phosphorus	7723-14-0	257		10.8	3.12	1
01662	Potassium	7440-09-7	1,900		108	9.01	1
01667	Sodium	7440-23-5	87.7	J	108	18.1	1
06969	Tin	7440-31-5	2.92	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,220		1.08	0.184	1
06971	Vanadium	7440-62-2	42.4		1.08	0.141	1
06972	Zinc	7440-66-6	47.1		4.32	0.216	1
10146	Zirconium	7440-67-7	3.64	J	5.40	0.908	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.432	U	0.432	0.108	2
06142	Silver	7440-22-4	0.216	U	0.216	0.0281	2
06144	Strontium	7440-24-6	25.9		0.432	0.0735	2
06145	Thallium	7440-28-0	0.322		0.216	0.0324	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0109	J	0.0181	0.0108	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.1	J	1.1	0.44	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.88		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

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

Sample Description: SL-518-SA5D-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192799
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:50 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH105-18

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13255SLB026	09/18/2013 10:33	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13255SLB026	09/12/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 17:59	Laura M Krieger	23.67
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325432357	09/11/2013 13:42	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325432357	09/11/2013 13:42	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132570033A	09/21/2013 04:03	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 15:37	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570034A	09/18/2013 07:54	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570034A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132570033A	09/17/2013 09:00	William H Saadeh	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570030A	09/18/2013 01:01	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132570030A	09/17/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 21:15	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 11:05	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 11:05	Choon Y Tian	2

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

Sample Description: SL-518-SA5D-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192799
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 13:50 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH105-18

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 11:05	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 11:05	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:14	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201A	09/20/2013 15:48	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201A	09/19/2013 17:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403A	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-606-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192800
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 12:20 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60600 SDG#: PH105-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.83	J	1.1	0.43	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.4 C.	n.a.	8.02		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	8.5		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201A	09/20/2013 16:05	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201A	09/19/2013 17:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403A	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-606-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192801
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 12:30 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60640 SDG#: PH105-20

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	1.4	1.1	0.45	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.4 C.		n.a.	7.87	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	12.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201A	09/20/2013 16:22	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201A	09/19/2013 17:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403B	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-606-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192802
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 12:40 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60690 SDG#: PH105-21

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	2.2	1.1	0.45	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.4 C.		n.a.	8.13	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	11.1	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201A	09/20/2013 16:39	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201A	09/19/2013 17:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403B	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13261162401B	09/19/2013 00:30	Scott W Freisher	1

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

Sample Description: SL-606-SA5D-SB-13.0-14.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7192803
LL Group # 1417898
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/10/2013 12:50 by VC

Submitted: 09/11/2013 09:25
Reported: 09/24/2013 17:55

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60613 SDG#: PH105-22*

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	1.5	1.1	0.43	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.4 C.		n.a.	8.29	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	8.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201B	09/20/2013 16:56	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201B	09/19/2013 17:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13254039403B	09/11/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13256162401B	09/13/2013 20:58	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417898
Reported: 09/24/13 at 05:55 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13255SLB026	Sample number(s): 7192796-7192799									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	95		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	100		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	98		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	93		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	99		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	90		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	100		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	106		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	110		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	95		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	101		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	104		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	101		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	101		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	98		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	92		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	189*		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	106		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	94		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	91		79-112		
Batch number: 13255B94A	Sample number(s): 7192780									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	115	115	75-135	0	30
Batch number: 13256A34A	Sample number(s): 7192797-7192799									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	79	79	67-119	0	30
Batch number: 132570033A	Sample number(s): 7192796-7192799									
2,4-D	36	U	36.	12	ug/kg	94		59-122		
Dalapon	90	U	90.	44	ug/kg	61		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	94		54-131		
Dicamba	12	U	12.	4.0	ug/kg	83		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	21		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	121		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	82		56-133		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	87		54-134		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417898
Reported: 09/24/13 at 05:55 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	98		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	94		63-130		
Batch number: 132570021A	Sample number(s): 7192796-7192799									
Aldrin	0.83	U	0.83	0.17	ug/kg	96		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	116		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	96		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	110		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	121		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	100		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	107		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	99		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	121		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	112		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	107		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	104		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	109		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	94		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	102		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	113		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	99		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	102		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132570034A	Sample number(s): 7192796-7192799									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	83	84	62-87	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	102		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	106		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132570030A	Sample number(s): 7192796-7192799									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	84		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	103		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	89		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	78		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	70		49-107		
Batch number: 132620637001	Sample number(s): 7192796-7192799									
Aluminum	40.0	U	40.0	7.21	mg/kg	99		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	101		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	98		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	101		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	98		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	102		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417898
Reported: 09/24/13 at 05:55 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Calcium	10.3	J	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	105		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	101		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	99		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	101		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	103		80-120		
Potassium	100	U	100.	8.34	mg/kg	100		80-120		
Sodium	100	U	100.	16.7	mg/kg	99		80-120		
Tin	1.36	J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	99		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	101		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	103		80-120		
Batch number: 132620637001A	Sample number(s): 7192796-7192799									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	104		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	103		80-120		
Batch number: 132620637001B	Sample number(s): 7192796-7192799									
Selenium	0.400	U	0.400	0.100	mg/kg	107		80-120		
Batch number: 132620638001	Sample number(s): 7192796-7192799									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	114		85-120		
Batch number: 13261261202A	Sample number(s): 7192781-7192792									
1a Anions by 300.0-Fluoride	1.0	U	1.0	0.40	mg/kg	106		90-110		
Batch number: 13262262201A	Sample number(s): 7192793-7192802									
1a Anions by 300.0-Fluoride	1.0	U	1.0	0.40	mg/kg	98		90-110		
Batch number: 13262262201B	Sample number(s): 7192803									
1a Anions by 300.0-Fluoride	1.0	U	1.0	0.40	mg/kg	98		90-110		
Batch number: 13254039403A	Sample number(s): 7192781-7192784,7192796-7192800									
15a pH by 9045D						99		95-105		
Batch number: 13254039403B	Sample number(s): 7192801-7192803									
15a pH by 9045D						99		95-105		
Batch number: 13256162401B	Sample number(s): 7192803									
14a Moisture Content by 160.3						100		80-120		
Batch number: 13261162401A	Sample number(s): 7192781-7192789									
14a Moisture Content by 160.3						100		80-120		
Batch number: 13261162401B	Sample number(s): 7192790-7192802									
14a Moisture Content by 160.3						100		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417898
Reported: 09/24/13 at 05:55 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13255003	Sample number(s): 7192796									
2378-TCDD	1.00	U	1.00	0.0854	ng/kg	107		67-158		
12378-PeCDD	5.00	U	5.00	0.0596	ng/kg	101		70-142		
123478-HxCDD	5.00	U	5.00	0.0332	ng/kg	111		70-164		
123678-HxCDD	5.00	U	5.00	0.0340	ng/kg	102		76-134		
123789-HxCDD	5.00	U	5.00	0.0332	ng/kg	102		64-162		
1234678-HpCDD	5.00	U	5.00	0.0452	ng/kg	107		70-140		
OCDD	0.194	J	10.0	0.0505	ng/kg	97		78-144		
2378-TCDF	1.00	U	1.00	0.0751	ng/kg	119		75-158		
12378-PeCDF	5.00	U	5.00	0.0497	ng/kg	104		80-134		
23478-PeCDF	5.00	U	5.00	0.0447	ng/kg	103		68-160		
123478-HxCDF	5.00	U	5.00	0.0275	ng/kg	107		72-134		
123678-HxCDF	5.00	U	5.00	0.0258	ng/kg	103		84-130		
123789-HxCDF	5.00	U	5.00	0.0348	ng/kg	108		78-130		
234678-HxCDF	0.0500	J	5.00	0.0253	ng/kg	109		70-156		
1234678-HpCDF	0.0282	J	5.00	0.0192	ng/kg	103		82-122		
1234789-HpCDF	0.0482	J	5.00	0.0325	ng/kg	99		78-138		
OCDF	0.0941	J	10.0	0.0745	ng/kg	100		63-170		
TEQ WHO 2005 - EDLx0.0	U				ng/kg					

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13255SLB026	Sample number(s): 7192796-7192799 UNSPK: P191082								
Acenaphthene	92	94	48-127	2	30				
Acenaphthylene	96	96	49-121	0	30				
Anthracene	101	94	52-126	8	30				
Benzo(a)anthracene	94	91	44-143	4	30				
Benzo(a)pyrene	97	91	44-140	6	30				
Benzo(b)fluoranthene	118	101	26-142	15	30				
Benzo(e)pyrene	88	84	70-130	5	30				
Benzo(g,h,i)perylene	96	76	33-141	22	30				
Benzo(k)fluoranthene	96	88	54-142	9	30				
Butylbenzylphthalate	112	114	49-151	2	30				
Di-n-butylphthalate	119	117	52-147	2	30				
Chrysene	90	89	29-148	1	30				
Dibenz(a,h)anthracene	102	83	20-137	20	30				
Diethylphthalate	104	104	43-145	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417898
Reported: 09/24/13 at 05:55 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dimethylphthalate	99	99	58-129	1	30				
Bis(2-Ethylhexyl)phthalate	112	115	39-167	3	30				
Fluoranthene	99	97	40-148	1	30				
Fluorene	96	94	51-137	2	30				
Indeno(1,2,3-cd)pyrene	101	82	17-136	20	30				
1-Methylnaphthalene	102	101	50-131	1	30				
2-Methylnaphthalene	102	100	35-152	2	30				
Naphthalene	97	96	31-148	0	30				
N-Nitrosodimethylamine	177*	171*	48-113	3	30				
Di-n-octylphthalate	113	111	52-162	1	30				
Phenanthrene	98	95	29-142	4	30				
Pyrene	88	84	26-143	4	30				
Batch number: 132570033A	Sample number(s): 7192796-7192799 UNSPK: P196426								
2,4-D	70	97	42-143	32	35				
Dalapon	24	49	16-98	67*	50				
2,4-DB	97	140	10-179	37	50				
Dicamba	62	81	55-133	27	50				
Dinoseb	30	38	10-52	26	35				
2,4-DP (Dichlorprop)	111	128	32-171	14	50				
MCPA	93	120	23-169	25	50				
MCPP (Mecoprop)	82	92	24-164	11	50				
2,4,5-T	80	103	12-172	26	35				
2,4,5-TP	87	92	10-142	5	35				
Batch number: 132570021A	Sample number(s): 7192796-7192799 UNSPK: P191082								
Aldrin	101	92	16-126	10	50				
Alpha BHC	116	107	14-140	9	50				
Beta BHC	101	93	42-133	9	50				
Gamma BHC - Lindane	112	101	30-137	10	50				
p,p-DDD	126	115	43-149	9	50				
p,p-DDE	100	130	35-152	24	50				
p,p-DDT	116	119	12-193	3	50				
Delta BHC	95	92	13-153	3	50				
Dieldrin	123	113	41-153	9	50				
Endosulfan I	115	104	26-146	10	50				
Endosulfan II	113	100	34-141	12	50				
Endosulfan Sulfate	109	98	10-181	12	50				
Endrin	117	105	30-152	11	50				
Endrin Aldehyde	98	87	23-138	12	35				
Endrin Ketone	103	91	30-148	13	50				
Heptachlor	118	106	16-152	11	50				
Heptachlor Epoxide	102	93	33-144	8	50				
Methoxychlor	109	102	41-161	7	50				
Batch number: 132570034A	Sample number(s): 7192796-7192799 UNSPK: P191082								
PCB-1016	87	89	41-135	4	50				
PCB-1260	88	93	40-134	7	50				
Batch number: 132570030A	Sample number(s): 7192796-7192799 UNSPK: P191082								
EFH (C12-C14)	96	96	49-123	0	20				
EFH (C15-C20)	145*	182*	49-123	22*	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417898
Reported: 09/24/13 at 05:55 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
EFH (C21-C30)	127*	273*	49-123	46*	20				
EFH (C30-C40)	127*	384*	49-123	57*	20				
EFH (C8-C11)	89	83	49-123	8	20				
Batch number: 132620637001	Sample number(s): 7192796-7192799 UNSPK: P196426 BKG: P196426								
Aluminum	2099 (2)	2459 (2)	75-125	4	20	15,600	15,700	1	20
Antimony	41*	43*	75-125	5	20	3.96 U	3.96 U	0 (1)	20
Arsenic	95	98	75-125	2	20	3.41 J	3.38 J	1 (1)	20
Barium	96	99	75-125	2	20	81.0	81.3	0	20
Beryllium	99	100	75-125	1	20	0.625 J	0.622 J	0 (1)	20
Boron	96	97	75-125	1	20	3.67 J	3.72 J	1 (1)	20
Cadmium	92	93	75-125	1	20	0.316 J	0.353 J	11 (1)	20
Calcium	205 (2)	229 (2)	75-125	2	20	4,390	4,430	1	20
Chromium	110	113	75-125	1	20	28.7	28.4	1	20
Cobalt	90	90	75-125	0	20	6.36	6.21	2	20
Copper	100	102	75-125	1	20	10.6	11.0	4	20
Iron	658 (2)	1662 (2)	75-125	4	20	24,100	24,300	1	20
Lead	92	89	75-125	2	20	9.95	9.97	0 (1)	20
Lithium	99	101	75-125	2	20	21.3	21.7	2	20
Magnesium	229 (2)	334 (2)	75-125	4	20	5,300	5,370	1	20
Manganese	82 (2)	96 (2)	75-125	2	20	353	345	2	20
Molybdenum	92	93	75-125	1	20	0.355 J	0.360 J	1 (1)	20
Nickel	94	94	75-125	0	20	11.4	11.6	2	20
Phosphorus	89 (2)	107 (2)	75-125	3	20	578	582	1	20
Potassium	142 (2)	166 (2)	75-125	4	20	4,620	4,690	1	20
Sodium	96	98	75-125	2	20	77.8 J	78.7 J	1 (1)	20
Tin	86	86	75-125	1	20	2.61 J	2.69 J	3 (1)	20
Titanium	426 (2)	501 (2)	75-125	5	20	1,030	1,030	1	20
Vanadium	103	108	75-125	3	20	50.7	50.6	0	20
Zinc	97	101	75-125	2	20	59.4	60.2	1	20
Zirconium	92	93	75-125	1	20	6.01	6.15	2 (1)	20
Batch number: 132620637001A	Sample number(s): 7192796-7192799 UNSPK: P196426 BKG: P196426								
Silver	115	126*	75-125	9	20	0.0269 J	0.0287 J	7 (1)	20
Strontium	134*	182*	75-125	10	20	26.3	28.8	9	20
Thallium	112	131*	75-125	10	20	0.273	0.304	11 (1)	20
Batch number: 132620637001B	Sample number(s): 7192796-7192799 UNSPK: P196426 BKG: P196426								
Selenium	102	106	75-125	3	20	0.229 J	0.259 J	12 (1)	20
Batch number: 132620638001	Sample number(s): 7192796-7192799 UNSPK: P196426 BKG: P196426								
3a Mercury 7471A	108	106	65-135	1	20	0.0202	0.0186	8 (1)	20
Batch number: 13261261202A	Sample number(s): 7192781-7192792 UNSPK: 7192790 BKG: 7192790								
1a Anions by 300.0-Fluoride	65*		80-120			2.7	3.5	24* (1)	20
Batch number: 13262262201A	Sample number(s): 7192793-7192802 UNSPK: 7192793 BKG: 7192793								
1a Anions by 300.0-Fluoride	70*		80-120			1.3	1.5	19 (1)	20
Batch number: 13262262201B	Sample number(s): 7192803 UNSPK: 7192803 BKG: 7192803								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417898
Reported: 09/24/13 at 05:55 PM

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1a Anions by 300.0-Fluoride	77*		80-120			1.3	1.6	20 (1)	20
Batch number: 13254039403A	Sample number(s): 7192781-7192784,7192796-7192800 BKG: 7192781								
15a pH by 9045D						8.22	8.21	0	3
Batch number: 13254039403B	Sample number(s): 7192801-7192803 BKG: 7192803								
15a pH by 9045D						8.29	8.27	0	3
Batch number: 13256162401B	Sample number(s): 7192803 BKG: 7192803								
14a Moisture Content by 160.3						8.4	8.8	4	20
Batch number: 13261162401A	Sample number(s): 7192781-7192789 BKG: 7192782								
14a Moisture Content by 160.3						11.5	12.4	8	20
Batch number: 13261162401B	Sample number(s): 7192790-7192802 BKG: 7192790								
14a Moisture Content by 160.3						13.9	13.7	2	20
14a Moisture Content by 160.3						13.9	13.7	2	20
14a Moisture Content by 160.3						13.9	13.7	2	20
Batch number: 13255003	Sample number(s): 7192796 UNSPK: P191082								
2378-TCDD	87	86	40-135	1	20				
12378-PeCDD	96	96	40-135	0	20				
123478-HxCDD	98	99	40-135	1	20				
123678-HxCDD	99	97	40-135	2	20				
123789-HxCDD	97	94	40-135	3	20				
1234678-HpCDD	96	98	40-135	2	20				
OCDD	99	107	40-135	7	20				
2378-TCDF	96	94	40-135	3	20				
12378-PeCDF	94	95	40-135	1	20				
23478-PeCDF	95	99	40-135	3	20				
123478-HxCDF	102	100	40-135	3	20				
123678-HxCDF	98	102	40-135	3	20				
123789-HxCDF	97	96	40-135	1	20				
234678-HxCDF	100	98	40-135	3	20				
1234678-HpCDF	99	99	40-135	1	20				
1234789-HpCDF	99	100	40-135	0	20				
OCDF	100	99	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13255SLB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7192796	87	91	105

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1417898
Reported: 09/24/13 at 05:55 PM

Surrogate Quality Control

7192797	93	101	109
7192798	94	101	110
7192799	95	103	111
Blank	96	108	115
LCS	96	106	114
MS	93	98	108
MSD	90	94	109
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13255B94A

	Trifluorotoluene-F
7192780	72
Blank	72
LCS	79
LCSD	80
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13256A34A

	Trifluorotoluene-F
7192797	82
7192798	81
7192799	83
Blank	95
LCS	91
LCSD	90
Limits:	50-142

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132570021A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7192796	105	101
7192797	91	93
7192798	94	95
7192799	96	97
Blank	97	101
LCS	104	112
MS	105	111
MSD	98	100
Limits:	50-130	20-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132570033A

	2,4-Dichlorophenylacetic acid
7192796	56
7192797	52

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Quality Control Summary

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Reported: 09/24/13 at 05:55 PM

Surrogate Quality Control

7192798	53
7192799	58
Blank	54
LCS	62
MS	59
MSD	62
Limits:	50-150

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132570034A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7192796	96	84
7192797	103	92
7192798	102	95
7192799	116	100
Blank	109	98
LCS	112	103
LCSD	111	105
MS	94	85
MSD	98	87
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132570030A

	Chlorobenzene	Orthoterphenyl
7192796	102	88
7192797	115	91
7192798	109	87
7192799	114	94
Blank	112	95
LCS	101	86
MS	116	97
MSD	114	90
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13255003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7192796	59	55	61	67	67	63
Blank	60	61	60	69	68	64
MS	68	72	65	72	71	70
MSD	64	61	66	72	75	72
OPR	81	103	79	82	82	76
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7192796	77	57	49	66	71	78
Blank	78	59	49	74	70	80

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Surrogate Quality Control

MS	83	68	55	82	77	82
MSD	76	63	54	69	76	81
OPR	99	74	74	114	83	88
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7192796	78	75	62	47	57
Blank	79	73	63	47	59
MS	82	84	67	55	73
MSD	82	79	65	55	63
OPR	87	89	91	87	113
Limits:	28-130	23-140	17-157	24-169	24-185

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SSFL Phase 3 Chain of Custody

13013 1417898 7192780-803

CDM Smith

DateShipped: 9/10/2013
CarrierName: FedEx
AirbillNo: 796656512929

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130910-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-091013	9/10/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-603-SA5D-SB-0.0-0.5	9/10/13 10:10	SO	None	1 - SS-Sleeve	10 day				X																											
SL-603-SA5D-SB-0.0-0.5	9/10/13 10:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-603-SA5D-SB-4.0-5.0	9/10/13 10:20	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-603-SA5D-SB-9.0-10.0	9/10/13 10:30	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-603-SA5D-SB-13.0-14.0	9/10/13 10:40	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-604-SA5D-SB-0.0-0.5	9/10/13 08:55	SO	None	1 - SS-Sleeve	10 day				X																											
SL-604-SA5D-SB-4.0-5.0	9/10/13 09:05	SO	None	1 - 8 oz glass	10 day				X																											
SL-604-SA5D-SB-9.0-10.0	9/10/13 09:15	SO	None	1 - 8 oz glass	10 day				X																											
SL-604-SA5D-SB-16.5-17.5	9/10/13 09:25	SO	None	1 - 8 oz glass	10 day				X																											
SL-605-SA5D-SB-0.0-0.5	9/10/13 07:45	SO	None	1 - SS-Sleeve	10 day				X																											
SL-605-SA5D-SB-4.0-5.0MS	9/10/13 07:55	SO	None	1 - 8 oz glass	10 day				X																											MS/MSD
SL-605-SA5D-SB-4.0-5.0MS	9/10/13 07:55	SO	None	1 - 16 oz glass	10 day				X																											MS/MSD
SL-905-SA5D-SB-4.0-5.0	9/10/13 08:00	SO	None	1 - 8 oz glass	10 day				X																											
SL-605-SA5D-SB-9.0-10.0	9/10/13 08:05	SO	None	1 - 8 oz glass	10 day				X																											
SL-605-SA5D-SB-14.5-15.5	9/10/13 08:15	SO	None	1 - 8 oz glass	10 day				X																											
SL-518-SA5D-SB-0.0-0.5	9/10/13 13:20	SO	None	2 - SS-Sleeve	10 day	X	X		X			X		X	X						X	X			X											
SL-518-SA5D-SB-0.0-0.5	9/10/13 13:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-518-SA5D-SB-4.0-5.0	9/10/13 13:30	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X			X			X	X			X											
SL-518-SA5D-SB-4.0-5.0	9/10/13 13:30	SO	None	2 - Encore	10 day																			X												
SL-518-SA5D-SB-9.0-10.0	9/10/13 13:40	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X			X			X	X			X											
SL-518-SA5D-SB-9.0-10.0	9/10/13 13:40	SO	None	2 - Encore	10 day																			X												
SL-518-SA5D-SB-15.0-16.0	9/10/13 13:50	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X			X			X	X			X											
SL-518-SA5D-SB-15.0-16.0	9/10/13 13:50	SO	None	2 - Encore	10 day																			X												
SL-606-SA5D-SB-0.0-0.5	9/10/13 12:20	SO	None	1 - SS-Sleeve	10 day				X																											
SL-606-SA5D-SB-0.0-0.5	9/10/13 12:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-606-SA5D-SB-4.0-5.0	9/10/13 12:30	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-606-SA5D-SB-9.0-10.0	9/10/13 12:40	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-606-SA5D-SB-13.0-14.0	9/10/13 12:50	SO	None	1 - 8 oz glass	10 day				X									X																		

13013 1417898 7192780-803

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/10/2013
CarrierName: FedEx
AirbillNo: 796656512929

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130910-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Pesticides 8081	Herbicides 8151	Terphenyls 8015	Alcohols 8015	Glycols 8015	TPH-EFH 8015	TPH-GRO 8015	1,4 Dioxane 8260 SIM	VOCs 8260	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Costa

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	9/10/2013	1600									
									Brandy Barely	9.11.13	925

COC Rev 2

COC 20130910-01, Page 2 of 2

2 of 2

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1417898

Client/Project: CDM

Date of Receipt: 9.11.13

Time of Receipt: 925

Source Code: SO-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	5.0	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Barclay 2299 **Date/Time:** 9.11.13 954

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH106

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 27, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/12/2013
Group Number: 1418268
SDG: PH106
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB-091113 Water	7194439
TB-091113 Water	7194440
SL-519-SA5D-SB-0.0-0.5 Soil	7194441
SL-519-SA5D-SB-4.0-5.0 Soil	7194442
SL-520-SA5D-SB-0.0-0.5 Soil	7194443
SL-520-SA5D-SB-4.0-5.0 Soil	7194444
SL-520-SA5D-SB-8.0-9.0 Soil	7194445
SL-521-SA5D-SB-0.0-0.5 Soil	7194446
SL-521-SA5D-SB-5.5-6.5 Soil	7194447
SL-522-SA5D-SB-0.0-0.5 Soil	7194448
SL-522-SA5D-SB-6.0-7.0 Soil	7194449
SL-506-SA5D-SB-0.0-0.5 Soil	7194450
SL-506-SA5D-SB-4.0-5.0 Soil	7194451
SL-523-SA5D-SB-0.0-0.5 Soil	7194452
SL-529-SA5D-SB-0.0-0.5 Soil	7194453
SL-529-SA5D-SB-3.0-4.0 Soil	7194454

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

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: EB-091113 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7194439
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 15:00 by PH

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB911 SDG#: PH106-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.20	J	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.24	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.21	J	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.051	U	0.051	0.010	1
12971	Naphthalene	91-20-3	0.038	J	0.051	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.031	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.49	U	0.49	0.16	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.25	1
10407	2,4-DB	94-82-6	0.99	U	0.99	0.30	1
10407	Dicamba	1918-00-9	0.30	U	0.30	0.079	1
10407	Dinoseb	88-85-7	0.49	U	0.49	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.49	U	0.49	0.16	1
10407	MCPA	94-74-6	200	U	200	49	1
10407	MCPP	93-65-2	200	U	200	49	1
10407	2,4,5-T	93-76-5	0.049	U	0.049	0.015	1
10407	2,4,5-TP	93-72-1	0.049	U	0.049	0.0099	1
Perchlorate	**SW-846 6850 1/2007**		**ug/l**		**ug/l**	**ug/l**	
06386	6b Perchlorate (Method 6850)	14797-73-0	1.0	U	1.0	0.20	1

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

Sample Description: EB-091113 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7194439
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 15:00 by PH

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB911 SDG#: PH106-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0083	U	0.0083	0.0017	1
10589	Alpha BHC	319-84-6	0.0083	U	0.0083	0.0025	1
10589	Beta BHC	319-85-7	0.0083	U	0.0083	0.0028	1
10589	Gamma BHC - Lindane	58-89-9	0.0083	U	0.0083	0.0017	1
10589	Chlordane	57-74-9	0.41	U	0.41	0.13	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0041	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0041	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0043	1
10589	Delta BHC	319-86-8	0.0083	U	0.0083	0.0028	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0044	1
10589	Endosulfan I	959-98-8	0.0083	U	0.0083	0.0036	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.012	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0048	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0067	1
10589	Endrin Aldehyde	7421-93-4	0.083	U	0.083	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0041	1
10589	Heptachlor	76-44-8	0.0083	U	0.0083	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0083	U	0.0083	0.0019	1
10589	Methoxychlor	72-43-5	0.083	U	0.083	0.025	1
10589	Mirex	2385-85-5	0.21	U	0.21	0.070	1
10589	Toxaphene	8001-35-2	2.5	U	2.5	0.83	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.41	U	0.41	0.083	1
13092	Aroclor 5442	12642-23-8	0.41	U	0.41	0.083	1
13092	Aroclor 5460	11126-42-4	0.41	U	0.41	0.091	1
13092	PCB-1016	12674-11-2	0.41	U	0.41	0.083	1
13092	PCB-1221	11104-28-2	0.41	U	0.41	0.083	1
13092	PCB-1232	11141-16-5	0.41	U	0.41	0.17	1
13092	PCB-1242	53469-21-9	0.41	U	0.41	0.083	1
13092	PCB-1248	12672-29-6	0.41	U	0.41	0.083	1
13092	PCB-1254	11097-69-1	0.41	U	0.41	0.083	1
13092	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
13092	PCB-1262	37324-23-5	0.41	U	0.41	0.17	1
13092	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C15-C20)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C21-C30)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C30 - C40)	n.a.	0.48	U	0.48	0.097	1
10365	EFH (C8-C11)	n.a.	0.097	U	0.097	0.048	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1

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

Sample Description: EB-091113 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7194439
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 15:00 by PH

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB911 SDG#: PH106-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0040 J	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0019 J	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0087 J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	
01504	1b Anions by 300.0-Fluoride	16984-48-8	0.10 U	0.10	0.080	1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.2	0.010	0.010	1

The sample was analyzed 3 hours and 36 minutes oustide of the 48 hour holding time for pH.

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

Sample Description: EB-091113 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7194439
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 15:00 by PH

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB911 SDG#: PH106-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.813	JQ	1.92	0.458	1
10915	12378-PeCDD	40321-76-4	2.30	JQ	9.62	0.525	1
10915	123478-HxCDD	39227-28-6	1.49	JQ	9.62	0.387	1
10915	123678-HxCDD	57653-85-7	1.68	JQ	9.62	0.385	1
10915	123789-HxCDD	19408-74-3	1.48	JQ	9.62	0.221	1
10915	1234678-HpCDD	35822-46-9	1.74	JQ	9.62	0.272	1
10915	OCDD	3268-87-9	2.74	J	19.2	0.245	1
10915	2378-TCDF	51207-31-9	1.92	U	1.92	0.441	1
10915	12378-PeCDF	57117-41-6	1.67	JQ	9.62	0.248	1
10915	23478-PeCDF	57117-31-4	1.79	JQ	9.62	0.309	1
10915	123478-HxCDF	70648-26-9	2.00	JQ	9.62	0.351	1
10915	123678-HxCDF	57117-44-9	1.83	JQ	9.62	0.342	1
10915	123789-HxCDF	72918-21-9	0.931	JQ	9.62	0.169	1
10915	234678-HxCDF	60851-34-5	1.37	JQ	9.62	0.222	1
10915	1234678-HpCDF	67562-39-4	1.63	JQ	9.62	0.157	1
10915	1234789-HpCDF	55673-89-7	0.942	J	9.62	0.122	1
10915	OCDF	39001-02-0	2.98	J	19.2	0.382	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0111				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	50	25 - 181
13C12-123478-HxCDD	36	32 - 141
13C12-123678-HxCDD	38	28 - 130
13C12-123789-HxCDD	59	28 - 130
13C12-1234678-HpCDD	53	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	58	24 - 185
13C12-23478-PeCDF	46	21 - 178
13C12-123478-HxCDF	32	26 - 152
13C12-123678-HxCDF	33	26 - 123
13C12-234678-HxCDF	48	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	39	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	51	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: EB-091113 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7194439
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 15:00 by PH

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB911 SDG#: PH106-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: EB-091113 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7194439
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 15:00 by PH

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB911 SDG#: PH106-01EB

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13257WAM026	09/23/2013 13:49	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13257WAM026	09/16/2013 11:30	Kelli M Barto	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13255B94A	09/16/2013 12:50	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13255B94A	09/16/2013 12:50	Catherine J Schwarz	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132570020A	09/22/2013 03:23	Melissa McDermott	1
06386	6b Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132610031A	09/18/2013 22:46	Jessica L Miller	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132600003A	09/18/2013 21:34	Jamie L Brillhart	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132600005A	09/18/2013 01:45	Jessica L Miller	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132600005A	09/17/2013 12:15	Kelli M Barto	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132600003A	09/17/2013 12:15	Kelli M Barto	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132570020A	09/16/2013 15:00	Seth A Farrier	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570005A	09/17/2013 19:22	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132570005A	09/15/2013 09:20	Kelli M Barto	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13266001	09/25/2013 03:44	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	2	13266001	09/23/2013 09:00	Brett M Weidman	1
01743	Aluminum	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07052	Cobalt	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
01756	Lithium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1

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

Sample Description: EB-091113 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7194439
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 15:00 by PH

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB911 SDG#: PH106-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07060	Molybdenum	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07061	Nickel	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
10143	Phosphorus	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
07072	Zinc	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	132610635001	09/19/2013 17:02	Katlin N Cataldi	1
06041	Selenium	SW-846 6020A	1	132610639001B	09/23/2013 04:38	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	132610639001A	09/23/2013 04:38	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	132610639001A	09/23/2013 04:38	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	132610639001A	09/23/2013 04:38	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	132585713004	09/17/2013 07:51	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132610635001	09/19/2013 09:40	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132610639001	09/19/2013 09:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132585713004	09/16/2013 17:30	Nelli S Markaryan	1
01504	1b Anions by 300.0-Fluoride	EPA 300.0	1	13263347601C	09/20/2013 12:12	Christopher D Meeks	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13255987301A	09/12/2013 13:50	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13256002105A	09/13/2013 21:36	Michele L Graham	1

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

Sample Description: TB-091113 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7194440
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:00

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB911 SDG#: PH106-02TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13255B94A	09/16/2013 13:15	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13255B94A	09/16/2013 13:15	Catherine J Schwarz	1

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

Sample Description: SL-519-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194441
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 07:40 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH106-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.4	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.7	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.2	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.4	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	0.94	J	1.8	0.72	1
12969	Pyrene	129-00-0	0.98	J	1.8	0.72	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.1	J	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	9.8	J	11	4.3	1
12952	EFH (C8-C11)	n.a.	2.2	J	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-519-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194441
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 07:40 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH106-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,700		42.8	7.71	1
06944	Antimony	7440-36-0	1.04	J	4.28	0.791	1
06935	Arsenic	7440-38-2	5.52		4.28	0.748	1
06946	Barium	7440-39-3	133		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.938	J	1.07	0.0716	1
07914	Boron	7440-42-8	15.7		10.7	0.898	1
06949	Cadmium	7440-43-9	0.628	J	1.07	0.0813	1
01650	Calcium	7440-70-2	6,860		21.4	3.57	1
06951	Chromium	7440-47-3	35.7		3.21	0.171	1
06952	Cobalt	7440-48-4	10.1		1.07	0.106	1
06953	Copper	7440-50-8	18.7		2.14	0.310	1
01654	Iron	7439-89-6	33,700		85.5	7.74	2
06955	Lead	7439-92-1	10.8		3.21	0.535	1
01656	Lithium	7439-93-2	23.8		4.3	0.36	1
01657	Magnesium	7439-95-4	6,990		10.7	1.79	1
06958	Manganese	7439-96-5	523		1.07	0.0887	1
06960	Molybdenum	7439-98-7	0.280	J	2.14	0.182	1
06961	Nickel	7440-02-0	21.3		2.14	0.139	1
10145	Phosphorus	7723-14-0	462		10.7	3.09	1
01662	Potassium	7440-09-7	6,330		107	8.92	1
01667	Sodium	7440-23-5	87.6	J	107	17.9	1
06969	Tin	7440-31-5	3.49	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,310		1.07	0.182	1
06971	Vanadium	7440-62-2	65.7		1.07	0.139	1
06972	Zinc	7440-66-6	79.0		4.28	0.214	1
10146	Zirconium	7440-67-7	4.49	J	5.35	0.898	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.243	J	0.428	0.107	2
06142	Silver	7440-22-4	0.0463	J	0.214	0.0278	2
06144	Strontium	7440-24-6	32.9		0.428	0.0727	2
06145	Thallium	7440-28-0	0.385		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0180	U	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.08		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-519-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194441
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 07:40 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH106-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.162	1
11031	12378-PeCDD	40321-76-4	0.185	JBQ	5.32	0.115	1
11031	123478-HxCDD	39227-28-6	5.32	U	5.32	0.0616	1
11031	123678-HxCDD	57653-85-7	0.342	J	5.32	0.0654	1
11031	123789-HxCDD	19408-74-3	0.506	JB	5.32	0.0628	1
11031	1234678-HpCDD	35822-46-9	1.03	JBQ	5.32	0.0912	1
11031	OCDD	3268-87-9	12.5	B	10.6	0.0733	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.150	1
11031	12378-PeCDF	57117-41-6	0.345	JBQ	5.32	0.0592	1
11031	23478-PeCDF	57117-31-4	5.32	U	5.32	0.0621	1
11031	123478-HxCDF	70648-26-9	0.0548	J	5.32	0.0477	1
11031	123678-HxCDF	57117-44-9	0.0606	JBQ	5.32	0.0434	1
11031	123789-HxCDF	72918-21-9	0.727	JB	5.32	0.0526	1
11031	234678-HxCDF	60851-34-5	0.0469	JQ	5.32	0.0420	1
11031	1234678-HpCDF	67562-39-4	0.212	JB	5.32	0.0238	1
11031	1234789-HpCDF	55673-89-7	5.32	U	5.32	0.0441	1
11031	OCDF	39001-02-0	0.508	JB	10.6	0.0986	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.169				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	55	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-519-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194441
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 07:40 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH106-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-519-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194441
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 07:40 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH106-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/17/2013 07:41	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 09:27	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132610010A	09/19/2013 21:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132610010A	09/18/2013 23:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 05:51	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 07:16	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 15:58	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:32	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:32	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:32	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:32	Choon Y Tian	2

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

Sample Description: SL-519-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194441
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 07:40 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH106-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402A	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401A	09/19/2013 23:12	Scott W Freisher	1

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

Sample Description: SL-519-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194442
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:00 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51940 SDG#: PH106-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20.06
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1

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

Sample Description: SL-519-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194442
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:00 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51940 SDG#: PH106-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,900		44.3	7.99	1
06944	Antimony	7440-36-0	0.850	J	4.43	0.820	1
06935	Arsenic	7440-38-2	5.72		4.43	0.775	1
06946	Barium	7440-39-3	145		1.11	0.0366	1
06947	Beryllium	7440-41-7	1.03	J	1.11	0.0742	1
07914	Boron	7440-42-8	16.5		11.1	0.931	1
06949	Cadmium	7440-43-9	0.417	J	1.11	0.0842	1
01650	Calcium	7440-70-2	9,650		22.2	3.70	1
06951	Chromium	7440-47-3	39.3		3.32	0.177	1
06952	Cobalt	7440-48-4	10.5		1.11	0.110	1
06953	Copper	7440-50-8	16.7		2.22	0.321	1
01654	Iron	7439-89-6	37,000		88.6	8.02	2
06955	Lead	7439-92-1	10.6		3.32	0.554	1
01656	Lithium	7439-93-2	28.8		4.4	0.38	1
01657	Magnesium	7439-95-4	8,080		11.1	1.85	1
06958	Manganese	7439-96-5	452		1.11	0.0919	1
06960	Molybdenum	7439-98-7	2.22	U	2.22	0.188	1
06961	Nickel	7440-02-0	22.2		2.22	0.144	1
10145	Phosphorus	7723-14-0	379		11.1	3.20	1
01662	Potassium	7440-09-7	4,100		111	9.24	1
01667	Sodium	7440-23-5	134		111	18.5	1
06969	Tin	7440-31-5	4.04	J	11.1	0.244	1
06970	Titanium	7440-32-6	1,270		1.11	0.188	1
06971	Vanadium	7440-62-2	71.6		1.11	0.144	1
06972	Zinc	7440-66-6	78.5		4.43	0.222	1
10146	Zirconium	7440-67-7	3.54	J	5.54	0.931	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.127	J	0.443	0.111	2
06142	Silver	7440-22-4	0.0493	J	0.222	0.0288	2
06144	Strontium	7440-24-6	39.7		0.443	0.0753	2
06145	Thallium	7440-28-0	0.369		0.222	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.01		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.2		0.10	0.10	1

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

Sample Description: SL-519-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194442
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:00 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51940 SDG#: PH106-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/19/2013 10:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 19:10	Laura M Krieger	20.06
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325532372	09/12/2013 11:26	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325532372	09/12/2013 11:26	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 10:22	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/23/2013 20:40	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 07:20	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1

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

Sample Description: SL-519-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194442
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:00 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51940 SDG#: PH106-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:02	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:34	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:34	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:34	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:34	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402A	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401A	09/19/2013 23:12	Scott W Freisher	1

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

Sample Description: SL-520-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194443
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:50 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH106-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.0	J	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.93	U	0.93	0.19	1
10590	Alpha BHC	319-84-6	0.93	U	0.93	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.93	U	0.93	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.93	U	0.93	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.93	U	0.93	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.93	U	0.93	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.93	U	0.93	0.19	1
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1

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

Sample Description: SL-520-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194443
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:50 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH106-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.8		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	12		11	4.5	1
12952	EFH (C8-C11)	n.a.	2.9	J	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,100		44.3	7.99	1
06944	Antimony	7440-36-0	1.16	J	4.43	0.820	1
06935	Arsenic	7440-38-2	5.50		4.43	0.775	1
06946	Barium	7440-39-3	152		1.11	0.0365	1
06947	Beryllium	7440-41-7	1.04	J	1.11	0.0742	1
07914	Boron	7440-42-8	14.8		11.1	0.930	1
06949	Cadmium	7440-43-9	0.495	J	1.11	0.0842	1
01650	Calcium	7440-70-2	6,560		22.1	3.70	1
06951	Chromium	7440-47-3	37.2		3.32	0.177	1
06952	Cobalt	7440-48-4	10.3		1.11	0.110	1
06953	Copper	7440-50-8	16.1		2.21	0.321	1
01654	Iron	7439-89-6	36,200		88.6	8.02	2
06955	Lead	7439-92-1	10.5		3.32	0.554	1
01656	Lithium	7439-93-2	24.9		4.4	0.38	1
01657	Magnesium	7439-95-4	7,130		11.1	1.85	1
06958	Manganese	7439-96-5	468		1.11	0.0919	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	21.6		2.21	0.144	1
10145	Phosphorus	7723-14-0	362		11.1	3.20	1
01662	Potassium	7440-09-7	4,610		111	9.24	1
01667	Sodium	7440-23-5	102	J	111	18.5	1
06969	Tin	7440-31-5	3.69	J	11.1	0.244	1
06970	Titanium	7440-32-6	1,290		1.11	0.188	1
06971	Vanadium	7440-62-2	68.3		1.11	0.144	1
06972	Zinc	7440-66-6	79.8		4.43	0.221	1
10146	Zirconium	7440-67-7	4.08	J	5.54	0.930	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-520-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194443
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:50 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH106-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.274 J	0.443	0.111	2
06142	Silver	7440-22-4	0.0488 J	0.221	0.0288	2
06144	Strontium	7440-24-6	33.7	0.443	0.0753	2
06145	Thallium	7440-28-0	0.366	0.221	0.0332	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0178 U	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.63	0.0100	0.0100	1
	The pH was measured in water at 21.6 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.6	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-520-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194443
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:50 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH106-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.11	U	1.11	0.129	1
11031	12378-PeCDD	40321-76-4	5.55	U	5.55	0.0895	1
11031	123478-HxCDD	39227-28-6	5.55	U	5.55	0.0538	1
11031	123678-HxCDD	57653-85-7	0.0786	JQ	5.55	0.0573	1
11031	123789-HxCDD	19408-74-3	0.278	JBQ	5.55	0.0565	1
11031	1234678-HpCDD	35822-46-9	0.465	JB	5.55	0.0607	1
11031	OCDD	3268-87-9	4.19	JBQ	11.1	0.0730	1
11031	2378-TCDF	51207-31-9	1.11	U	1.11	0.109	1
11031	12378-PeCDF	57117-41-6	0.128	JBQ	5.55	0.0483	1
11031	23478-PeCDF	57117-31-4	5.55	U	5.55	0.0497	1
11031	123478-HxCDF	70648-26-9	0.0571	JQ	5.55	0.0453	1
11031	123678-HxCDF	57117-44-9	5.55	U	5.55	0.0407	1
11031	123789-HxCDF	72918-21-9	0.413	JB	5.55	0.0492	1
11031	234678-HxCDF	60851-34-5	5.55	U	5.55	0.0404	1
11031	1234678-HpCDF	67562-39-4	0.109	JB	5.55	0.0195	1
11031	1234789-HpCDF	55673-89-7	5.55	U	5.55	0.0381	1
11031	OCDF	39001-02-0	0.158	JBQ	11.1	0.101	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0471				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	47	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-520-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194443
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:50 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH106-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-520-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194443
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:50 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH106-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/19/2013 11:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 15:53	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 10:40	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132610010A	09/20/2013 00:07	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132610010A	09/18/2013 23:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 06:48	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 07:24	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:06	Katlin N Cataldi	1

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

Sample Description: SL-520-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194443
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 08:50 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH106-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:37	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:37	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:37	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:37	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402A	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401A	09/19/2013 23:12	Scott W Freisher	1

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

Sample Description: SL-520-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194444
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:00 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52040 SDG#: PH106-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.79	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.79	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.79	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.79	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.79	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.79	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.1	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.1	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.79	1
12969	Diethylphthalate	84-66-2	21	U	21	7.1	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.1	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.79	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.79	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.79	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.79	1
12969	2-Methylnaphthalene	91-57-6	2.0	U	2.0	0.79	1
12969	Naphthalene	91-20-3	1.0	J	2.0	0.79	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.79	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.1	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.79	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.79	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	22.89
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.99	U	0.99	0.20	1
10590	Alpha BHC	319-84-6	0.99	U	0.99	0.20	1
10590	Beta BHC	319-85-7	2.3	U	2.3	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.99	U	0.99	0.20	1
10590	Chlordane	57-74-9	20	U	20	4.8	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.42	1
10590	Delta BHC	319-86-8	0.99	U	0.99	0.53	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.99	U	0.99	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.71	1
10590	Heptachlor	76-44-8	0.99	U	0.99	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.99	U	0.99	0.20	1

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

Sample Description: SL-520-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194444
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:00 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52040 SDG#: PH106-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	8.0	U	8.0	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.42	1
10590	Toxaphene	8001-35-2	39	U	39	17	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.9	1
10592	PCB-1242	53469-21-9	20	U	20	4.9	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.2	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C15-C20)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C21-C30)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.9	U	5.9	2.4	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,600		47.0	8.48	1
06944	Antimony	7440-36-0	1.21	J	4.70	0.870	1
06935	Arsenic	7440-38-2	6.39		4.70	0.823	1
06946	Barium	7440-39-3	127		1.18	0.0388	1
06947	Beryllium	7440-41-7	0.958	J	1.18	0.0788	1
07914	Boron	7440-42-8	16.6		11.8	0.988	1
06949	Cadmium	7440-43-9	0.600	J	1.18	0.0894	1
01650	Calcium	7440-70-2	7,820		23.5	3.93	1
06951	Chromium	7440-47-3	37.1		3.53	0.188	1
06952	Cobalt	7440-48-4	10.7		1.18	0.116	1
06953	Copper	7440-50-8	16.2		2.35	0.341	1
01654	Iron	7439-89-6	35,500		94.1	8.51	2
06955	Lead	7439-92-1	10.4		3.53	0.588	1
01656	Lithium	7439-93-2	28.1		4.7	0.40	1
01657	Magnesium	7439-95-4	7,670		11.8	1.96	1
06958	Manganese	7439-96-5	496		1.18	0.0976	1
06960	Molybdenum	7439-98-7	2.35	U	2.35	0.200	1
06961	Nickel	7440-02-0	22.8		2.35	0.153	1
10145	Phosphorus	7723-14-0	459		11.8	3.40	1
01662	Potassium	7440-09-7	3,550		118	9.81	1
01667	Sodium	7440-23-5	167		118	19.6	1
06969	Tin	7440-31-5	3.91	J	11.8	0.259	1
06970	Titanium	7440-32-6	1,350		1.18	0.200	1

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

Sample Description: SL-520-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194444
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:00 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52040 SDG#: PH106-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	69.1	1.18	0.153	1
06972	Zinc	7440-66-6	74.9	4.70	0.235	1
10146	Zirconium	7440-67-7	3.92 J	5.88	0.988	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.470 U	0.470	0.118	2
06142	Silver	7440-22-4	0.0489 J	0.235	0.0306	2
06144	Strontium	7440-24-6	37.7	0.470	0.0800	2
06145	Thallium	7440-28-0	0.355	0.235	0.0353	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0193 U	0.0193	0.0116	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.14	0.0100	0.0100	1
	The pH was measured in water at 21.6 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	15.8	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-520-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194444
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:00 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52040 SDG#: PH106-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.14	U	1.14	0.160	1
11031	12378-PeCDD	40321-76-4	5.69	U	5.69	0.117	1
11031	123478-HxCDD	39227-28-6	5.69	U	5.69	0.0512	1
11031	123678-HxCDD	57653-85-7	5.69	U	5.69	0.0567	1
11031	123789-HxCDD	19408-74-3	5.69	U	5.69	0.0529	1
11031	1234678-HpCDD	35822-46-9	0.142	JBQ	5.69	0.0533	1
11031	OCDD	3268-87-9	0.674	JBQ	11.4	0.0591	1
11031	2378-TCDF	51207-31-9	0.172	JQ	1.14	0.144	1
11031	12378-PeCDF	57117-41-6	5.69	U	5.69	0.0581	1
11031	23478-PeCDF	57117-31-4	0.0597	JQ	5.69	0.0590	1
11031	123478-HxCDF	70648-26-9	5.69	U	5.69	0.0439	1
11031	123678-HxCDF	57117-44-9	5.69	U	5.69	0.0391	1
11031	123789-HxCDF	72918-21-9	5.69	U	5.69	0.0492	1
11031	234678-HxCDF	60851-34-5	5.69	U	5.69	0.0382	1
11031	1234678-HpCDF	67562-39-4	0.0418	JBQ	5.69	0.0230	1
11031	1234789-HpCDF	55673-89-7	5.69	U	5.69	0.0391	1
11031	OCDF	39001-02-0	0.284	JBQ	11.4	0.105	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	U				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	54	17 - 157
13C12-2378-TCDF	44	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	52	26 - 138
13C12-OCDF	43	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-520-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194444
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:00 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52040 SDG#: PH106-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-520-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194444
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:00 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52040 SDG#: PH106-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/19/2013 11:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 19:46	Laura M Krieger	22.89
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325532372	09/12/2013 11:19	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325532372	09/12/2013 11:20	Larry E Bevins	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 16:08	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 10:59	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/23/2013 21:01	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132640003A	09/23/2013 03:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 07:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 07:28	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194444
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:00 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52040 SDG#: PH106-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:11	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:39	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:39	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:39	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:39	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:07	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402A	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA5D-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194445
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52080 SDG#: PH106-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	0.38	J	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.6	J	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	3.0		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.1	J	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.4	J	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	3.2		1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	3.8		1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.85	J	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.1	J	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	2.3		1.9	0.75	1
12969	Pyrene	129-00-0	3.5		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20.36
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.93	U	0.93	0.19	1
10590	Alpha BHC	319-84-6	0.93	U	0.93	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.93	U	0.93	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.93	U	0.93	0.51	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.93	U	0.93	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.93	U	0.93	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.93	U	0.93	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA5D-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194445
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52080 SDG#: PH106-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,900		45.0	8.11	1
06944	Antimony	7440-36-0	4.50	U	4.50	0.832	1
06935	Arsenic	7440-38-2	3.59	J	4.50	0.787	1
06946	Barium	7440-39-3	88.3		1.12	0.0371	1
06947	Beryllium	7440-41-7	0.546	J	1.12	0.0754	1
07914	Boron	7440-42-8	8.62	J	11.2	0.945	1
06949	Cadmium	7440-43-9	0.470	J	1.12	0.0855	1
01650	Calcium	7440-70-2	32,000		22.5	3.76	1
06951	Chromium	7440-47-3	19.2		3.37	0.180	1
06952	Cobalt	7440-48-4	5.45		1.12	0.111	1
06953	Copper	7440-50-8	7.75		2.25	0.326	1
01654	Iron	7439-89-6	19,700		45.0	4.07	1
06955	Lead	7439-92-1	6.34		3.37	0.562	1
01656	Lithium	7439-93-2	18.5		4.5	0.38	1
01657	Magnesium	7439-95-4	3,910		11.2	1.88	1
06958	Manganese	7439-96-5	278		1.12	0.0934	1
06960	Molybdenum	7439-98-7	2.25	U	2.25	0.191	1
06961	Nickel	7440-02-0	10.8		2.25	0.146	1
10145	Phosphorus	7723-14-0	346		11.2	3.25	1
01662	Potassium	7440-09-7	2,030		112	9.38	1
01667	Sodium	7440-23-5	119		112	18.8	1
06969	Tin	7440-31-5	3.20	J	11.2	0.247	1
06970	Titanium	7440-32-6	1,070		1.12	0.191	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA5D-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194445
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52080 SDG#: PH106-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	37.5	1.12	0.146	1
06972	Zinc	7440-66-6	45.7	4.50	0.225	1
10146	Zirconium	7440-67-7	2.48 J	5.62	0.945	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.450 U	0.450	0.112	2
06142	Silver	7440-22-4	0.0388 J	0.225	0.0292	2
06144	Strontium	7440-24-6	30.4	0.450	0.0765	2
06145	Thallium	7440-28-0	0.241	0.225	0.0337	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184 U	0.0184	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.18	0.0100	0.0100	1
	The pH was measured in water at 21.5 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.1	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA5D-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194445
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52080 SDG#: PH106-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.11	U	1.11	0.177	1
11031	12378-PeCDD	40321-76-4	5.53	U	5.53	0.114	1
11031	123478-HxCDD	39227-28-6	5.53	U	5.53	0.0565	1
11031	123678-HxCDD	57653-85-7	0.0716	JQ	5.53	0.0589	1
11031	123789-HxCDD	19408-74-3	5.53	U	5.53	0.0601	1
11031	1234678-HpCDD	35822-46-9	1.15	JBQ	5.53	0.0784	1
11031	OCDD	3268-87-9	14.4	B	11.1	0.0863	1
11031	2378-TCDF	51207-31-9	1.11	U	1.11	0.136	1
11031	12378-PeCDF	57117-41-6	5.53	U	5.53	0.0670	1
11031	23478-PeCDF	57117-31-4	0.0660	JQ	5.53	0.0612	1
11031	123478-HxCDF	70648-26-9	5.53	U	5.53	0.0515	1
11031	123678-HxCDF	57117-44-9	5.53	U	5.53	0.0452	1
11031	123789-HxCDF	72918-21-9	5.53	U	5.53	0.0623	1
11031	234678-HxCDF	60851-34-5	5.53	U	5.53	0.0452	1
11031	1234678-HpCDF	67562-39-4	0.156	JBQ	5.53	0.0294	1
11031	1234789-HpCDF	55673-89-7	0.0914	JBQ	5.53	0.0516	1
11031	OCDF	39001-02-0	0.432	JB	11.1	0.113	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00439				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	56	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	46	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA5D-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194445
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52080 SDG#: PH106-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA5D-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194445
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52080 SDG#: PH106-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/23/2013 14:24	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 20:22	Laura M Krieger	20.36
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325532372	09/12/2013 11:20	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325532372	09/12/2013 11:21	Larry E Bevins	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 16:23	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 11:18	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/23/2013 21:22	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132640003A	09/23/2013 03:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 08:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA5D-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194445
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52080 SDG#: PH106-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:15	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:41	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:41	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:41	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:41	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:09	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402A	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194446
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:45 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH106-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.2	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	6.5		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	0.73	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.5	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	2.2	J	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	7.1		5.4	2.1	1
12952	EFH (C30-C40)	n.a.	14		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194446
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:45 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH106-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,900		43.0	7.74	1
06944	Antimony	7440-36-0	4.30	U	4.30	0.795	1
06935	Arsenic	7440-38-2	4.44		4.30	0.752	1
06946	Barium	7440-39-3	129		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.858	J	1.07	0.0719	1
07914	Boron	7440-42-8	13.0		10.7	0.902	1
06949	Cadmium	7440-43-9	0.559	J	1.07	0.0816	1
01650	Calcium	7440-70-2	4,360		21.5	3.59	1
06951	Chromium	7440-47-3	31.3		3.22	0.172	1
06952	Cobalt	7440-48-4	9.77		1.07	0.106	1
06953	Copper	7440-50-8	17.1		2.15	0.311	1
01654	Iron	7439-89-6	28,900		43.0	3.89	1
06955	Lead	7439-92-1	9.01		3.22	0.537	1
01656	Lithium	7439-93-2	19.6		4.3	0.37	1
01657	Magnesium	7439-95-4	5,700		10.7	1.79	1
06958	Manganese	7439-96-5	532		1.07	0.0891	1
06960	Molybdenum	7439-98-7	0.366	J	2.15	0.183	1
06961	Nickel	7440-02-0	19.4		2.15	0.140	1
10145	Phosphorus	7723-14-0	346		10.7	3.10	1
01662	Potassium	7440-09-7	5,410		107	8.96	1
01667	Sodium	7440-23-5	96.1	J	107	17.9	1
06969	Tin	7440-31-5	3.64	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,320		1.07	0.183	1
06971	Vanadium	7440-62-2	58.6		1.07	0.140	1
06972	Zinc	7440-66-6	67.0		4.30	0.215	1
10146	Zirconium	7440-67-7	2.99	J	5.37	0.902	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.208	J	0.430	0.107	2
06142	Silver	7440-22-4	0.0373	J	0.215	0.0279	2
06144	Strontium	7440-24-6	30.1		0.430	0.0730	2
06145	Thallium	7440-28-0	0.375		0.215	0.0322	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.50		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194446
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:45 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH106-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.130	1
11031	12378-PeCDD	40321-76-4	0.198	JB	5.41	0.0953	1
11031	123478-HxCDD	39227-28-6	5.41	U	5.41	0.0600	1
11031	123678-HxCDD	57653-85-7	0.725	J	5.41	0.0664	1
11031	123789-HxCDD	19408-74-3	1.04	JB	5.41	0.0664	1
11031	1234678-HpCDD	35822-46-9	0.860	JBQ	5.41	0.0615	1
11031	OCDD	3268-87-9	14.6	B	10.8	0.0723	1
11031	2378-TCDF	51207-31-9	1.08	U	1.08	0.125	1
11031	12378-PeCDF	57117-41-6	0.327	JB	5.41	0.0543	1
11031	23478-PeCDF	57117-31-4	0.0719	JQ	5.41	0.0508	1
11031	123478-HxCDF	70648-26-9	0.0691	JQ	5.41	0.0552	1
11031	123678-HxCDF	57117-44-9	0.101	JBQ	5.41	0.0497	1
11031	123789-HxCDF	72918-21-9	1.84	JB	5.41	0.0638	1
11031	234678-HxCDF	60851-34-5	5.41	U	5.41	0.0504	1
11031	1234678-HpCDF	67562-39-4	0.110	JBQ	5.41	0.0172	1
11031	1234789-HpCDF	55673-89-7	5.41	U	5.41	0.0315	1
11031	OCDF	39001-02-0	0.288	JBQ	10.8	0.0839	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.572				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	52	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194446
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:45 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH106-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194446
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:45 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH106-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/19/2013 12:57	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 11:36	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132610010A	09/20/2013 00:28	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132610010A	09/18/2013 23:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 09:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:19	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:44	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:44	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:44	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:44	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194446
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:45 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH106-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:11	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402A	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194447
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:55 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52155 SDG#: PH106-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	0.83	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.18
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194447
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:55 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52155 SDG#: PH106-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	3.4	J	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,400		42.3	7.62	1
06944	Antimony	7440-36-0	4.23	U	4.23	0.782	1
06935	Arsenic	7440-38-2	3.89	J	4.23	0.740	1
06946	Barium	7440-39-3	75.0		1.06	0.0349	1
06947	Beryllium	7440-41-7	0.447	J	1.06	0.0708	1
07914	Boron	7440-42-8	7.52	J	10.6	0.887	1
06949	Cadmium	7440-43-9	0.318	J	1.06	0.0803	1
01650	Calcium	7440-70-2	7,220		21.1	3.53	1
06951	Chromium	7440-47-3	17.2		3.17	0.169	1
06952	Cobalt	7440-48-4	4.76		1.06	0.105	1
06953	Copper	7440-50-8	6.28		2.11	0.306	1
01654	Iron	7439-89-6	21,000		42.3	3.82	1
06955	Lead	7439-92-1	3.78		3.17	0.528	1
01656	Lithium	7439-93-2	26.6		4.2	0.36	1
01657	Magnesium	7439-95-4	5,410		10.6	1.76	1
06958	Manganese	7439-96-5	294		1.06	0.0877	1
06960	Molybdenum	7439-98-7	2.11	U	2.11	0.180	1
06961	Nickel	7440-02-0	10.0		2.11	0.137	1
10145	Phosphorus	7723-14-0	417		10.6	3.05	1
01662	Potassium	7440-09-7	2,480		106	8.81	1
01667	Sodium	7440-23-5	85.4	J	106	17.6	1
06969	Tin	7440-31-5	3.45	J	10.6	0.232	1
06970	Titanium	7440-32-6	1,300		1.06	0.180	1
06971	Vanadium	7440-62-2	33.9		1.06	0.137	1
06972	Zinc	7440-66-6	57.9		4.23	0.211	1
10146	Zirconium	7440-67-7	5.28	U	5.28	0.887	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.423	U	0.423	0.106	2
06142	Silver	7440-22-4	0.211	U	0.211	0.0275	2
06144	Strontium	7440-24-6	19.6		0.423	0.0718	2
06145	Thallium	7440-28-0	0.244		0.211	0.0317	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.15		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194447
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:55 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52155 SDG#: PH106-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194447
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:55 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52155 SDG#: PH106-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.133	1
11031	12378-PeCDD	40321-76-4	5.33	U	5.33	0.0922	1
11031	123478-HxCDD	39227-28-6	5.33	U	5.33	0.0476	1
11031	123678-HxCDD	57653-85-7	0.0601	JQ	5.33	0.0519	1
11031	123789-HxCDD	19408-74-3	5.33	U	5.33	0.0502	1
11031	1234678-HpCDD	35822-46-9	0.265	JBQ	5.33	0.0582	1
11031	OCDD	3268-87-9	2.46	JB	10.7	0.0666	1
11031	2378-TCDF	51207-31-9	1.07	U	1.07	0.128	1
11031	12378-PeCDF	57117-41-6	0.104	JBQ	5.33	0.0516	1
11031	23478-PeCDF	57117-31-4	0.0879	JQ	5.33	0.0489	1
11031	123478-HxCDF	70648-26-9	5.33	U	5.33	0.0378	1
11031	123678-HxCDF	57117-44-9	0.0476	JBQ	5.33	0.0335	1
11031	123789-HxCDF	72918-21-9	0.124	JBQ	5.33	0.0434	1
11031	234678-HxCDF	60851-34-5	5.33	U	5.33	0.0342	1
11031	1234678-HpCDF	67562-39-4	0.0497	JB	5.33	0.0171	1
11031	1234789-HpCDF	55673-89-7	5.33	U	5.33	0.0325	1
11031	OCDF	39001-02-0	10.7	U	10.7	0.0912	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00129				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	86	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194447
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:55 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52155 SDG#: PH106-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194447
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:55 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52155 SDG#: PH106-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/19/2013 13:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 20:57	Laura M Krieger	24.18
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325532372	09/12/2013 11:21	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325532372	09/12/2013 11:22	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 11:55	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132610010A	09/19/2013 20:13	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132610010A	09/18/2013 23:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 10:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:23	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5D-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194447
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 09:55 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52155 SDG#: PH106-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:46	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:46	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:46	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:46	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402A	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194448
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:15 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH106-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.2	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.5	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	0.82	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.0	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	0.83	J	1.8	0.72	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.90	U	0.90	0.18	1
10590	Alpha BHC	319-84-6	0.90	U	0.90	0.18	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.90	U	0.90	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.36	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.36	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.90	U	0.90	0.49	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.36	1
10590	Endosulfan I	959-98-8	0.90	U	0.90	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.36	1
10590	Endrin	72-20-8	1.8	U	1.8	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.36	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.65	1
10590	Heptachlor	76-44-8	0.90	U	0.90	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.90	U	0.90	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194448
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:15 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH106-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	2.2	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	10	J	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,900		42.8	7.71	1
06944	Antimony	7440-36-0	4.28	U	4.28	0.791	1
06935	Arsenic	7440-38-2	3.86	J	4.28	0.748	1
06946	Barium	7440-39-3	111		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.756	J	1.07	0.0716	1
07914	Boron	7440-42-8	11.6		10.7	0.898	1
06949	Cadmium	7440-43-9	0.521	J	1.07	0.0813	1
01650	Calcium	7440-70-2	4,430		21.4	3.57	1
06951	Chromium	7440-47-3	34.8		3.21	0.171	1
06952	Cobalt	7440-48-4	9.25		1.07	0.106	1
06953	Copper	7440-50-8	17.8		2.14	0.310	1
01654	Iron	7439-89-6	26,600		42.8	3.87	1
06955	Lead	7439-92-1	7.98		3.21	0.535	1
01656	Lithium	7439-93-2	18.1		4.3	0.36	1
01657	Magnesium	7439-95-4	6,240		10.7	1.79	1
06958	Manganese	7439-96-5	447		1.07	0.0887	1
06960	Molybdenum	7439-98-7	0.365	J	2.14	0.182	1
06961	Nickel	7440-02-0	24.1		2.14	0.139	1
10145	Phosphorus	7723-14-0	340		10.7	3.09	1
01662	Potassium	7440-09-7	4,590		107	8.92	1
01667	Sodium	7440-23-5	124		107	17.9	1
06969	Tin	7440-31-5	3.22	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,310		1.07	0.182	1
06971	Vanadium	7440-62-2	57.8		1.07	0.139	1
06972	Zinc	7440-66-6	63.6		4.28	0.214	1
10146	Zirconium	7440-67-7	5.96		5.35	0.898	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194448
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:15 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH106-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.204 J	0.428	0.107	2
06142	Silver	7440-22-4	0.0324 J	0.214	0.0278	2
06144	Strontium	7440-24-6	28.6	0.428	0.0727	2
06145	Thallium	7440-28-0	0.321	0.214	0.0321	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0112 J	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.92	0.0100	0.0100	1
	The pH was measured in water at 21.6 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.4	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194448
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:15 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH106-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08 U	1.08	0.121	1
11031	12378-PeCDD	40321-76-4	0.195 JBQ	5.40	0.0952	1
11031	123478-HxCDD	39227-28-6	0.0665 JBQ	5.40	0.0510	1
11031	123678-HxCDD	57653-85-7	0.317 J	5.40	0.0519	1
11031	123789-HxCDD	19408-74-3	0.680 JB	5.40	0.0506	1
11031	1234678-HpCDD	35822-46-9	0.419 JBQ	5.40	0.0554	1
11031	OCDD	3268-87-9	4.89 JB	10.8	0.0643	1
11031	2378-TCDF	51207-31-9	1.08 U	1.08	0.106	1
11031	12378-PeCDF	57117-41-6	0.381 JBQ	5.40	0.0510	1
11031	23478-PeCDF	57117-31-4	0.172 J	5.40	0.0458	1
11031	123478-HxCDF	70648-26-9	0.108 JQ	5.40	0.0458	1
11031	123678-HxCDF	57117-44-9	0.0998 JBQ	5.40	0.0407	1
11031	123789-HxCDF	72918-21-9	1.11 JB	5.40	0.0519	1
11031	234678-HxCDF	60851-34-5	0.0928 JQ	5.40	0.0413	1
11031	1234678-HpCDF	67562-39-4	0.0487 JBQ	5.40	0.0179	1
11031	1234789-HpCDF	55673-89-7	0.0703 JB	5.40	0.0306	1
11031	OCDF	39001-02-0	0.153 JBQ	10.8	0.0811	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.265			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194448
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:15 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH106-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194448
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:15 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH106-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/19/2013 14:05	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 16:39	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 12:13	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132610010A	09/19/2013 23:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132610010A	09/18/2013 23:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 11:31	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:27	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194448
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:15 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH106-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:49	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:49	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:49	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:49	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402A	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194449
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:25 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52260 SDG#: PH106-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	7.4		1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	11		1.8	0.73	1
12969	Naphthalene	91-20-3	45		1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.08
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.38	1
10590	Delta BHC	319-86-8	0.91	U	0.91	0.49	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194449
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:25 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52260 SDG#: PH106-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.4	U	7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	3.2	J	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,200		43.0	7.76	1
06944	Antimony	7440-36-0	1.04	J	4.30	0.796	1
06935	Arsenic	7440-38-2	10.8		4.30	0.753	1
06946	Barium	7440-39-3	117		1.08	0.0355	1
06947	Beryllium	7440-41-7	1.38		1.08	0.0721	1
07914	Boron	7440-42-8	11.9		10.8	0.904	1
06949	Cadmium	7440-43-9	0.476	J	1.08	0.0818	1
01650	Calcium	7440-70-2	16,000		21.5	3.59	1
06951	Chromium	7440-47-3	34.8		3.23	0.172	1
06952	Cobalt	7440-48-4	9.62		1.08	0.107	1
06953	Copper	7440-50-8	26.5		2.15	0.312	1
01654	Iron	7439-89-6	35,700		86.1	7.79	2
06955	Lead	7439-92-1	13.1		3.23	0.538	1
01656	Lithium	7439-93-2	37.5		4.3	0.37	1
01657	Magnesium	7439-95-4	7,490		10.8	1.80	1
06958	Manganese	7439-96-5	376		1.08	0.0893	1
06960	Molybdenum	7439-98-7	2.15	U	2.15	0.183	1
06961	Nickel	7440-02-0	31.1		2.15	0.140	1
10145	Phosphorus	7723-14-0	692		10.8	3.11	1
01662	Potassium	7440-09-7	3,150		108	8.98	1
01667	Sodium	7440-23-5	189		108	18.0	1
06969	Tin	7440-31-5	4.23	J	10.8	0.237	1
06970	Titanium	7440-32-6	1,330		1.08	0.183	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194449
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:25 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52260 SDG#: PH106-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	63.2		1.08	0.140	1
06972	Zinc	7440-66-6	115		4.30	0.215	1
10146	Zirconium	7440-67-7	5.38	U	5.38	0.904	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.219	J	0.430	0.108	2
06142	Silver	7440-22-4	0.157	J	0.215	0.0280	2
06144	Strontium	7440-24-6	35.9		0.430	0.0732	2
06145	Thallium	7440-28-0	0.401		0.215	0.0323	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0110	J	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.28		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194449
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:25 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52260 SDG#: PH106-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.254	J	1.09	0.211	1
11031	12378-PeCDD	40321-76-4	0.168	JBQ	5.46	0.151	1
11031	123478-HxCDD	39227-28-6	5.46	U	5.46	0.102	1
11031	123678-HxCDD	57653-85-7	0.150	JQ	5.46	0.106	1
11031	123789-HxCDD	19408-74-3	0.265	JBQ	5.46	0.113	1
11031	1234678-HpCDD	35822-46-9	0.471	JBQ	5.46	0.0849	1
11031	OCDD	3268-87-9	0.328	JBQ	10.9	0.0629	1
11031	2378-TCDF	51207-31-9	1.09	U	1.09	0.153	1
11031	12378-PeCDF	57117-41-6	0.141	JBQ	5.46	0.0730	1
11031	23478-PeCDF	57117-31-4	0.0865	J	5.46	0.0695	1
11031	123478-HxCDF	70648-26-9	0.0967	JQ	5.46	0.0458	1
11031	123678-HxCDF	57117-44-9	0.0729	JB	5.46	0.0409	1
11031	123789-HxCDF	72918-21-9	0.0731	JBQ	5.46	0.0559	1
11031	234678-HxCDF	60851-34-5	5.46	U	5.46	0.0408	1
11031	1234678-HpCDF	67562-39-4	0.0390	JB	5.46	0.0240	1
11031	1234789-HpCDF	55673-89-7	5.46	U	5.46	0.0401	1
11031	OCDF	39001-02-0	10.9	U	10.9	0.105	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.287				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	43	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	62	32 - 141
13C12-123678-HxCDD	64	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	38	24 - 169
13C12-12378-PeCDF	57	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	55	26 - 152
13C12-123678-HxCDF	62	26 - 123
13C12-234678-HxCDF	60	28 - 136
13C12-123789-HxCDF	56	29 - 147
13C12-1234678-HpCDF	69	28 - 143
13C12-1234789-HpCDF	52	26 - 138
13C12-OCDF	42	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194449
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:25 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52260 SDG#: PH106-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194449
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:25 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52260 SDG#: PH106-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/23/2013 14:56	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 21:33	Laura M Krieger	22.08
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325532372	09/12/2013 11:24	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325532372	09/12/2013 11:24	Larry E Bevins	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 16:54	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 12:32	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132610010A	09/19/2013 20:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132610010A	09/18/2013 23:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 12:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 07:32	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA5D-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194449
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 10:25 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52260 SDG#: PH106-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:40	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:56	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:56	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:56	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:56	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:17	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402A	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194450
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:30 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH106-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.46	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	0.84	J	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.2	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	3.7	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	7.6	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194450
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:30 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH106-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,800		44.3	7.98	1
06944	Antimony	7440-36-0	0.910	J	4.43	0.819	1
06935	Arsenic	7440-38-2	4.57		4.43	0.775	1
06946	Barium	7440-39-3	144		1.11	0.0365	1
06947	Beryllium	7440-41-7	1.00	J	1.11	0.0742	1
07914	Boron	7440-42-8	13.7		11.1	0.930	1
06949	Cadmium	7440-43-9	0.617	J	1.11	0.0842	1
01650	Calcium	7440-70-2	6,790		22.1	3.70	1
06951	Chromium	7440-47-3	35.9		3.32	0.177	1
06952	Cobalt	7440-48-4	11.8		1.11	0.110	1
06953	Copper	7440-50-8	15.9		2.21	0.321	1
01654	Iron	7439-89-6	35,500		88.6	8.02	2
06955	Lead	7439-92-1	11.3		3.32	0.554	1
01656	Lithium	7439-93-2	23.0		4.4	0.38	1
01657	Magnesium	7439-95-4	6,700		11.1	1.85	1
06958	Manganese	7439-96-5	581		1.11	0.0919	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	22.0		2.21	0.144	1
10145	Phosphorus	7723-14-0	238		11.1	3.20	1
01662	Potassium	7440-09-7	3,930		111	9.24	1
01667	Sodium	7440-23-5	181		111	18.5	1
06969	Tin	7440-31-5	3.60	J	11.1	0.244	1
06970	Titanium	7440-32-6	910		1.11	0.188	1
06971	Vanadium	7440-62-2	65.1		1.11	0.144	1
06972	Zinc	7440-66-6	69.9		4.43	0.221	1
10146	Zirconium	7440-67-7	1.78	J	5.54	0.930	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.196	J	0.443	0.111	2
06142	Silver	7440-22-4	0.0511	J	0.221	0.0288	2
06144	Strontium	7440-24-6	42.9		0.443	0.0753	2
06145	Thallium	7440-28-0	0.380		0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0177	U	0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.15		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194450
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:30 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH106-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.131	1
11031	12378-PeCDD	40321-76-4	5.28	U	5.28	0.0827	1
11031	123478-HxCDD	39227-28-6	0.0624	JBQ	5.28	0.0477	1
11031	123678-HxCDD	57653-85-7	0.253	JQ	5.28	0.0523	1
11031	123789-HxCDD	19408-74-3	0.307	JBQ	5.28	0.0492	1
11031	1234678-HpCDD	35822-46-9	0.171	JB	5.28	0.0563	1
11031	OCDD	3268-87-9	0.920	JB	10.6	0.0497	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0998	1
11031	12378-PeCDF	57117-41-6	0.563	JB	5.28	0.0511	1
11031	23478-PeCDF	57117-31-4	0.0605	JQ	5.28	0.0487	1
11031	123478-HxCDF	70648-26-9	0.0546	J	5.28	0.0503	1
11031	123678-HxCDF	57117-44-9	5.28	U	5.28	0.0443	1
11031	123789-HxCDF	72918-21-9	0.665	JB	5.28	0.0626	1
11031	234678-HxCDF	60851-34-5	0.0702	JQ	5.28	0.0449	1
11031	1234678-HpCDF	67562-39-4	0.0542	JBQ	5.28	0.0181	1
11031	1234789-HpCDF	55673-89-7	0.0751	JBQ	5.28	0.0347	1
11031	OCDF	39001-02-0	0.149	JB	10.6	0.0829	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0738				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	48	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194450
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:30 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH106-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194450
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:30 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH106-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/23/2013 15:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 12:50	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/23/2013 21:44	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132640003A	09/23/2013 03:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 16:22	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 07:36	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:44	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 14:58	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 14:58	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 14:58	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 14:58	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194450
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:30 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH106-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:23	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402B	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194451
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:50 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH106-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	0.99	J	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.04
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194451
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:50 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH106-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,700		45.4	8.19	1
06944	Antimony	7440-36-0	1.26	J	4.54	0.841	1
06935	Arsenic	7440-38-2	5.96		4.54	0.795	1
06946	Barium	7440-39-3	132		1.14	0.0375	1
06947	Beryllium	7440-41-7	1.06	J	1.14	0.0761	1
07914	Boron	7440-42-8	16.6		11.4	0.954	1
06949	Cadmium	7440-43-9	0.325	J	1.14	0.0863	1
01650	Calcium	7440-70-2	6,860		22.7	3.79	1
06951	Chromium	7440-47-3	41.0		3.41	0.182	1
06952	Cobalt	7440-48-4	8.91		1.14	0.112	1
06953	Copper	7440-50-8	16.6		2.27	0.329	1
01654	Iron	7439-89-6	37,400		90.9	8.22	2
06955	Lead	7439-92-1	10.1		3.41	0.568	1
01656	Lithium	7439-93-2	32.7		4.5	0.39	1
01657	Magnesium	7439-95-4	7,730		11.4	1.90	1
06958	Manganese	7439-96-5	295		1.14	0.0943	1
06960	Molybdenum	7439-98-7	2.27	U	2.27	0.193	1
06961	Nickel	7440-02-0	19.4		2.27	0.148	1
10145	Phosphorus	7723-14-0	289		11.4	3.28	1
01662	Potassium	7440-09-7	3,870		114	9.47	1
01667	Sodium	7440-23-5	777		114	19.0	1
06969	Tin	7440-31-5	3.84	J	11.4	0.250	1
06970	Titanium	7440-32-6	1,370		1.14	0.193	1
06971	Vanadium	7440-62-2	75.0		1.14	0.148	1
06972	Zinc	7440-66-6	69.2		4.54	0.227	1
10146	Zirconium	7440-67-7	4.15	J	5.68	0.954	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.454	U	0.454	0.114	2
06142	Silver	7440-22-4	0.0670	J	0.227	0.0295	2
06144	Strontium	7440-24-6	42.9		0.454	0.0772	2
06145	Thallium	7440-28-0	0.350		0.227	0.0341	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0157	J	0.0184	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.40		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194451
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:50 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH106-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/23/2013 16:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 22:09	Laura M Krieger	21.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325532372	09/12/2013 11:25	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325532372	09/12/2013 11:25	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 13:08	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132610010A	09/19/2013 20:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132610010A	09/18/2013 23:30	Karen L Beyer	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 07:40	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194451
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:50 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH106-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:48	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 15:00	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 15:00	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 15:00	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 15:00	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:26	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402B	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194452
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 12:20 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52300 SDG#: PH106-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	0.82	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.86	U	0.86	0.18	1
10590	Alpha BHC	319-84-6	0.86	U	0.86	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.86	U	0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.36	1
10590	Delta BHC	319-86-8	0.86	U	0.86	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.86	U	0.86	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.86	U	0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.86	U	0.86	0.18	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	15	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194452
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 12:20 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52300 SDG#: PH106-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,800		41.5	7.47	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.767	1
06935	Arsenic	7440-38-2	4.61		4.15	0.725	1
06946	Barium	7440-39-3	90.5		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.455	J	1.04	0.0694	1
07914	Boron	7440-42-8	6.99	J	10.4	0.870	1
06949	Cadmium	7440-43-9	0.268	J	1.04	0.0788	1
01650	Calcium	7440-70-2	3,340		20.7	3.46	1
06951	Chromium	7440-47-3	24.2		3.11	0.166	1
06952	Cobalt	7440-48-4	6.03		1.04	0.103	1
06953	Copper	7440-50-8	8.80		2.07	0.301	1
01654	Iron	7439-89-6	22,000		41.5	3.75	1
06955	Lead	7439-92-1	4.69		3.11	0.518	1
01656	Lithium	7439-93-2	28.1		4.1	0.35	1
01657	Magnesium	7439-95-4	5,930		10.4	1.73	1
06958	Manganese	7439-96-5	276		1.04	0.0860	1
06960	Molybdenum	7439-98-7	2.07	U	2.07	0.176	1
06961	Nickel	7440-02-0	14.9		2.07	0.135	1
10145	Phosphorus	7723-14-0	420		10.4	2.99	1
01662	Potassium	7440-09-7	2,160		104	8.64	1
01667	Sodium	7440-23-5	132		104	17.3	1
06969	Tin	7440-31-5	3.62	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,330		1.04	0.176	1
06971	Vanadium	7440-62-2	42.3		1.04	0.135	1
06972	Zinc	7440-66-6	54.9		4.15	0.207	1
10146	Zirconium	7440-67-7	1.49	J	5.18	0.870	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194452
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 12:20 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52300 SDG#: PH106-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.415 U	0.415	0.104	2
06142	Silver	7440-22-4	0.207 U	0.207	0.0269	2
06144	Strontium	7440-24-6	14.8	0.415	0.0705	2
06145	Thallium	7440-28-0	0.241	0.207	0.0311	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171 U	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.34	0.0100	0.0100	1
	The pH was measured in water at 21.7 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.5	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194452
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 12:20 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52300 SDG#: PH106-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.989	U	0.989	0.134	1
11031	12378-PeCDD	40321-76-4	4.94	U	4.94	0.0857	1
11031	123478-HxCDD	39227-28-6	4.94	U	4.94	0.0396	1
11031	123678-HxCDD	57653-85-7	0.0733	JQ	4.94	0.0396	1
11031	123789-HxCDD	19408-74-3	0.0874	JBQ	4.94	0.0398	1
11031	1234678-HpCDD	35822-46-9	0.121	JB	4.94	0.0507	1
11031	OCDD	3268-87-9	0.525	JBQ	9.89	0.0420	1
11031	2378-TCDF	51207-31-9	0.989	U	0.989	0.103	1
11031	12378-PeCDF	57117-41-6	4.94	U	4.94	0.0489	1
11031	23478-PeCDF	57117-31-4	4.94	U	4.94	0.0489	1
11031	123478-HxCDF	70648-26-9	4.94	U	4.94	0.0379	1
11031	123678-HxCDF	57117-44-9	4.94	U	4.94	0.0349	1
11031	123789-HxCDF	72918-21-9	4.94	U	4.94	0.0536	1
11031	234678-HxCDF	60851-34-5	4.94	U	4.94	0.0353	1
11031	1234678-HpCDF	67562-39-4	0.0342	JBQ	4.94	0.0175	1
11031	1234789-HpCDF	55673-89-7	0.0464	JBQ	4.94	0.0341	1
11031	OCDF	39001-02-0	0.107	JBQ	9.89	0.0842	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00124				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	48	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194452
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 12:20 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52300 SDG#: PH106-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194452
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 12:20 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52300 SDG#: PH106-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/23/2013 16:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 17:09	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 13:27	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132610010A	09/19/2013 21:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132610010A	09/18/2013 23:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 17:19	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:52	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194452
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 12:20 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52300 SDG#: PH106-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 15:03	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 15:03	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 15:03	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 15:03	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:28	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402B	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194453
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH106-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.61	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	0.85	J	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.88	U	0.88	0.18	1
10590	Alpha BHC	319-84-6	0.88	U	0.88	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.88	U	0.88	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.88	U	0.88	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.88	U	0.88	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.88	U	0.88	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.88	U	0.88	0.18	1
10590	Methoxychlor	72-43-5	7.1	U	7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194453
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH106-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	4.7	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,500		41.9	7.55	1
06944	Antimony	7440-36-0	0.825	J	4.19	0.774	1
06935	Arsenic	7440-38-2	4.66		4.19	0.733	1
06946	Barium	7440-39-3	106		1.05	0.0345	1
06947	Beryllium	7440-41-7	0.713	J	1.05	0.0701	1
07914	Boron	7440-42-8	9.15	J	10.5	0.879	1
06949	Cadmium	7440-43-9	0.398	J	1.05	0.0795	1
01650	Calcium	7440-70-2	2,850		20.9	3.50	1
06951	Chromium	7440-47-3	25.1		3.14	0.167	1
06952	Cobalt	7440-48-4	7.18		1.05	0.104	1
06953	Copper	7440-50-8	12.7		2.09	0.304	1
01654	Iron	7439-89-6	22,800		41.9	3.79	1
06955	Lead	7439-92-1	7.14		3.14	0.523	1
01656	Lithium	7439-93-2	17.3		4.2	0.36	1
01657	Magnesium	7439-95-4	4,370		10.5	1.75	1
06958	Manganese	7439-96-5	365		1.05	0.0869	1
06960	Molybdenum	7439-98-7	0.292	J	2.09	0.178	1
06961	Nickel	7440-02-0	14.9		2.09	0.136	1
10145	Phosphorus	7723-14-0	255		10.5	3.02	1
01662	Potassium	7440-09-7	3,670		105	8.73	1
01667	Sodium	7440-23-5	104	J	105	17.5	1
06969	Tin	7440-31-5	3.22	J	10.5	0.230	1
06970	Titanium	7440-32-6	1,150		1.05	0.178	1
06971	Vanadium	7440-62-2	46.8		1.05	0.136	1
06972	Zinc	7440-66-6	51.1		4.19	0.209	1
10146	Zirconium	7440-67-7	2.32	J	5.23	0.879	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194453
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH106-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.152 J	0.419	0.105	2
06142	Silver	7440-22-4	0.0281 J	0.209	0.0272	2
06144	Strontium	7440-24-6	24.3	0.419	0.0712	2
06145	Thallium	7440-28-0	0.318	0.209	0.0314	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175 U	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.7 C.	n.a.	7.00	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	5.4	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194453
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH106-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.141	JQ	1.01	0.120	1
11031	12378-PeCDD	40321-76-4	5.06	U	5.06	0.0739	1
11031	123478-HxCDD	39227-28-6	5.06	U	5.06	0.0422	1
11031	123678-HxCDD	57653-85-7	0.283	JQ	5.06	0.0463	1
11031	123789-HxCDD	19408-74-3	0.335	JB	5.06	0.0471	1
11031	1234678-HpCDD	35822-46-9	1.96	JB	5.06	0.0722	1
11031	OCDD	3268-87-9	30.7	B	10.1	0.0569	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.100	1
11031	12378-PeCDF	57117-41-6	0.117	JBQ	5.06	0.0430	1
11031	23478-PeCDF	57117-31-4	0.0575	JQ	5.06	0.0407	1
11031	123478-HxCDF	70648-26-9	0.0689	JQ	5.06	0.0385	1
11031	123678-HxCDF	57117-44-9	0.0509	JBQ	5.06	0.0356	1
11031	123789-HxCDF	72918-21-9	0.375	JBQ	5.06	0.0458	1
11031	234678-HxCDF	60851-34-5	0.109	J	5.06	0.0349	1
11031	1234678-HpCDF	67562-39-4	0.281	JB	5.06	0.0204	1
11031	1234789-HpCDF	55673-89-7	0.0533	JB	5.06	0.0351	1
11031	OCDF	39001-02-0	0.733	JB	10.1	0.0886	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0767				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	52	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194453
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH106-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194453
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH106-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/23/2013 17:10	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 17:24	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 14:59	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132610010A	09/19/2013 23:45	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132610010A	09/18/2013 23:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 18:16	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 16:56	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194453
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:10 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH106-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 15:05	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 15:05	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 15:05	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 15:05	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:30	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402B	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194454
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:15 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52930 SDG#: PH106-16*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	0.57	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.0	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.88
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.88	U	0.88	0.18	1
10590	Alpha BHC	319-84-6	0.88	U	0.88	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.88	U	0.88	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.88	U	0.88	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.88	U	0.88	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.88	U	0.88	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.88	U	0.88	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194454
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:15 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52930 SDG#: PH106-16*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.1	U	7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,500		41.7	7.52	1
06944	Antimony	7440-36-0	1.21	J	4.17	0.772	1
06935	Arsenic	7440-38-2	6.91		4.17	0.730	1
06946	Barium	7440-39-3	106		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.693	J	1.04	0.0699	1
07914	Boron	7440-42-8	8.48	J	10.4	0.876	1
06949	Cadmium	7440-43-9	0.286	J	1.04	0.0793	1
01650	Calcium	7440-70-2	4,250		20.9	3.48	1
06951	Chromium	7440-47-3	29.3		3.13	0.167	1
06952	Cobalt	7440-48-4	7.56		1.04	0.103	1
06953	Copper	7440-50-8	14.1		2.09	0.302	1
01654	Iron	7439-89-6	29,100		83.4	7.55	2
06955	Lead	7439-92-1	7.38		3.13	0.521	1
01656	Lithium	7439-93-2	33.2		4.2	0.35	1
01657	Magnesium	7439-95-4	7,560		10.4	1.74	1
06958	Manganese	7439-96-5	351		1.04	0.0866	1
06960	Molybdenum	7439-98-7	0.200	J	2.09	0.177	1
06961	Nickel	7440-02-0	22.0		2.09	0.136	1
10145	Phosphorus	7723-14-0	489		10.4	3.01	1
01662	Potassium	7440-09-7	2,400		104	8.70	1
01667	Sodium	7440-23-5	339		104	17.4	1
06969	Tin	7440-31-5	3.70	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,560		1.04	0.177	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194454
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:15 by VC

Submitted: 09/12/2013 09:10
Reported: 09/27/2013 15:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52930 SDG#: PH106-16*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	54.6		1.04	0.136	1
06972	Zinc	7440-66-6	72.5		4.17	0.209	1
10146	Zirconium	7440-67-7	1.56	J	5.21	0.876	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.142	J	0.417	0.104	2
06142	Silver	7440-22-4	0.209	U	0.209	0.0271	2
06144	Strontium	7440-24-6	25.4		0.417	0.0709	2
06145	Thallium	7440-28-0	0.347		0.209	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.07		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13256SLD026	09/23/2013 17:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13256SLD026	09/14/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13256A34A	09/13/2013 22:44	Laura M Krieger	25.88
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325532372	09/12/2013 11:23	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325532372	09/12/2013 11:23	Larry E Bevins	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132570021A	09/19/2013 17:40	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132570035A	09/18/2013 15:18	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132570035A	09/17/2013 09:15	Katheryne V Sponheimer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132570021A	09/16/2013 17:05	JoElla L Rice	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7194454
LL Group # 1418268
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/11/2013 13:15 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

52930 SDG#: PH106-16*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132610010A	09/19/2013 21:38	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132610010A	09/18/2013 23:30	Karen L Beyer	1
01643	Aluminum	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132560637002	09/18/2013 07:44	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132560637002	09/17/2013 17:00	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132560637002B	09/17/2013 15:08	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132560637002A	09/17/2013 15:08	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132560637002A	09/17/2013 15:08	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132560637002A	09/17/2013 15:08	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132560638002	09/17/2013 07:58	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132560637002	09/16/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132560638002	09/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13255039402B	09/12/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13256SLD026	Sample number(s): 7194441-7194454									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	106		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	107		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	96		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	105		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	117		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	109		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	112		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	101		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	109		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	109		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	107		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	98		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	105		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	106		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	108		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	109		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	107		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	102		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	196*		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	108		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	102		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	97		79-112		
Batch number: 13257WAM026	Sample number(s): 7194439									
Acenaphthene	0.050	U	0.050	0.010	ug/l	84	100	77-118	17	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	87	106	80-123	20	30
Anthracene	0.050	U	0.050	0.010	ug/l	90	106	78-123	16	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	98	112	73-127	14	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	92	106	72-120	14	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	96	117	79-136	20	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	85	96	70-130	13	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	112	125	64-130	11	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	100	108	73-131	7	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	21*	37*	40-138	54*	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	72	92	64-141	24	30
Chrysene	0.050	U	0.050	0.010	ug/l	102	114	76-125	12	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	110	125	58-131	13	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	51*	71	64-128	33*	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	10*	24	23-139	79*	30

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	1.0	U	1.0	0.050	ug/l	93	115	70-143	21	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	88	104	79-124	17	30
Fluorene	0.050	U	0.050	0.010	ug/l	87	104	74-115	17	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	107	120	62-130	12	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	90	106	80-126	17	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	89	105	81-124	16	30
Naphthalene	0.050	U	0.050	0.030	ug/l	88	104	75-120	17	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	67	80	36-120	18	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	78	98	57-145	23	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	89	104	75-120	15	30
Pyrene	0.050	U	0.050	0.010	ug/l	104	120	71-130	14	30
Batch number: 13255B94A	Sample number(s): 7194439-7194440									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	115	115	75-135	0	30
Batch number: 13256A34A	Sample number(s): 7194442,7194444-7194445,7194447,7194449,7194451,7194454									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	79	79	67-119	0	30
Batch number: 132570020A	Sample number(s): 7194439									
2,4-D	0.50	U	0.50	0.16	ug/l	103	107	68-155	4	30
Dalapon	1.3	U	1.3	0.25	ug/l	78	78	25-119	1	30
2,4-DB	1.0	U	1.0	0.30	ug/l	95	96	50-163	1	30
Dicamba	0.30	U	0.30	0.080	ug/l	90	91	64-163	2	30
Dinoseb	0.50	U	0.50	0.12	ug/l	129	124	16-163	4	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	123	127	89-162	3	30
MCPA	200 U		200.	50	ug/l	87	88	68-154	2	30
MCPP	200 U		200.	50	ug/l	96	100	46-173	5	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	101	104	71-174	2	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	99	100	58-155	1	30
Batch number: 132610031A	Sample number(s): 7194439									
6b Perchlorate (Method 6850)	1.0	U	1.0	0.20	ug/l	99		85-115		
Batch number: 132570021A	Sample number(s): 7194443-7194445,7194448-7194449,7194452-7194454									
Aldrin	0.83	U	0.83	0.17	ug/kg	96		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	116		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	96		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	110		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	121		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	100		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	107		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	99		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	121		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	112		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	107		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	104		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	109		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	94		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	102		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	113		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	99		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	102		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132570035A	Sample number(s): 7194441-7194454									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	83	81	62-87	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	108		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	105		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132600003A	Sample number(s): 7194439									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	82	87	45-125	6	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	85	90	51-139	6	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	82	86	57-127	5	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	83	88	57-133	6	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	90	94	55-145	4	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	87	92	58-130	6	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	65	72	45-140	9	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	86	91	52-133	6	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	85	89	60-135	5	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	82	86	56-128	5	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	93	100	53-123	8	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	87	92	51-130	6	30
Endrin	0.016	U	0.016	0.0065	ug/l	75	80	43-139	6	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	83	88	50-122	5	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	86	90	51-133	4	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	78	83	48-130	7	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	83	88	65-128	5	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	69	72	40-150	4	30
Mirex	0.20	U	0.20	0.068	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132600005A	Sample number(s): 7194439									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	57	62	35-84	7	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	89	80	67-117	11	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	101	94	67-128	7	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132570005A	Sample number(s): 7194439									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	89	90	70-130	1	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	102	96	70-130	7	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	96	96	70-130	0	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	89	86	70-130	4	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	76	74	70-130	2	30
Batch number: 132610010A	Sample number(s): 7194441,7194443,7194446-7194449,7194451-7194454									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	104		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	109		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	111		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	102		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	85		49-107		
Batch number: 132640003A	Sample number(s): 7194442,7194444-7194445,7194450									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	102		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	110		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	106		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	84		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	84		49-107		
Batch number: 132560637002	Sample number(s): 7194441-7194454									
Aluminum	40.0	U	40.0	7.21	mg/kg	106		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	109		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	102		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	101		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	99		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	97		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	103		80-120		
Calcium	5.14	J	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	105		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	102		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	103		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	101		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	101		80-120		
Sodium	100 U		100.	16.7	mg/kg	100		80-120		
Tin	1.20	J	10.0	0.220	mg/kg	104		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	106		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	104		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	104		80-120		
Batch number: 132560637002A	Sample number(s): 7194441-7194454									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	106		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	104		80-120		
Batch number: 132560637002B	Sample number(s): 7194441-7194454									
Selenium	0.400	U	0.400	0.100	mg/kg	113		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132560638002	Sample number(s): 7194441-7194454								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	108		85-120		
Batch number: 132585713004	Sample number(s): 7194439								
3b Mercury 7470A	0.00020 U	0.00020	0.00006 0	mg/l	93	94	90-115	1	20
Batch number: 132610635001	Sample number(s): 7194439								
Aluminum	0.400 U	0.400	0.0828	mg/l	103	103	80-120	0	20
Antimony	0.0400 U	0.0400	0.0053	mg/l	113	114	80-120	1	20
Arsenic	0.0400 U	0.0400	0.0068	mg/l	98	98	80-120	0	20
Barium	0.0100 U	0.0100	0.00033	mg/l	102	103	80-120	1	20
Beryllium	0.0100 U	0.0100	0.00067	mg/l	100	101	80-120	0	20
Boron	0.100 U	0.100	0.0084	mg/l	97	98	80-120	1	20
Cadmium	0.0100 U	0.0100	0.00076	mg/l	103	103	80-120	1	20
Calcium	0.400 U	0.400	0.0334	mg/l	105	105	80-120	0	20
Chromium	0.0300 U	0.0300	0.0016	mg/l	100	102	80-120	1	20
Cobalt	0.0100 U	0.0100	0.0013	mg/l	103	103	80-120	0	20
Copper	0.0044 J	0.0200	0.0027	mg/l	106	107	80-120	1	20
Iron	0.400 U	0.400	0.0430	mg/l	103	104	80-120	1	20
Lead	0.0300 U	0.0300	0.0047	mg/l	104	103	80-120	1	20
Lithium	0.0400 U	0.0400	0.0047	mg/l	104	104	80-120	0	20
Magnesium	0.200 U	0.200	0.0167	mg/l	103	103	80-120	0	20
Manganese	0.0100 U	0.0100	0.00083	mg/l	103	104	80-120	1	20
Molybdenum	0.0200 U	0.0200	0.0017	mg/l	104	105	80-120	1	20
Nickel	0.0200 U	0.0200	0.0015	mg/l	105	105	80-120	0	20
Phosphorus	0.200 U	0.200	0.0418	mg/l	102	103	80-120	0	20
Potassium	1.00 U	1.00	0.0980	mg/l	102	103	80-120	0	20
Sodium	2.00 U	2.00	0.167	mg/l	103	103	80-120	0	20
Tin	0.0400 U	0.0400	0.0029	mg/l	99	100	80-120	0	20
Titanium	0.0200 U	0.0200	0.0017	mg/l	104	105	80-120	1	20
Vanadium	0.0100 U	0.0100	0.0020	mg/l	102	102	80-120	1	20
Zinc	0.0400 U	0.0400	0.0020	mg/l	102	102	80-120	0	20
Zirconium	0.100 U	0.100	0.0084	mg/l	102	102	80-120	1	20
Batch number: 132610639001A	Sample number(s): 7194439								
Silver	0.0010 U	0.0010	0.00011	mg/l	105	105	90-115	0	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	105	103	80-120	2	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	104	109	80-120	5	20
Batch number: 132610639001B	Sample number(s): 7194439								
Selenium	0.0040 U	0.0040	0.00050	mg/l	105	106	80-120	0	20
Batch number: 13255987301A	Sample number(s): 7194439								
2b Chromium VI by EPA 7199	10.0 U	10.0	5.0	ug/l	103	101	90-110	3	20
Batch number: 13263347601C	Sample number(s): 7194439								
1b Anions by 300.0-Fluoride	0.10 U	0.10	0.080	mg/l	102	104	90-110	2	20
Batch number: 13255039402A	Sample number(s): 7194441-7194449								
15a pH by 9045D					99		95-105		
Batch number: 13255039402B	Sample number(s): 7194450-7194454								
15a pH by 9045D					99		95-105		
Batch number: 13256002105A	Sample number(s): 7194439								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
28b pH (9040B and 9040C)					99		99-103		
Batch number: 13262162401A	Sample number(s): 7194441-7194443								
14a Moisture Content by 160.3					100		80-120		
Batch number: 13262162401B	Sample number(s): 7194444-7194454								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13261001	Sample number(s): 7194441,7194443-7194450,7194452-7194453									
2378-TCDD	1.00	U	1.00	0.151	ng/kg	85		67-158		
12378-PeCDD	0.122	J	5.00	0.106	ng/kg	99		70-142		
123478-HxCDD	0.0859	J	5.00	0.0445	ng/kg	100		70-164		
123678-HxCDD	5.00	U	5.00	0.0496	ng/kg	97		76-134		
123789-HxCDD	0.0579	J	5.00	0.0484	ng/kg	98		64-162		
1234678-HpCDD	0.0535	J	5.00	0.0502	ng/kg	96		70-140		
OCDD	0.197	J	10.0	0.0532	ng/kg	98		78-144		
2378-TCDF	1.00	U	1.00	0.143	ng/kg	88		75-158		
12378-PeCDF	0.0876	J	5.00	0.0660	ng/kg	93		80-134		
23478-PeCDF	5.00	U	5.00	0.0633	ng/kg	97		68-160		
123478-HxCDF	5.00	U	5.00	0.0482	ng/kg	96		72-134		
123678-HxCDF	0.0456	J	5.00	0.0403	ng/kg	98		84-130		
123789-HxCDF	0.0750	J	5.00	0.0526	ng/kg	96		78-130		
234678-HxCDF	5.00	U	5.00	0.0421	ng/kg	96		70-156		
1234678-HpCDF	0.0418	J	5.00	0.0219	ng/kg	95		82-122		
1234789-HpCDF	0.0583	J	5.00	0.0419	ng/kg	95		78-138		
OCDF	0.197	J	10.0	0.104	ng/kg	96		63-170		
Batch number: 13266001	Sample number(s): 7194439									
2378-TCDD	2.00	U	2.00	0.452	pg/l	104		60-150		
12378-PeCDD	1.71	J	10.0	0.340	pg/l	105		60-150		
123478-HxCDD	1.45	J	10.0	0.279	pg/l	104		60-150		
123678-HxCDD	1.49	J	10.0	0.273	pg/l	108		60-150		
123789-HxCDD	0.932	J	10.0	0.180	pg/l	104		60-150		
1234678-HpCDD	1.27	J	10.0	0.203	pg/l	102		60-150		
OCDD	2.51	J	20.0	0.252	pg/l	102		60-150		
2378-TCDF	2.00	U	2.00	0.396	pg/l	100		60-150		
12378-PeCDF	1.48	J	10.0	0.190	pg/l	104		60-150		
23478-PeCDF	1.58	J	10.0	0.233	pg/l	103		60-150		
123478-HxCDF	1.70	J	10.0	0.276	pg/l	102		60-150		
123678-HxCDF	1.55	J	10.0	0.253	pg/l	104		60-150		
123789-HxCDF	1.03	J	10.0	0.162	pg/l	104		60-150		
234678-HxCDF	1.30	J	10.0	0.174	pg/l	104		60-150		
1234678-HpCDF	1.58	J	10.0	0.142	pg/l	104		60-150		
1234789-HpCDF	1.12	J	10.0	0.121	pg/l	104		60-150		
OCDF	2.72	J	20.0	0.328	pg/l	103		60-150		
Batch number: 13261001	Sample number(s): 7194441,7194443-7194450,7194452-7194453									
TEQ WHO 2005 - EDLx0.0	U				ng/kg					
Batch number: 13266001	Sample number(s): 7194439									
TEQ WHO 2005 - EDLx0.0	0.525				pg/l					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13256SLD026	Sample number(s): 7194441-7194454 UNSPK: 7194441								
Acenaphthene	100	64	48-127	44*	30				
Acenaphthylene	104	65	49-121	45*	30				
Anthracene	101	67	52-126	41*	30				
Benzo(a)anthracene	100	65	44-143	43*	30				
Benzo(a)pyrene	102	66	44-140	43*	30				
Benzo(b)fluoranthene	110	73	26-142	39*	30				
Benzo(e)pyrene	93	61*	70-130	41*	30				
Benzo(g,h,i)perylene	98	64	33-141	42*	30				
Benzo(k)fluoranthene	97	62	54-142	45*	30				
Butylbenzylphthalate	114	75	49-151	41*	30				
Di-n-butylphthalate	110	72	52-147	41*	30				
Chrysene	94	62	29-148	39*	30				
Dibenz(a,h)anthracene	106	69	20-137	43*	30				
Diethylphthalate	110	69	43-145	46*	30				
Dimethylphthalate	106	67	58-129	45*	30				
Bis(2-Ethylhexyl)phthalate	109	70	39-167	44*	30				
Fluoranthene	94	62	40-148	39*	30				
Fluorene	102	65	51-137	44*	30				
Indeno(1,2,3-cd)pyrene	103	67	17-136	42*	30				
1-Methylnaphthalene	109	68	50-131	46*	30				
2-Methylnaphthalene	107	67	35-152	46*	30				
Naphthalene	99	60	31-148	46*	30				
N-Nitrosodimethylamine	186*	105	48-113	56*	30				
Di-n-octylphthalate	117	75	52-162	43*	30				
Phenanthrene	101	64	29-142	43*	30				
Pyrene	88	58	26-143	41*	30				
Batch number: 132610031A	Sample number(s): 7194439 UNSPK: 7194439								
6b Perchlorate (Method 6850)	105	98	80-120	7	20				
Batch number: 132570021A	Sample number(s): 7194443-7194445,7194448-7194449,7194452-7194454 UNSPK: P191082								
Aldrin	101	92	16-126	10	50				
Alpha BHC	116	107	14-140	9	50				
Beta BHC	101	93	42-133	9	50				
Gamma BHC - Lindane	112	101	30-137	10	50				
p,p-DDD	126	115	43-149	9	50				
p,p-DDE	100	130	35-152	24	50				
p,p-DDT	116	119	12-193	3	50				
Delta BHC	95	92	13-153	3	50				
Dieldrin	123	113	41-153	9	50				
Endosulfan I	115	104	26-146	10	50				
Endosulfan II	113	100	34-141	12	50				
Endosulfan Sulfate	109	98	10-181	12	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Endrin	117	105	30-152	11	50				
Endrin Aldehyde	98	87	23-138	12	35				
Endrin Ketone	103	91	30-148	13	50				
Heptachlor	118	106	16-152	11	50				
Heptachlor Epoxide	102	93	33-144	8	50				
Methoxychlor	109	102	41-161	7	50				
Batch number: 132570035A	Sample number(s): 7194441-7194454 UNSPK: 7194441								
PCB-1016	100	98	41-135	0	50				
PCB-1260	102	99	40-134	1	50				
Batch number: 132610010A	Sample number(s): 7194441,7194443,7194446-7194449,7194451-7194454 UNSPK: 7194441								
EFH (C12-C14)	125*	112	49-123	11	20				
EFH (C15-C20)	223*	194*	49-123	14	20				
EFH (C21-C30)	176*	154*	49-123	8	20				
EFH (C30-C40)	225*	184*	49-123	11	20				
EFH (C8-C11)	141*	20*	49-123	59*	20				
Batch number: 132640003A	Sample number(s): 7194442,7194444-7194445,7194450 UNSPK: P201708								
EFH (C12-C14)	79	78	49-123	1	20				
EFH (C15-C20)	89	85	49-123	4	20				
EFH (C21-C30)	91	88	49-123	3	20				
EFH (C30-C40)	75	74	49-123	0	20				
EFH (C8-C11)	73	70	49-123	4	20				
Batch number: 132560637002	Sample number(s): 7194441-7194454 UNSPK: P191082 BKG: P191082								
Aluminum	4743 (2)	4362 (2)	75-125	2	20	22,400	22,900	2	20
Antimony	48*	48*	75-125	1	20	1.14 J	0.971 J	16 (1)	20
Arsenic	98	98	75-125	0	20	4.92	4.73	4 (1)	20
Barium	102	102	75-125	0	20	93.1	92.6	1	20
Beryllium	100	99	75-125	1	20	0.764 J	0.772 J	1 (1)	20
Boron	99	98	75-125	1	20	18.2	17.5	4 (1)	20
Cadmium	92	93	75-125	1	20	0.566 J	0.568 J	0 (1)	20
Calcium	-243 (2)	618 (2)	75-125	8	20	41,400	42,500	3	20
Chromium	128*	122	75-125	2	20	31.5	31.3	1	20
Cobalt	91	91	75-125	0	20	8.29	8.53	3	20
Copper	107	105	75-125	1	20	15.9	16.1	1	20
Iron	1924 (2)	1020 (2)	75-125	3	20	30,100	30,200	0	20
Lead	91	92	75-125	1	20	9.00	9.03	0 (1)	20
Lithium	106	107	75-125	1	20	21.6	22.0	2	20
Magnesium	519 (2)	442 (2)	75-125	2	20	6,900	7,040	2	20
Manganese	103 (2)	102 (2)	75-125	0	20	382	381	0	20
Molybdenum	92	93	75-125	0	20	0.457 J	0.213 J	73* (1)	20
Nickel	93	93	75-125	0	20	16.7	16.7	0	20
Phosphorus	100 (2)	75 (2)	75-125	3	20	654	653	0	20
Potassium	196 (2)	183 (2)	75-125	2	20	6,270	6,410	2	20
Sodium	100	101	75-125	1	20	101	104	3 (1)	20
Tin	88	88	75-125	0	20	3.04 J	3.28 J	8 (1)	20
Titanium	605 (2)	550 (2)	75-125	3	20	1,140	1,160	3	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Vanadium	130*	124	75-125	2	20	59.8	60.2	1	20
Zinc	103	101	75-125	1	20	74.1	74.6	1	20
Zirconium	78	77	75-125	0	20	2.40 J	3.38 J	34* (1)	20
Batch number: 132560637002A	Sample number(s): 7194441-7194454 UNSPK: P191082 BKG: P191082								
Silver	99	101	75-125	2	20	0.0286 J	0.0299 J	4 (1)	20
Strontium	116 (2)	144 (2)	75-125	2	20	81.2	76.5	6	20
Thallium	99	97	75-125	1	20	0.299	0.329	9 (1)	20
Batch number: 132560637002B	Sample number(s): 7194441-7194454 UNSPK: P191082 BKG: P191082								
Selenium	88	94	75-125	5	20	0.297 J	0.286 J	4 (1)	20
Batch number: 132560638002	Sample number(s): 7194441-7194454 UNSPK: P191082 BKG: P191082								
3a Mercury 7471A	116	119	65-135	4	20	0.0160 U	0.0158 U	0 (1)	20
Batch number: 13255039402A	Sample number(s): 7194441-7194449 BKG: 7194441								
15a pH by 9045D						8.08	8.10	0	3
Batch number: 13255039402B	Sample number(s): 7194450-7194454 BKG: 7194450								
15a pH by 9045D						8.15	8.09	1	3
Batch number: 13256002105A	Sample number(s): 7194439 BKG: P194859								
28b pH (9040B and 9040C)						7.0	7.1	1	3
Batch number: 13262162401A	Sample number(s): 7194441-7194443 BKG: 7194442								
14a Moisture Content by 160.3						13.2	13.1	1	20
Batch number: 13262162401B	Sample number(s): 7194444-7194454 BKG: 7194444								
14a Moisture Content by 160.3						15.8	15.6	1	20
Batch number: 13261001	Sample number(s): 7194441,7194443-7194450,7194452-7194453 UNSPK: P196426								
2378-TCDD	90	92	40-135	1	20				
12378-PeCDD	95	99	40-135	3	20				
123478-HxCDD	98	99	40-135	0	20				
123678-HxCDD	95	96	40-135	0	20				
123789-HxCDD	95	94	40-135	2	20				
1234678-HpCDD	91	92	40-135	1	20				
OCDD	59	58	40-135	1	20				
2378-TCDF	96	100	40-135	3	20				
12378-PeCDF	94	93	40-135	2	20				
23478-PeCDF	95	97	40-135	0	20				
123478-HxCDF	97	96	40-135	1	20				
123678-HxCDF	97	99	40-135	1	20				
123789-HxCDF	96	95	40-135	2	20				
234678-HxCDF	96	94	40-135	3	20				
1234678-HpCDF	92	94	40-135	1	20				
1234789-HpCDF	94	94	40-135	1	20				
OCDF	93	91	40-135	3	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13256SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7194441	81	89	102
7194442	56	62	64
7194443	88	96	99
7194444	86	94	99
7194445	95	104	110
7194446	86	87	102
7194447	93	102	105
7194448	91	97	103
7194449	94	101	104
7194450	87	94	101
7194451	87	94	101
7194452	97	104	101
7194453	91	97	103
7194454	93	101	103
Blank	90	100	109
LCS	96	107	114
MS	87	98	108
MSD	57	63	67
Limits:	54-129	59-125	61-125

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13257WAM026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7194439	93	94	96
Blank	92	98	96
LCS	83	93	87
LCSD	97	105	103
Limits:	44-137	62-141	51-136

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13255B94A

	Trifluorotoluene-F
7194439	74
7194440	82
Blank	72
LCS	79
LCSD	80
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13256A34A

	Trifluorotoluene-F

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Surrogate Quality Control

7194442	82
7194444	81
7194445	85
7194447	79
7194449	79
7194451	84
7194454	93
Blank	95
LCS	91
LCSD	90
Limits:	50-142

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 132570020A

	2,4-Dichlorophenylacetic acid
7194439	66
Blank	66
LCS	70
LCSD	72
Limits:	50-150

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132570021A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7194443	92	89
7194444	95	94
7194445	100	90
7194448	93	88
7194449	93	94
7194452	100	99
7194453	101	96
7194454	96	97
Blank	97	101
LCS	104	112
MS	105	111
MSD	98	100
Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132570035A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7194441	110	95
7194442	102	86
7194443	107	90
7194444	105	93
7194445	109	95
7194446	107	91
7194447	108	95

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Surrogate Quality Control

7194448	112	96
7194449	108	95
7194450	105	93
7194451	108	91
7194452	113	100
7194453	120	91
7194454	115	95
Blank	118	107
LCS	117	99
LCSD	120	105
MS	113	96
MSD	110	96
Limits:	45-120	45-120

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132600003A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7194439	102	57
Blank	86	84
LCS	87	73
LCSD	90	90
Limits:	60-140	20-120

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132600005A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7194439	70	34*
Blank	85	87
LCS	98	97
LCSD	90	76
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132570005A

	Chlorobenzene	Orthoterphenyl
7194439	105	91
Blank	101	88
LCS	109	94
LCSD	110	93
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132610010A

	Chlorobenzene	Orthoterphenyl
7194441	81	100
7194443	85	85
7194446	87	98
7194447	86	87

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Surrogate Quality Control

7194448	93	97
7194449	91	86
7194451	80	68
7194452	97	105
7194453	86	96
7194454	86	72
Blank	121	102
LCS	122	106
MS	95	95
MSD	87	89
Limits:	37-125	66-123

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132640003A

	Chlorobenzene	Orthoterphenyl
7194442	102	80
7194444	102	72
7194445	103	89
7194450	102	89
Blank	111	99
LCS	120	100
MS	103	79
MSD	98	81
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13261001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7194441	61	68	67	78	76	77
7194443	61	64	60	71	67	73
7194444	52	62	58	66	65	61
7194445	59	71	65	74	72	65
7194446	59	69	67	75	74	75
7194447	64	76	71	80	77	78
7194448	63	70	66	75	74	73
7194449	43	58	55	62	60	56
7194450	58	64	63	72	69	63
7194452	65	73	64	73	71	62
7194453	67	76	68	80	76	73
Blank	61	69	64	74	71	72
MS	62	73	68	77	75	72
MSD	56	65	63	71	69	67
OPR	59	71	63	73	70	65
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7194441	92	62	55	74	77	78
7194443	88	58	47	72	68	76
7194444	75	52	43	70	66	69
7194445	81	59	46	76	73	77

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Surrogate Quality Control

7194446	88	61	52	77	75	77
7194447	93	64	50	86	81	86
7194448	86	63	50	79	75	81
7194449	69	52	42	62	62	64
7194450	86	57	48	71	72	77
7194452	88	60	48	80	72	79
7194453	93	65	52	85	79	81
Blank	93	62	51	77	75	80
MS	91	68	56	81	76	82
MSD	84	63	54	70	70	77
OPR	92	57	44	80	74	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7194441	81	80	70	51	74
7194443	74	74	63	51	70
7194444	71	68	54	44	64
7194445	77	75	56	52	73
7194446	79	78	65	51	71
7194447	85	84	66	55	79
7194448	80	79	64	52	73
7194449	65	64	52	38	57
7194450	79	74	63	52	67
7194452	77	77	64	54	76
7194453	83	83	66	58	80
Blank	80	81	67	49	72
MS	82	85	71	55	77
MSD	76	77	68	48	67
OPR	80	77	63	50	77
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13266001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7194439	78	46	32	33	48	71
Blank	71	56	42	45	64	77
OPR	80	52	43	45	55	83
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7194439	39	59	51	50	36	38
Blank	52	72	56	65	46	50
OPR	50	70	72	54	47	48
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7194439	59	53	58	61	58
Blank	72	69	58	70	76

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418268
Reported: 09/27/13 at 03:35 PM

Surrogate Quality Control

OPR	68	63	82	67	59
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1418268 7194439-54

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/11/2013
CarrierName: FedEx
AirbillNo: 796665999076

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130911-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB-091113	9/11/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB-091113	9/11/13 15:00	WQ	None	4 - 250 mL Poly	10 day				X										X	X																
EB-091113	9/11/13 15:00	WQ	None	3 - 250 mL Amber	10 day							X			X							X														
EB-091113	9/11/13 15:00	WQ	None	4 - 1 L Amber	10 day									X							X															
EB-091113	9/11/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB-091113	9/11/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
EB-091113	9/11/13 15:00	WQ	None	1 - 40 mL Vial	10 day												X																			

Special Instructions:

Sampler: Pam Hart

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shy J Mypel	09/11/2013	1600									
									Brianely Key	9/12/13	910

COC Rev 2

COC: 20130911-01, Page 1 of 1

13013 1418268 7194439-54

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/11/2013
CarrierName: FedEx
AirbillNo: 796665999076

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130911-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-091113	9/11/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-519-SA5D-SB-0.0-0.5	9/11/13 07:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-519-SA5D-SB-0.0-0.5	9/11/13 07:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-519-SA5D-SB-4.0-5.0	9/11/13 08:00	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											
SL-519-SA5D-SB-4.0-5.0	9/11/13 08:00	SO	None	2 - Encore	10 day																			X												
SL-520-SA5D-SB-0.0-0.5	9/11/13 08:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X			X											
SL-520-SA5D-SB-0.0-0.5	9/11/13 08:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-520-SA5D-SB-4.0-5.0	9/11/13 09:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X				X			X											
SL-520-SA5D-SB-4.0-5.0	9/11/13 09:00	SO	None	2 - Encore	10 day																			X												
SL-520-SA5D-SB-8.0-9.0	9/11/13 09:10	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X				X			X											
SL-520-SA5D-SB-8.0-9.0	9/11/13 09:10	SO	None	2 - Encore	10 day																			X												
SL-521-SA5D-SB-0.0-0.5	9/11/13 09:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-521-SA5D-SB-0.0-0.5	9/11/13 09:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-521-SA5D-SB-5.5-6.5	9/11/13 09:55	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X							X											
SL-521-SA5D-SB-5.5-6.5	9/11/13 09:55	SO	None	2 - Encore	10 day																			X												
SL-522-SA5D-SB-0.0-0.5	9/11/13 10:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X			X											
SL-522-SA5D-SB-0.0-0.5	9/11/13 10:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-522-SA5D-SB-6.0-7.0	9/11/13 10:25	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X				X			X											
SL-522-SA5D-SB-6.0-7.0	9/11/13 10:25	SO	None	2 - Encore	10 day																			X												
SL-506-SA5D-SB-4.0-5.0	9/11/13 13:50	SO	None	2 - Encore	10 day																			X												
SL-529-SA5D-SB-3.0-4.0	9/11/13 13:15	SO	None	2 - Encore	10 day																			X												

Rec by Brandy Barely 9.12.13 910

13013 1418268 7194439-54

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/11/2013
CarrierName: FedEx
AirbillNo: 796665999076

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130911-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	09/11/2013	1600									
									Brewer	9.12.13	910

COC Rev 2

COC 20130911-02, Page 1 of 2

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13013 14186268 7194439-54
AM 9/10/13

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/11/2013
CarrierName: FedEx
AirbillNo: 796665999076

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130911-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-506-SA5D-SB-0.0-0.5	9/11/13 13:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-506-SA5D-SB-0.0-0.5	9/11/13 13:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-506-SA5D-SB-4.0-5.0	9/11/13 13:50	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											
SL-523-SA5D-SB-0.0-0.5	9/11/13 12:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X			X											
SL-523-SA5D-SB-0.0-0.5	9/11/13 12:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-529-SA5D-SB-0.0-0.5	9/11/13 13:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X			X											
SL-529-SA5D-SB-0.0-0.5	9/11/13 13:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-529-SA5D-SB-3.0-4.0	9/11/13 13:15	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X				X			X											

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stacy Murphy	9/11/2013	1600									
									Brandy Bair	9-12-13	910

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Environmental Sample Administration Receipt Documentation Log

1418268

Client/Project: CDM

Date of Receipt: 9.12.13

Time of Receipt: 910

Source Code: SO-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	3.2	TB	WI	Y	B	
2	↓	1.3	↓	↓	↓	↓	
3	↓	1.3	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brianely Baez 2299 **Date/Time:** 9.12.13 938

Issued by Dept. 6042 Management

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH107

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 30, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/13/2013
Group Number: 1418633
SDG: PH107
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-091213 Water	7196425
SL-553-SA5D-SB-0.0-0.5 Soil	7196426
SL-553-SA5D-SB-0.0-0.5MS Soil	7196427
SL-553-SA5D-SB-0.0-0.5MSD Soil	7196428
SL-553-SA5D-SB-0.0-0.5SS Soil	7196429
SL-553-SA5D-SB-0.0-0.5IS Soil	7196430
SL-553-SA5D-SB-0.0-0.5PDS Soil	7196431
SL-553-SA5D-SB-0.0-0.5DUP Soil	7196432
SL-853-SA5D-SB-0.0-0.5 Soil	7196433
SL-553-SA5D-SB-4.5-5.5 Soil	7196434
SL-551-SA5D-SB-0.0-0.5 Soil	7196435
SL-551-SA5D-SB-4.0-5.0 Soil	7196436
SL-551-SA5D-SB-9.0-10.0 Soil	7196437
SL-551-SA5D-SB-14.0-15.0 Soil	7196438
SL-551-SA5D-SB-17.5.-18.5 Soil	7196439
SL-591-SA5D-SB-0.0-0.5 Soil	7196440
SL-591-SA5D-SB-6.5-7.5 Soil	7196441
SL-592-SA5D-SB-0.0-0.5 Soil	7196442
SL-592-SA5D-SB-4.0-5.0 Soil	7196443
SL-592-SA5D-SB-10.5-11.5 Soil	7196444
EB-091213 Water	7196445

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-091213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7196425
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 08:00

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB107 SDG#: PH107-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13262A94A	09/20/2013 13:08	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13262A94A	09/20/2013 13:08	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196426
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.6	J	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.6	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	2.4		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.2	J	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.2	J	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	2.7		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.0	1
12969	Fluoranthene	206-44-0	3.2		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.90	J	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.5	J	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	2.0		1.7	0.67	1
12969	Pyrene	129-00-0	3.2		1.7	0.67	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	91	U	91	45	1
10401	2,4-DB	94-82-6	17	U	17	6.3	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	24	U	24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.1	1
10401	MCPA	94-74-6	2,500	U	2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	2,500	U	2,500	760	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.83	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.76	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.1	U	5.1	2.1	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196426
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	2.5	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	13		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	41		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,900		40.2	7.24	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.743	1
06935	Arsenic	7440-38-2	3.46	J	4.02	0.703	1
06946	Barium	7440-39-3	82.1		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.634	J	1.00	0.0673	1
07914	Boron	7440-42-8	3.72	J	10.0	0.843	1
06949	Cadmium	7440-43-9	0.320	J	1.00	0.0763	1
01650	Calcium	7440-70-2	4,450		20.1	3.35	1
06951	Chromium	7440-47-3	29.1		3.01	0.161	1
06952	Cobalt	7440-48-4	6.45		1.00	0.0994	1
06953	Copper	7440-50-8	10.7		2.01	0.291	1
01654	Iron	7439-89-6	24,500		40.2	3.64	1
06955	Lead	7439-92-1	10.1		3.01	0.502	1
01656	Lithium	7439-93-2	21.6		4.0	0.34	1
01657	Magnesium	7439-95-4	5,370		10.0	1.68	1
06958	Manganese	7439-96-5	358		1.00	0.0833	1
06960	Molybdenum	7439-98-7	0.360	J	2.01	0.171	1
06961	Nickel	7440-02-0	11.6		2.01	0.131	1
10145	Phosphorus	7723-14-0	586		10.0	2.90	1
01662	Potassium	7440-09-7	4,690		100	8.37	1
01667	Sodium	7440-23-5	78.9	J	100	16.8	1
06969	Tin	7440-31-5	2.65	J	10.0	0.221	1
06970	Titanium	7440-32-6	1,040		1.00	0.171	1
06971	Vanadium	7440-62-2	51.4		1.00	0.131	1
06972	Zinc	7440-66-6	60.3		4.02	0.201	1
10146	Zirconium	7440-67-7	6.10		5.02	0.843	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.232	J	0.402	0.100	2
06142	Silver	7440-22-4	0.0272	J	0.201	0.0261	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196426
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**		**mg/kg**	**mg/kg**	
06144	Strontium	7440-24-6	26.7		0.402	0.0683	2
06145	Thallium	7440-28-0	0.277		0.201	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0205		0.0163	0.0098	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.80	J	1.0	0.40	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.20	J	0.41	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.11		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196426
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.120	1
11031	12378-PeCDD	40321-76-4	0.195	JBQ	5.03	0.0839	1
11031	123478-HxCDD	39227-28-6	0.190	JB	5.03	0.0650	1
11031	123678-HxCDD	57653-85-7	0.581	J	5.03	0.0695	1
11031	123789-HxCDD	19408-74-3	0.585	JBQ	5.03	0.0687	1
11031	1234678-HpCDD	35822-46-9	9.20	B	5.03	0.0866	1
11031	OCDD	3268-87-9	150	B	10.1	0.0674	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.116	1
11031	12378-PeCDF	57117-41-6	0.367	JB	5.03	0.0595	1
11031	23478-PeCDF	57117-31-4	0.195	JQ	5.03	0.0603	1
11031	123478-HxCDF	70648-26-9	0.251	J	5.03	0.0640	1
11031	123678-HxCDF	57117-44-9	0.163	JBQ	5.03	0.0563	1
11031	123789-HxCDF	72918-21-9	0.471	JBQ	5.03	0.0694	1
11031	234678-HxCDF	60851-34-5	0.207	J	5.03	0.0582	1
11031	1234678-HpCDF	67562-39-4	1.59	JB	5.03	0.0415	1
11031	1234789-HpCDF	55673-89-7	0.178	JBQ	5.03	0.0682	1
11031	OCDF	39001-02-0	4.59	JB	10.1	0.0839	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.288				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	55	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196426
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196426
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/25/2013 03:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132570033A	09/21/2013 04:30	Elizabeth J Marin	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 18:38	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 16:00	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132570033A	09/17/2013 09:00	William H Saadeh	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/21/2013 00:23	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 19:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196426
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 20:31	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 10:38	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 10:38	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 10:38	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 10:38	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:16	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201A	09/25/2013 11:07	Christopher D Meeks	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13271243202A	09/29/2013 00:32	Clinton M Wilson	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13256039401A	09/13/2013 18:40	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13271243202A	09/28/2013 03:50	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196427
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	31		1.7	0.67	1
12969	Acenaphthylene	208-96-8	33		1.7	0.33	1
12969	Anthracene	120-12-7	32		1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	33		1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	32		1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	38		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	30		17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	25		1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	35		1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	38		18	6.0	1
12969	Di-n-butylphthalate	84-74-2	36		18	6.0	1
12969	Chrysene	218-01-9	32		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	27		1.7	0.67	1
12969	Diethylphthalate	84-66-2	32		18	6.0	1
12969	Dimethylphthalate	131-11-3	32		18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	41		18	6.0	1
12969	Fluoranthene	206-44-0	34		1.7	0.67	1
12969	Fluorene	86-73-7	32		1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	27		1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	36		1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	36		1.7	0.67	1
12969	Naphthalene	91-20-3	34		1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	40		18	6.0	1
12969	Phenanthrene	85-01-8	32		1.7	0.67	1
12969	Pyrene	129-00-0	32		1.7	0.67	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.						
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	59		37	12	1
10401	Dalapon	75-99-0	51	J	91	45	1
10401	2,4-DB	94-82-6	82		17	6.3	1
10401	Dicamba	1918-00-9	5.2	J	12	4.1	1
10401	Dinoseb	88-85-7	43		24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	94		17	9.1	1
10401	MCPA	94-74-6	7,900		2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	6,900		2,500	760	1
10401	2,4,5-T	93-76-5	6.7		1.7	0.83	1
10401	2,4,5-TP	93-72-1	7.4		1.7	0.76	1
Perchlorate	**SW-846 6850 1/2007**		ug/kg		ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	98		5.1	2.1	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196427
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	170		17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	190		17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	4.9	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	14		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	37		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,100		40.2	7.24	1
06944	Antimony	7440-36-0	20.7		4.02	0.743	1
06935	Arsenic	7440-38-2	17.8		4.02	0.703	1
06946	Barium	7440-39-3	276		1.00	0.0331	1
06947	Beryllium	7440-41-7	5.59		1.00	0.0673	1
07914	Boron	7440-42-8	197		10.0	0.843	1
06949	Cadmium	7440-43-9	4.93		1.00	0.0763	1
01650	Calcium	7440-70-2	5,280		20.1	3.35	1
06951	Chromium	7440-47-3	51.1		3.01	0.161	1
06952	Cobalt	7440-48-4	51.7		1.00	0.0994	1
06953	Copper	7440-50-8	35.8		2.01	0.291	1
01654	Iron	7439-89-6	25,100		40.2	3.64	1
06955	Lead	7439-92-1	23.9		3.01	0.502	1
01656	Lithium	7439-93-2	121		4.0	0.34	1
01657	Magnesium	7439-95-4	5,830		10.0	1.68	1
06958	Manganese	7439-96-5	399		1.00	0.0833	1
06960	Molybdenum	7439-98-7	185		2.01	0.171	1
06961	Nickel	7440-02-0	58.8		2.01	0.131	1
10145	Phosphorus	7723-14-0	675		10.0	2.90	1
01662	Potassium	7440-09-7	6,110		100	8.37	1
01667	Sodium	7440-23-5	1,040		100	16.8	1
06969	Tin	7440-31-5	347		10.0	0.221	1
06970	Titanium	7440-32-6	1,470		1.00	0.171	1
06971	Vanadium	7440-62-2	103		1.00	0.131	1
06972	Zinc	7440-66-6	109		4.02	0.201	1
10146	Zirconium	7440-67-7	98.5		5.02	0.843	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.28		0.402	0.100	2
06142	Silver	7440-22-4	11.6		0.201	0.0261	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196427
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06144	Strontium	7440-24-6	37.4	0.402	0.0683	2
06145	Thallium	7440-28-0	0.727	0.201	0.0301	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.198	0.0165	0.0099	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	2.5	1.0	0.40	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.4	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196427
LL Group # 1418633
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Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	17.8		0.984	0.155	1
11031	12378-PeCDD	40321-76-4	94.0	B	4.92	0.135	1
11031	123478-HxCDD	39227-28-6	96.4	B	4.92	0.112	1
11031	123678-HxCDD	57653-85-7	94.5		4.92	0.118	1
11031	123789-HxCDD	19408-74-3	94.5	B	4.92	0.115	1
11031	1234678-HpCDD	35822-46-9	99.1	B	4.92	0.0977	1
11031	OCDD	3268-87-9	266	B	9.84	0.0968	1
11031	2378-TCDF	51207-31-9	18.8		0.984	0.158	1
11031	12378-PeCDF	57117-41-6	92.6	B	4.92	0.111	1
11031	23478-PeCDF	57117-31-4	94.1		4.92	0.112	1
11031	123478-HxCDF	70648-26-9	95.5		4.92	0.137	1
11031	123678-HxCDF	57117-44-9	95.6	B	4.92	0.122	1
11031	123789-HxCDF	72918-21-9	94.8	B	4.92	0.157	1
11031	234678-HxCDF	60851-34-5	95.0		4.92	0.126	1
11031	1234678-HpCDF	67562-39-4	92.2	B	4.92	0.0660	1
11031	1234789-HpCDF	55673-89-7	93.1	B	4.92	0.114	1
11031	OCDF	39001-02-0	188	B	9.84	0.118	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196427
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/25/2013 03:58	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132570033A	09/21/2013 04:57	Elizabeth J Marin	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 18:50	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 16:18	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132570033A	09/17/2013 09:00	William H Saadeh	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/21/2013 00:44	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 20:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196427
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 20:43	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 10:46	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 10:46	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 10:46	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 10:46	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:22	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13266266201A	09/25/2013 11:40	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196428
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	29		1.7	0.67	1
12969	Acenaphthylene	208-96-8	30		1.7	0.33	1
12969	Anthracene	120-12-7	30		1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	30		1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	30		1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	36		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	28		17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	21		1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	33		1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	35		18	6.0	1
12969	Di-n-butylphthalate	84-74-2	34		18	6.0	1
12969	Chrysene	218-01-9	30		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	23		1.7	0.67	1
12969	Diethylphthalate	84-66-2	31		18	6.0	1
12969	Dimethylphthalate	131-11-3	30		18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	42		18	6.0	1
12969	Fluoranthene	206-44-0	31		1.7	0.67	1
12969	Fluorene	86-73-7	30		1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	24		1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	33		1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	33		1.7	0.67	1
12969	Naphthalene	91-20-3	32		1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	31		1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	39		18	6.0	1
12969	Phenanthrene	85-01-8	30		1.7	0.67	1
12969	Pyrene	129-00-0	29		1.7	0.67	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.						
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	82		37	12	1
10401	Dalapon	75-99-0	100		91	45	1
10401	2,4-DB	94-82-6	120		17	6.3	1
10401	Dicamba	1918-00-9	6.8	J	12	4.1	1
10401	Dinoseb	88-85-7	55		24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	110		17	9.1	1
10401	MCPA	94-74-6	10,000		2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	7,800		2,500	760	1
10401	2,4,5-T	93-76-5	8.7		1.7	0.83	1
10401	2,4,5-TP	93-72-1	7.8		1.7	0.76	1
Perchlorate	**SW-846 6850 1/2007**		ug/kg		ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	100		5.1	2.1	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196428
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	180		17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	180		17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.3		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	18		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	55		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,800		40.2	7.24	1
06944	Antimony	7440-36-0	21.7		4.02	0.743	1
06935	Arsenic	7440-38-2	18.2		4.02	0.703	1
06946	Barium	7440-39-3	280		1.00	0.0331	1
06947	Beryllium	7440-41-7	5.66		1.00	0.0673	1
07914	Boron	7440-42-8	199		10.0	0.843	1
06949	Cadmium	7440-43-9	4.98		1.00	0.0763	1
01650	Calcium	7440-70-2	5,370		20.1	3.35	1
06951	Chromium	7440-47-3	51.8		3.01	0.161	1
06952	Cobalt	7440-48-4	51.8		1.00	0.0994	1
06953	Copper	7440-50-8	36.3		2.01	0.291	1
01654	Iron	7439-89-6	26,200		40.2	3.64	1
06955	Lead	7439-92-1	23.5		3.01	0.502	1
01656	Lithium	7439-93-2	123		4.0	0.34	1
01657	Magnesium	7439-95-4	6,040		10.0	1.68	1
06958	Manganese	7439-96-5	406		1.00	0.0833	1
06960	Molybdenum	7439-98-7	186		2.01	0.171	1
06961	Nickel	7440-02-0	59.0		2.01	0.131	1
10145	Phosphorus	7723-14-0	693		10.0	2.90	1
01662	Potassium	7440-09-7	6,350		100	8.37	1
01667	Sodium	7440-23-5	1,060		100	16.8	1
06969	Tin	7440-31-5	349		10.0	0.221	1
06970	Titanium	7440-32-6	1,550		1.00	0.171	1
06971	Vanadium	7440-62-2	106		1.00	0.131	1
06972	Zinc	7440-66-6	111		4.02	0.201	1
10146	Zirconium	7440-67-7	99.3		5.02	0.843	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.36		0.402	0.100	2
06142	Silver	7440-22-4	12.7		0.201	0.0261	2

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Sample Description: SL-553-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196428
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06144	Strontium	7440-24-6	41.3	0.402	0.0683	2
06145	Thallium	7440-28-0	0.805	0.201	0.0301	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.196	0.0166	0.010	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.4	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196428
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

55300 SDG#: PH107-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	17.9		0.973	0.254	1
11031	12378-PeCDD	40321-76-4	96.4	B	4.87	0.216	1
11031	123478-HxCDD	39227-28-6	96.2	B	4.87	0.169	1
11031	123678-HxCDD	57653-85-7	94.2		4.87	0.180	1
11031	123789-HxCDD	19408-74-3	92.3	B	4.87	0.172	1
11031	1234678-HpCDD	35822-46-9	98.4	B	4.87	0.147	1
11031	OCDD	3268-87-9	263	B	9.73	0.0979	1
11031	2378-TCDF	51207-31-9	19.4		0.973	0.242	1
11031	12378-PeCDF	57117-41-6	91.1	B	4.87	0.150	1
11031	23478-PeCDF	57117-31-4	94.4		4.87	0.140	1
11031	123478-HxCDF	70648-26-9	94.1		4.87	0.165	1
11031	123678-HxCDF	57117-44-9	96.8	B	4.87	0.150	1
11031	123789-HxCDF	72918-21-9	93.4	B	4.87	0.198	1
11031	234678-HxCDF	60851-34-5	92.1		4.87	0.156	1
11031	1234678-HpCDF	67562-39-4	93.4	B	4.87	0.103	1
11031	1234789-HpCDF	55673-89-7	92.1	B	4.87	0.174	1
11031	OCDF	39001-02-0	183	B	9.73	0.151	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	56	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	48	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196428
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

55300 SDG#: PH107-02MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/25/2013 05:37	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132570033A	09/21/2013 05:24	Elizabeth J Marin	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 19:16	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 16:37	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132570033A	09/17/2013 09:00	William H Saadeh	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/21/2013 01:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 21:06	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196428
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
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55300 SDG#: PH107-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 20:48	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 10:48	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 10:48	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 10:48	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 10:48	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:28	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5SS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196429
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02SS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	35.9	2.0	0.71	5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13271243202A	09/29/2013 01:01	Clinton M Wilson	5
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13271243202A	09/28/2013 03:50	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5IS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196430
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02IS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	1,000	41.9	14.7	100
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13271243202A	09/29/2013 01:16	Clinton M Wilson	100
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13271243202A	09/28/2013 03:50	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5PDS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196431
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02PDS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	40.2	4.1	1.4	10
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13271243202A	09/29/2013 01:37	Clinton M Wilson	10
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13271243202A	09/28/2013 03:50	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196432
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,000		40.2	7.24	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.743	1
06935	Arsenic	7440-38-2	3.43	J	4.02	0.703	1
06946	Barium	7440-39-3	82.4		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.631	J	1.00	0.0673	1
07914	Boron	7440-42-8	3.77	J	10.0	0.843	1
06949	Cadmium	7440-43-9	0.358	J	1.00	0.0763	1
01650	Calcium	7440-70-2	4,490		20.1	3.35	1
06951	Chromium	7440-47-3	28.9		3.01	0.161	1
06952	Cobalt	7440-48-4	6.30		1.00	0.0994	1
06953	Copper	7440-50-8	11.2		2.01	0.291	1
01654	Iron	7439-89-6	24,700		40.2	3.64	1
06955	Lead	7439-92-1	10.1		3.01	0.502	1
01656	Lithium	7439-93-2	22.0		4.0	0.34	1
01657	Magnesium	7439-95-4	5,450		10.0	1.68	1
06958	Manganese	7439-96-5	350		1.00	0.0833	1
06960	Molybdenum	7439-98-7	0.366	J	2.01	0.171	1
06961	Nickel	7440-02-0	11.7		2.01	0.131	1
10145	Phosphorus	7723-14-0	591		10.0	2.90	1
01662	Potassium	7440-09-7	4,750		100	8.37	1
01667	Sodium	7440-23-5	79.9	J	100	16.8	1
06969	Tin	7440-31-5	2.73	J	10.0	0.221	1
06970	Titanium	7440-32-6	1,050		1.00	0.171	1
06971	Vanadium	7440-62-2	51.4		1.00	0.131	1
06972	Zinc	7440-66-6	61.0		4.02	0.201	1
10146	Zirconium	7440-67-7	6.24		5.02	0.843	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.262	J	0.402	0.100	2
06142	Silver	7440-22-4	0.0291	J	0.201	0.0261	2
06144	Strontium	7440-24-6	29.2		0.402	0.0683	2
06145	Thallium	7440-28-0	0.309		0.201	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0189		0.0164	0.0098	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	0.67	J	1.0	0.40	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.57		0.40	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	7.13		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196432
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	1.4	0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	1.3	0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 20:39	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 10:43	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 10:43	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 10:43	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 10:43	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:20	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196432
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:30 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55300 SDG#: PH107-02DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13266266201A	09/25/2013 11:24	Christopher D Meeks	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13271243202A	09/29/2013 01:45	Clinton M Wilson	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13256039401A	09/13/2013 18:40	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13271243202A	09/28/2013 03:50	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196433
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH107-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.1	J	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.1	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	2.3		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.0	J	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	0.77	J	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.2		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	17	J	18	6.1	1
12969	Fluoranthene	206-44-0	2.3		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	J	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.5	J	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.4	J	1.7	0.67	1
12969	Pyrene	129-00-0	2.2		1.7	0.67	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.						
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	36	U	36	12	1
10401	Dalapon	75-99-0	91	U	91	44	1
10401	2,4-DB	94-82-6	17	U	17	6.9	1
10401	Dicamba	1918-00-9	12	U	12	4.0	1
10401	Dinoseb	88-85-7	24	U	24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.1	1
10401	MCPA	94-74-6	2,500	U	2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	2,500	U	2,500	760	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.83	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.76	1
	Reporting limits were raised due to interference from the sample matrix.						
Perchlorate	**SW-846 6850 1/2007**		ug/kg		ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.1	U	5.1	2.1	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196433
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH107-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	2.1	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	11		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	32		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,800		39.4	7.10	1
06944	Antimony	7440-36-0	3.94	U	3.94	0.729	1
06935	Arsenic	7440-38-2	3.83	J	3.94	0.689	1
06946	Barium	7440-39-3	87.3		0.985	0.0325	1
06947	Beryllium	7440-41-7	0.662	J	0.985	0.0660	1
07914	Boron	7440-42-8	3.06	J	9.85	0.827	1
06949	Cadmium	7440-43-9	0.363	J	0.985	0.0748	1
01650	Calcium	7440-70-2	4,570		19.7	3.29	1
06951	Chromium	7440-47-3	30.3		2.95	0.158	1
06952	Cobalt	7440-48-4	7.28		0.985	0.0975	1
06953	Copper	7440-50-8	12.5		1.97	0.286	1
01654	Iron	7439-89-6	27,000		78.8	7.13	2
06955	Lead	7439-92-1	11.8		2.95	0.492	1
01656	Lithium	7439-93-2	24.3		3.9	0.33	1
01657	Magnesium	7439-95-4	5,840		9.85	1.64	1
06958	Manganese	7439-96-5	386		0.985	0.0817	1
06960	Molybdenum	7439-98-7	0.374	J	1.97	0.167	1
06961	Nickel	7440-02-0	12.7		1.97	0.128	1
10145	Phosphorus	7723-14-0	579		9.85	2.85	1
01662	Potassium	7440-09-7	4,940		98.5	8.21	1
01667	Sodium	7440-23-5	83.4	J	98.5	16.4	1
06969	Tin	7440-31-5	2.80	J	9.85	0.217	1
06970	Titanium	7440-32-6	1,090		0.985	0.167	1
06971	Vanadium	7440-62-2	53.6		0.985	0.128	1
06972	Zinc	7440-66-6	67.0		3.94	0.197	1
10146	Zirconium	7440-67-7	6.53		4.92	0.827	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.284	J	0.394	0.0985	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196433
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH107-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06142	Silver	7440-22-4	0.0309 J	0.197	0.0256	2
06144	Strontium	7440-24-6	34.9	0.394	0.0670	2
06145	Thallium	7440-28-0	0.391	0.197	0.0295	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0215	0.0163	0.0098	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.86 J	1.0	0.40	1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.24 J	0.41	0.14	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	7.66	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	1.4	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196433
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH107-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.977	U	0.977	0.108	1
11031	12378-PeCDD	40321-76-4	0.154	JBQ	4.89	0.0844	1
11031	123478-HxCDD	39227-28-6	0.197	JBQ	4.89	0.0673	1
11031	123678-HxCDD	57653-85-7	0.577	JQ	4.89	0.0687	1
11031	123789-HxCDD	19408-74-3	0.649	JB	4.89	0.0697	1
11031	1234678-HpCDD	35822-46-9	6.28	B	4.89	0.0803	1
11031	OCDD	3268-87-9	86.0	B	9.77	0.0700	1
11031	2378-TCDF	51207-31-9	0.127	J	0.977	0.125	1
11031	12378-PeCDF	57117-41-6	0.398	JB	4.89	0.0635	1
11031	23478-PeCDF	57117-31-4	0.223	JQ	4.89	0.0619	1
11031	123478-HxCDF	70648-26-9	0.352	JQ	4.89	0.0650	1
11031	123678-HxCDF	57117-44-9	0.271	JB	4.89	0.0598	1
11031	123789-HxCDF	72918-21-9	0.559	JB	4.89	0.0796	1
11031	234678-HxCDF	60851-34-5	0.380	JQ	4.89	0.0615	1
11031	1234678-HpCDF	67562-39-4	1.28	JB	4.89	0.0330	1
11031	1234789-HpCDF	55673-89-7	0.181	JBQ	4.89	0.0597	1
11031	OCDF	39001-02-0	3.29	JB	9.77	0.0862	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.263				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	97	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	53	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196433
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH107-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196433
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH107-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/25/2013 06:10	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132660014A	09/24/2013 17:10	Melissa McDermott	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 19:29	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 16:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132570033A	09/17/2013 09:00	William H Saadeh	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/21/2013 01:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 22:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/23/2013 06:58	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196433
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH107-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 21:19	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 11:07	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 11:07	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 11:07	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 11:07	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:30	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201A	09/25/2013 11:57	Christopher D Meeks	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13271243202A	09/29/2013 02:06	Clinton M Wilson	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13256039401A	09/13/2013 18:40	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13271243202A	09/28/2013 03:50	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196434
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:45 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55345 SDG#: PH107-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.1	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.2	J	1.0	0.2	24.61
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	95	U	95	47	1
10401	2,4-DB	94-82-6	18	U	18	6.6	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.5	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.5	1
10401	MCPA	94-74-6	2,600	U	2,600	800	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	790	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.87	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.79	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.3	U	5.3	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196434
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:45 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55345 SDG#: PH107-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	4.4	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	8.2	J	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,200		41.5	7.48	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.768	1
06935	Arsenic	7440-38-2	3.85	J	4.15	0.726	1
06946	Barium	7440-39-3	81.2		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.757	J	1.04	0.0695	1
07914	Boron	7440-42-8	1.35	J	10.4	0.871	1
06949	Cadmium	7440-43-9	0.241	J	1.04	0.0788	1
01650	Calcium	7440-70-2	3,490		20.7	3.47	1
06951	Chromium	7440-47-3	29.7		3.11	0.166	1
06952	Cobalt	7440-48-4	7.05		1.04	0.103	1
06953	Copper	7440-50-8	8.53		2.07	0.301	1
01654	Iron	7439-89-6	26,600		41.5	3.76	1
06955	Lead	7439-92-1	7.23		3.11	0.519	1
01656	Lithium	7439-93-2	23.3		4.1	0.35	1
01657	Magnesium	7439-95-4	5,370		10.4	1.73	1
06958	Manganese	7439-96-5	342		1.04	0.0861	1
06960	Molybdenum	7439-98-7	0.364	J	2.07	0.176	1
06961	Nickel	7440-02-0	11.5		2.07	0.135	1
10145	Phosphorus	7723-14-0	343		10.4	3.00	1
01662	Potassium	7440-09-7	3,180		104	8.65	1
01667	Sodium	7440-23-5	118		104	17.3	1
06969	Tin	7440-31-5	2.96	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,200		1.04	0.176	1
06971	Vanadium	7440-62-2	56.4		1.04	0.135	1
06972	Zinc	7440-66-6	52.3		4.15	0.207	1
10146	Zirconium	7440-67-7	6.78		5.19	0.871	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196434
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:45 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55345 SDG#: PH107-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.189	J	0.415	0.104	2
06142	Silver	7440-22-4	0.207	U	0.207	0.0270	2
06144	Strontium	7440-24-6	26.4		0.415	0.0705	2
06145	Thallium	7440-28-0	0.325		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0119	J	0.0173	0.0104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	3.6		1.1	0.42	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.34	J	0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	8.00		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	5.5		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/25/2013 06:43	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13261A34A	09/18/2013 20:50	Laura M Krieger	24.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325632390	09/13/2013 15:29	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325632390	09/13/2013 15:29	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132570033A	09/21/2013 06:17	Elizabeth J Marin	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 19:41	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 17:14	Monica M Souders	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196434
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:45 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55345 SDG#: PH107-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132570033A	09/17/2013 09:00	William H Saadeh	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/21/2013 00:02	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 21:23	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 11:09	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 11:09	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 11:09	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 11:09	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:32	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201A	09/25/2013 12:14	Christopher D Meeks	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13271243202A	09/29/2013 02:21	Clinton M Wilson	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA5D-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196434
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 07:45 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55345 SDG#: PH107-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13256039401A	09/13/2013 18:40	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13271243202A	09/28/2013 03:50	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196435
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:05 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH107-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.0	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.						
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.2	U	5.2	2.2	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196435
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:05 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH107-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	34	U	34	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,700		41.0	7.39	1
06944	Antimony	7440-36-0	4.10	U	4.10	0.758	1
06935	Arsenic	7440-38-2	3.90	J	4.10	0.717	1
06946	Barium	7440-39-3	79.8		1.02	0.0338	1
06947	Beryllium	7440-41-7	0.767	J	1.02	0.0686	1
07914	Boron	7440-42-8	1.03	J	10.2	0.861	1
06949	Cadmium	7440-43-9	0.216	J	1.02	0.0779	1
01650	Calcium	7440-70-2	3,850		20.5	3.42	1
06951	Chromium	7440-47-3	36.6		3.07	0.164	1
06952	Cobalt	7440-48-4	7.95		1.02	0.101	1
06953	Copper	7440-50-8	11.9		2.05	0.297	1
01654	Iron	7439-89-6	30,300		82.0	7.42	2
06955	Lead	7439-92-1	6.76		3.07	0.512	1
01656	Lithium	7439-93-2	29.0		4.1	0.35	1
01657	Magnesium	7439-95-4	7,050		10.2	1.71	1
06958	Manganese	7439-96-5	341		1.02	0.0850	1
06960	Molybdenum	7439-98-7	0.209	J	2.05	0.174	1
06961	Nickel	7440-02-0	19.3		2.05	0.133	1
10145	Phosphorus	7723-14-0	519		10.2	2.96	1
01662	Potassium	7440-09-7	3,740		102	8.54	1
01667	Sodium	7440-23-5	92.2	J	102	17.1	1
06969	Tin	7440-31-5	2.96	J	10.2	0.225	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196435
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:05 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH107-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06970	Titanium	7440-32-6	1,130		1.02	0.174	1
06971	Vanadium	7440-62-2	61.2		1.02	0.133	1
06972	Zinc	7440-66-6	65.2		4.10	0.205	1
10146	Zirconium	7440-67-7	6.81		5.12	0.861	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.206	J	0.410	0.102	2
06142	Silver	7440-22-4	0.205	U	0.205	0.0266	2
06144	Strontium	7440-24-6	28.3		0.410	0.0697	2
06145	Thallium	7440-28-0	0.359		0.205	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0112	J	0.0166	0.010	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.68	J	1.0	0.42	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	6.78		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	4.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196435
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:05 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH107-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.152	1
11031	12378-PeCDD	40321-76-4	5.06	U	5.06	0.0973	1
11031	123478-HxCDD	39227-28-6	0.0425	JB	5.06	0.0422	1
11031	123678-HxCDD	57653-85-7	0.158	JQ	5.06	0.0442	1
11031	123789-HxCDD	19408-74-3	0.248	JB	5.06	0.0449	1
11031	1234678-HpCDD	35822-46-9	5.06	U	5.06	0.0439	1
11031	OCDD	3268-87-9	1.11	JB	10.1	0.0494	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.140	1
11031	12378-PeCDF	57117-41-6	0.117	JBQ	5.06	0.0633	1
11031	23478-PeCDF	57117-31-4	0.0571	JQ	5.06	0.0559	1
11031	123478-HxCDF	70648-26-9	0.0687	JQ	5.06	0.0425	1
11031	123678-HxCDF	57117-44-9	0.0806	JB	5.06	0.0402	1
11031	123789-HxCDF	72918-21-9	0.358	JB	5.06	0.0437	1
11031	234678-HxCDF	60851-34-5	5.06	U	5.06	0.0383	1
11031	1234678-HpCDF	67562-39-4	0.0749	JB	5.06	0.0250	1
11031	1234789-HpCDF	55673-89-7	0.0716	JBQ	5.06	0.0381	1
11031	OCDF	39001-02-0	0.171	JB	10.1	0.0708	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0739				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	53	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	45	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196435
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:05 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH107-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196435
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:05 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH107-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/25/2013 07:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 19:54	Richard A Shober	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132620006A	09/26/2013 14:02	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 17:32	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132620006A	09/19/2013 16:35	JoElla L Rice	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/20/2013 21:32	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/20/2013 22:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/23/2013 07:02	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196435
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:05 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH107-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 21:27	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 11:12	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 11:12	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 11:12	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 11:12	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:34	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201A	09/25/2013 12:31	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13256039401A	09/13/2013 18:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196436
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:15 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH107-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.2	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	23.06
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.4	U	5.4	2.3	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.36	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.36	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.36	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.36	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196436
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:15 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH107-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.36	1
10590	Endrin	72-20-8	1.8	U	1.8	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.36	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.65	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,700		43.1	7.77	1
06944	Antimony	7440-36-0	4.31	U	4.31	0.797	1
06935	Arsenic	7440-38-2	4.40		4.31	0.754	1
06946	Barium	7440-39-3	85.7		1.08	0.0356	1
06947	Beryllium	7440-41-7	0.789	J	1.08	0.0722	1
07914	Boron	7440-42-8	1.15	J	10.8	0.905	1
06949	Cadmium	7440-43-9	0.183	J	1.08	0.0819	1
01650	Calcium	7440-70-2	3,960		21.6	3.60	1
06951	Chromium	7440-47-3	40.9		3.23	0.172	1
06952	Cobalt	7440-48-4	8.35		1.08	0.107	1
06953	Copper	7440-50-8	12.7		2.16	0.313	1
01654	Iron	7439-89-6	31,400		86.2	7.80	2
06955	Lead	7439-92-1	6.93		3.23	0.539	1
01656	Lithium	7439-93-2	33.1		4.3	0.37	1
01657	Magnesium	7439-95-4	7,830		10.8	1.80	1
06958	Manganese	7439-96-5	342		1.08	0.0894	1
06960	Molybdenum	7439-98-7	0.222	J	2.16	0.183	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196436
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:15 by VC

Submitted: 09/13/2013 09:05
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3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH107-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06961	Nickel	7440-02-0	28.0		2.16	0.140	1
10145	Phosphorus	7723-14-0	469		10.8	3.11	1
01662	Potassium	7440-09-7	3,170		108	8.99	1
01667	Sodium	7440-23-5	108	J	108	18.0	1
06969	Tin	7440-31-5	3.09	J	10.8	0.237	1
06970	Titanium	7440-32-6	1,210		1.08	0.183	1
06971	Vanadium	7440-62-2	62.9		1.08	0.140	1
06972	Zinc	7440-66-6	65.8		4.31	0.216	1
10146	Zirconium	7440-67-7	7.08		5.39	0.905	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.142	J	0.431	0.108	2
06142	Silver	7440-22-4	0.216	U	0.216	0.0280	2
06144	Strontium	7440-24-6	31.1		0.431	0.0733	2
06145	Thallium	7440-28-0	0.383		0.216	0.0323	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173	U	0.0173	0.0104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	1.8		1.1	0.43	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	7.51		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	7.2		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/25/2013 07:50	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196436
LL Group # 1418633
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Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:15 by VC

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55140 SDG#: PH107-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13261A34A	09/18/2013 21:26	Laura M Krieger	23.06
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325632390	09/13/2013 15:32	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325632390	09/13/2013 15:32	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 20:07	Richard A Shober	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132620006A	09/26/2013 14:48	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 17:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132620006A	09/19/2013 16:35	JoElla L Rice	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/20/2013 21:54	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/23/2013 07:06	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 21:31	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 11:14	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 11:14	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 11:14	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 11:14	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:36	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196436
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:15 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH107-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201A	09/25/2013 12:48	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13256039401A	09/13/2013 18:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196437
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:25 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55190 SDG#: PH107-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.1	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	21.19
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.5	U	5.5	2.3	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.38	1
10590	Delta BHC	319-86-8	0.91	U	0.91	0.49	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196437
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:25 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55190 SDG#: PH107-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,600		42.2	7.60	1
06944	Antimony	7440-36-0	4.22	U	4.22	0.780	1
06935	Arsenic	7440-38-2	4.68		4.22	0.738	1
06946	Barium	7440-39-3	95.0		1.05	0.0348	1
06947	Beryllium	7440-41-7	0.826	J	1.05	0.0706	1
07914	Boron	7440-42-8	10.5	U	10.5	0.886	1
06949	Cadmium	7440-43-9	0.135	J	1.05	0.0801	1
01650	Calcium	7440-70-2	3,430		21.1	3.52	1
06951	Chromium	7440-47-3	43.9		3.16	0.169	1
06952	Cobalt	7440-48-4	9.83		1.05	0.104	1
06953	Copper	7440-50-8	12.9		2.11	0.306	1
01654	Iron	7439-89-6	29,300		84.3	7.63	2
06955	Lead	7439-92-1	7.02		3.16	0.527	1
01656	Lithium	7439-93-2	31.2		4.2	0.36	1
01657	Magnesium	7439-95-4	7,760		10.5	1.76	1
06958	Manganese	7439-96-5	369		1.05	0.0875	1
06960	Molybdenum	7439-98-7	0.385	J	2.11	0.179	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196437
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:25 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55190 SDG#: PH107-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06961	Nickel	7440-02-0	33.0	2.11	0.137	1
10145	Phosphorus	7723-14-0	417	10.5	3.05	1
01662	Potassium	7440-09-7	3,210	105	8.79	1
01667	Sodium	7440-23-5	125	105	17.6	1
06969	Tin	7440-31-5	3.01 J	10.5	0.232	1
06970	Titanium	7440-32-6	1,200	1.05	0.179	1
06971	Vanadium	7440-62-2	61.6	1.05	0.137	1
06972	Zinc	7440-66-6	64.1	4.22	0.211	1
10146	Zirconium	7440-67-7	7.33	5.27	0.886	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.112 J	0.422	0.105	2
06142	Silver	7440-22-4	0.0290 J	0.211	0.0274	2
06144	Strontium	7440-24-6	28.6	0.422	0.0717	2
06145	Thallium	7440-28-0	0.390	0.211	0.0316	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0138 J	0.0178	0.0107	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	2.2	1.1	0.43	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	7.66	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	8.8	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/25/2013 08:23	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196437
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:25 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55190 SDG#: PH107-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13261A34A	09/18/2013 22:01	Laura M Krieger	21.19
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325632390	09/13/2013 15:34	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325632390	09/13/2013 15:35	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 20:20	Richard A Shober	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132620006A	09/26/2013 15:04	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 18:09	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132620006A	09/19/2013 16:35	JoElla L Rice	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/20/2013 22:15	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/23/2013 07:10	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 21:35	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 11:17	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 11:17	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 11:17	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 11:17	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:38	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196437
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:25 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55190 SDG#: PH107-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201A	09/25/2013 13:05	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13256039401B	09/13/2013 18:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196438
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55114 SDG#: PH107-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.3	J	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20.46
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.7	U	5.7	2.4	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.95	U	0.95	0.19	1
10590	Alpha BHC	319-84-6	0.95	U	0.95	0.19	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.95	U	0.95	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.6	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.38	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.38	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.40	1
10590	Delta BHC	319-86-8	0.95	U	0.95	0.51	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.38	1
10590	Endosulfan I	959-98-8	0.95	U	0.95	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.38	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196438
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55114 SDG#: PH107-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.38	1
10590	Endrin	72-20-8	1.9	U	1.9	0.38	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.38	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.68	1
10590	Heptachlor	76-44-8	0.95	U	0.95	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.95	U	0.95	0.19	1
10590	Methoxychlor	72-43-5	7.6	U	7.6	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.40	1
10590	Toxaphene	8001-35-2	38	U	38	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,900		45.2	8.14	1
06944	Antimony	7440-36-0	4.52	U	4.52	0.835	1
06935	Arsenic	7440-38-2	7.35		4.52	0.790	1
06946	Barium	7440-39-3	125		1.13	0.0373	1
06947	Beryllium	7440-41-7	1.22		1.13	0.0756	1
07914	Boron	7440-42-8	11.3	U	11.3	0.948	1
06949	Cadmium	7440-43-9	0.117	J	1.13	0.0858	1
01650	Calcium	7440-70-2	5,210		22.6	3.77	1
06951	Chromium	7440-47-3	48.1		3.39	0.181	1
06952	Cobalt	7440-48-4	7.84		1.13	0.112	1
06953	Copper	7440-50-8	33.7		2.26	0.327	1
01654	Iron	7439-89-6	44,300		90.3	8.17	2
06955	Lead	7439-92-1	15.1		3.39	0.564	1
01656	Lithium	7439-93-2	42.7		4.5	0.38	1
01657	Magnesium	7439-95-4	9,940		11.3	1.89	1
06958	Manganese	7439-96-5	316		1.13	0.0937	1
06960	Molybdenum	7439-98-7	0.524	J	2.26	0.192	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196438
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55114 SDG#: PH107-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06961	Nickel	7440-02-0	31.2		2.26	0.147	1
10145	Phosphorus	7723-14-0	610		11.3	3.26	1
01662	Potassium	7440-09-7	4,360		113	9.42	1
01667	Sodium	7440-23-5	241		113	18.9	1
06969	Tin	7440-31-5	4.01	J	11.3	0.248	1
06970	Titanium	7440-32-6	1,550		1.13	0.192	1
06971	Vanadium	7440-62-2	82.6		1.13	0.147	1
06972	Zinc	7440-66-6	118		4.52	0.226	1
10146	Zirconium	7440-67-7	9.59		5.64	0.948	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.227	J	0.452	0.113	2
06142	Silver	7440-22-4	0.0421	J	0.226	0.0294	2
06144	Strontium	7440-24-6	57.9		0.452	0.0768	2
06145	Thallium	7440-28-0	0.588		0.226	0.0339	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0281		0.0185	0.0111	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	2.7		1.1	0.45	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	7.84		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	12.3		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/25/2013 08:56	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196438
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55114 SDG#: PH107-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13261A34A	09/18/2013 22:37	Laura M Krieger	20.46
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325632390	09/13/2013 15:36	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325632390	09/13/2013 15:37	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 20:32	Richard A Shober	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132620006A	09/26/2013 15:19	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 18:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132620006A	09/19/2013 16:35	JoElla L Rice	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/20/2013 22:36	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/23/2013 07:14	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 21:39	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 11:19	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 11:19	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 11:19	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 11:19	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:40	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196438
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55114 SDG#: PH107-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201A	09/25/2013 13:56	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13256039401B	09/13/2013 18:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-17.5.-18.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196439
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:45 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55117 SDG#: PH107-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	2.1		1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	3.4		1.8	0.72	1
12969	Naphthalene	91-20-3	2.2		1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.95
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.5	U	5.5	2.3	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.38	1
10590	Delta BHC	319-86-8	0.91	U	0.91	0.49	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-17.5.-18.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196439
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:45 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55117 SDG#: PH107-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,600		42.5	7.66	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.786	1
06935	Arsenic	7440-38-2	7.91		4.25	0.744	1
06946	Barium	7440-39-3	125		1.06	0.0351	1
06947	Beryllium	7440-41-7	1.00	J	1.06	0.0712	1
07914	Boron	7440-42-8	10.6	U	10.6	0.892	1
06949	Cadmium	7440-43-9	0.171	J	1.06	0.0807	1
01650	Calcium	7440-70-2	5,090		21.2	3.55	1
06951	Chromium	7440-47-3	43.5		3.19	0.170	1
06952	Cobalt	7440-48-4	11.6		1.06	0.105	1
06953	Copper	7440-50-8	30.7		2.12	0.308	1
01654	Iron	7439-89-6	38,000		85.0	7.69	2
06955	Lead	7439-92-1	14.7		3.19	0.531	1
01656	Lithium	7439-93-2	58.1		4.2	0.36	1
01657	Magnesium	7439-95-4	9,400		10.6	1.77	1
06958	Manganese	7439-96-5	462		1.06	0.0882	1
06960	Molybdenum	7439-98-7	0.383	J	2.12	0.181	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-17.5.-18.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196439
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:45 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55117 SDG#: PH107-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06961	Nickel	7440-02-0	35.7	2.12	0.138	1
10145	Phosphorus	7723-14-0	855	10.6	3.07	1
01662	Potassium	7440-09-7	4,210	106	8.86	1
01667	Sodium	7440-23-5	255	106	17.7	1
06969	Tin	7440-31-5	3.99 J	10.6	0.234	1
06970	Titanium	7440-32-6	1,590	1.06	0.181	1
06971	Vanadium	7440-62-2	62.0	1.06	0.138	1
06972	Zinc	7440-66-6	122	4.25	0.212	1
10146	Zirconium	7440-67-7	7.54	5.31	0.892	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.125 J	0.425	0.106	2
06142	Silver	7440-22-4	0.0336 J	0.212	0.0276	2
06144	Strontium	7440-24-6	28.1	0.425	0.0722	2
06145	Thallium	7440-28-0	0.556	0.212	0.0319	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0421	0.0177	0.0106	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	4.2	1.1	0.43	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.7 C.	n.a.	8.11	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	8.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/25/2013 09:29	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-17.5.-18.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196439
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:45 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55117 SDG#: PH107-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13261A34A	09/18/2013 23:12	Laura M Krieger	23.95
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201325632390	09/13/2013 15:38	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201325632390	09/13/2013 15:39	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 20:45	Richard A Shober	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132620006A	09/26/2013 15:34	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 18:46	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132620006A	09/19/2013 16:35	JoElla L Rice	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/20/2013 22:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
01643	Aluminum	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06944	Antimony	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06946	Barium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
07914	Boron	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
01650	Calcium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06951	Chromium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06953	Copper	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
01654	Iron	SW-846 6010C	1	132620637001	09/23/2013 07:18	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
01656	Lithium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06958	Manganese	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06961	Nickel	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
01662	Potassium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
01667	Sodium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06969	Tin	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06970	Titanium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06972	Zinc	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132620637001	09/21/2013 21:43	John P Hook	1
06141	Selenium	SW-846 6020A	1	132620637001B	09/20/2013 11:21	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132620637001A	09/20/2013 11:21	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132620637001A	09/20/2013 11:21	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132620637001A	09/20/2013 11:21	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638001	09/20/2013 05:42	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA5D-SB-17.5.-18.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196439
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 09:45 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55117 SDG#: PH107-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132620637001	09/19/2013 23:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638001	09/20/2013 02:45	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201A	09/25/2013 14:13	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13256039401B	09/13/2013 18:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-591-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196440
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 12:35 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59100 SDG#: PH107-10

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	1.4	1.0	0.41	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.		n.a.	7.14	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	4.3	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201A	09/25/2013 14:30	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13256039401B	09/13/2013 18:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-591-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196441
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 12:40 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59165 SDG#: PH107-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	6.6	1.1	0.44	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	7.81	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	9.0	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201A	09/25/2013 14:47	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201A	09/23/2013 06:50	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13256039401B	09/13/2013 18:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196442
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 12:00 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59200 SDG#: PH107-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	0.54	J	1.0	0.42	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.9		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201B	09/25/2013 15:03	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201B	09/23/2013 06:50	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196443
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 12:05 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59240 SDG#: PH107-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	3.2	1.1	0.44	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.1	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201B	09/25/2013 16:12	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201B	09/23/2013 06:50	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA5D-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7196444
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 12:10 by VC

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59210 SDG#: PH107-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	15.8	1.1	0.44	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.6	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0-Fluoride	EPA 300.0	1	13266266201B	09/25/2013 16:29	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13266266201B	09/23/2013 06:50	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13263162401A	09/20/2013 22:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-091213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7196445
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 15:00 by PH

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB107 SDG#: PH107-15EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.20	U	0.20	0.041	1
12971	Acenaphthylene	208-96-8	0.20	U	0.20	0.041	1
12971	Anthracene	120-12-7	0.20	U	0.20	0.041	1
12971	Benzo(a)anthracene	56-55-3	0.20	U	0.20	0.041	1
12971	Benzo(a)pyrene	50-32-8	0.20	U	0.20	0.041	1
12971	Benzo(b)fluoranthene	205-99-2	0.20	U	0.20	0.041	1
12971	Benzo(e)pyrene	192-97-2	0.20	U	0.20	0.041	1
12971	Benzo(g,h,i)perylene	191-24-2	0.20	U	0.20	0.041	1
12971	Benzo(k)fluoranthene	207-08-9	0.20	U	0.20	0.041	1
12971	Butylbenzylphthalate	85-68-7	4.1	U	4.1	0.20	1
12971	Di-n-butylphthalate	84-74-2	4.1	U	4.1	0.20	1
12971	Chrysene	218-01-9	0.20	U	0.20	0.041	1
12971	Dibenz(a,h)anthracene	53-70-3	0.20	U	0.20	0.041	1
12971	Diethylphthalate	84-66-2	4.1	U	4.1	0.20	1
12971	Dimethylphthalate	131-11-3	4.1	U	4.1	0.20	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	4.1	U	4.1	0.20	1
12971	Fluoranthene	206-44-0	0.20	U	0.20	0.041	1
12971	Fluorene	86-73-7	0.20	U	0.20	0.041	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.20	U	0.20	0.041	1
12971	1-Methylnaphthalene	90-12-0	0.20	U	0.20	0.041	1
12971	2-Methylnaphthalene	91-57-6	0.20	U	0.20	0.041	1
12971	Naphthalene	91-20-3	0.20	U	0.20	0.12	1
12971	N-Nitrosodimethylamine	62-75-9	0.20	U	0.20	0.041	1
12971	Di-n-octylphthalate	117-84-0	4.1	U	4.1	0.20	1
12971	Phenanthrene	85-01-8	0.20	U	0.20	0.12	1
12971	Pyrene	129-00-0	0.20	U	0.20	0.041	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.						
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	
10407	2,4-D	94-75-7	0.48	U	0.48	0.15	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.95	U	0.95	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.076	1
10407	Dinoseb	88-85-7	0.48	U	0.48	0.11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.48	U	0.48	0.15	1
10407	MCPA	94-74-6	190	U	190	48	1
10407	MCPP	93-65-2	190	U	190	48	1
10407	2,4,5-T	93-76-5	0.048	U	0.048	0.014	1
10407	2,4,5-TP	93-72-1	0.048	U	0.048	0.0095	1
Perchlorate	**SW-846 6850 1/2007**		ug/l		ug/l	ug/l	
06386	6b Perchlorate (Method 6850)	14797-73-0	1.0	U	1.0	0.20	1
Pesticides/PCBs	**SW-846 8082A**		ug/l		ug/l	ug/l	
13092	Aroclor 5432	63496-31-1	0.44	U	0.44	0.088	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-091213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7196445
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 15:00 by PH

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB107 SDG#: PH107-15EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5442	12642-23-8	0.44	U	0.44	0.088	1
13092	Aroclor 5460	11126-42-4	0.44	U	0.44	0.097	1
13092	PCB-1016	12674-11-2	0.44	U	0.44	0.088	1
13092	PCB-1221	11104-28-2	0.44	U	0.44	0.088	1
13092	PCB-1232	11141-16-5	0.44	U	0.44	0.18	1
13092	PCB-1242	53469-21-9	0.44	U	0.44	0.088	1
13092	PCB-1248	12672-29-6	0.44	U	0.44	0.088	1
13092	PCB-1254	11097-69-1	0.44	U	0.44	0.088	1
13092	PCB-1260	11096-82-5	0.44	U	0.44	0.13	1
13092	PCB-1262	37324-23-5	0.44	U	0.44	0.18	1
13092	PCB-1268	11100-14-4	0.44	U	0.44	0.14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C15-C20)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C21-C30)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.097	1
10365	EFH (C8-C11)	n.a.	0.097	U	0.097	0.049	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100	U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400	U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300	U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100	U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0045	J	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400	U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300	U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400	U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200	U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100	U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0032	J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200	U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200	U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00	U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00	U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400	U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200	U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100	U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400	U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100	U	0.100	0.0084	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-091213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7196445
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 15:00 by PH

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB107 SDG#: PH107-15EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	
01504	1b Anions by 300.0-Fluoride	16984-48-8	0.10 U	0.10	0.080	1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.0	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-091213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7196445
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 15:00 by PH

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB107 SDG#: PH107-15EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.94	U	1.94	0.488	1
10915	12378-PeCDD	40321-76-4	1.14	J	9.71	0.292	1
10915	123478-HxCDD	39227-28-6	0.821	J	9.71	0.182	1
10915	123678-HxCDD	57653-85-7	0.991	J	9.71	0.191	1
10915	123789-HxCDD	19408-74-3	1.03	J	9.71	0.179	1
10915	1234678-HpCDD	35822-46-9	1.20	JQ	9.71	0.210	1
10915	OCDD	3268-87-9	1.79	J	19.4	0.223	1
10915	2378-TCDF	51207-31-9	1.94	U	1.94	0.395	1
10915	12378-PeCDF	57117-41-6	0.812	JQ	9.71	0.171	1
10915	23478-PeCDF	57117-31-4	0.639	JQ	9.71	0.155	1
10915	123478-HxCDF	70648-26-9	1.13	JQ	9.71	0.161	1
10915	123678-HxCDF	57117-44-9	0.613	J	9.71	0.159	1
10915	123789-HxCDF	72918-21-9	1.29	J	9.71	0.152	1
10915	234678-HxCDF	60851-34-5	1.03	JQ	9.71	0.151	1
10915	1234678-HpCDF	67562-39-4	0.957	JQ	9.71	0.105	1
10915	1234789-HpCDF	55673-89-7	1.11	JQ	9.71	0.113	1
10915	OCDF	39001-02-0	2.16	JQ	19.4	0.241	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	1.61				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	92	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	95	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	90	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	94	26 - 138
13C12-OCDF	79	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB-091213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7196445
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 15:00 by PH

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB107 SDG#: PH107-15EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB-091213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7196445
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 15:00 by PH

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB107 SDG#: PH107-15EB*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13257WAM026	09/23/2013 14:16	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13257WAM026	09/16/2013 11:30	Kelli M Barto	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132570020A	09/22/2013 03:49	Melissa McDermott	1
06386	6b Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132610031A	09/18/2013 23:37	Jessica L Miller	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132600005A	09/18/2013 02:04	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132600005A	09/17/2013 12:15	Kelli M Barto	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132570020A	09/16/2013 15:00	Seth A Farrier	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132570005A	09/17/2013 19:43	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132570005A	09/15/2013 09:20	Kelli M Barto	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13266001	09/25/2013 04:41	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	2	13266001	09/23/2013 09:00	Brett M Weidman	1
01743	Aluminum	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07052	Cobalt	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
01756	Lithium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07060	Molybdenum	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07061	Nickel	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
10143	Phosphorus	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-091213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7196445
LL Group # 1418633
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/12/2013 15:00 by PH

Submitted: 09/13/2013 09:05
Reported: 09/30/2013 13:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB107 SDG#: PH107-15EB*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07072	Zinc	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	132610635001	09/19/2013 17:06	Katlin N Cataldi	1
06041	Selenium	SW-846 6020A	1	132610639001B	09/23/2013 04:40	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	132610639001A	09/23/2013 04:40	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	132610639001A	09/23/2013 04:40	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	132610639001A	09/23/2013 04:40	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	132665713003	09/25/2013 10:02	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132610635001	09/19/2013 09:40	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132610639001	09/19/2013 09:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132665713003	09/24/2013 05:55	Damary Valentin	1
01504	1b Anions by 300.0-Fluoride	EPA 300.0	1	13263347601C	09/20/2013 12:28	Christopher D Meeks	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13256987301A	09/13/2013 14:08	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13256121521A	09/13/2013 20:10	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418633
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Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13257WAM026	Sample number(s): 7196445									
Acenaphthene	0.050	U	0.050	0.010	ug/l	84	100	77-118	17	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	87	106	80-123	20	30
Anthracene	0.050	U	0.050	0.010	ug/l	90	106	78-123	16	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	98	112	73-127	14	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	92	106	72-120	14	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	96	117	79-136	20	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	85	96	70-130	13	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	112	125	64-130	11	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	100	108	73-131	7	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	21*	37*	40-138	54*	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	72	92	64-141	24	30
Chrysene	0.050	U	0.050	0.010	ug/l	102	114	76-125	12	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	110	125	58-131	13	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	51*	71	64-128	33*	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	10*	24	23-139	79*	30
Bis(2-Ethylhexyl)phthalate	1.0	U	1.0	0.050	ug/l	93	115	70-143	21	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	88	104	79-124	17	30
Fluorene	0.050	U	0.050	0.010	ug/l	87	104	74-115	17	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	107	120	62-130	12	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	90	106	80-126	17	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	89	105	81-124	16	30
Naphthalene	0.050	U	0.050	0.030	ug/l	88	104	75-120	17	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	67	80	36-120	18	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	78	98	57-145	23	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	89	104	75-120	15	30
Pyrene	0.050	U	0.050	0.010	ug/l	104	120	71-130	14	30
Batch number: 13260SLC026	Sample number(s): 7196426-7196428,7196433-7196439									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	101		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	102		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	103		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	98		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	96		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	108		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	116		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	110		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	107		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	106		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	106		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	107		85-122		

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418633
Reported: 09/30/13 at 01:46 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	102		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	105		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	107		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	114		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	113		78-121		
Naphthalene	0.92	J	1.7	0.67	ug/kg	106		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	110		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	109		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	102		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	104		79-112		
Batch number: 13261A34A	Sample number(s): 7196434,7196436-7196439									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	78	79	67-119	2	30
Batch number: 13262A94A	Sample number(s): 7196425									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	119	121	75-135	2	30
Batch number: 132570020A	Sample number(s): 7196445									
2,4-D	0.50	U	0.50	0.16	ug/l	103	107	68-155	4	30
Dalapon	1.3	U	1.3	0.25	ug/l	78	78	25-119	1	30
2,4-DB	1.0	U	1.0	0.30	ug/l	95	96	50-163	1	30
Dicamba	0.30	U	0.30	0.080	ug/l	90	91	64-163	2	30
Dinoseb	0.50	U	0.50	0.12	ug/l	129	124	16-163	4	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	123	127	89-162	3	30
MCPA	200	U	200.	50	ug/l	87	88	68-154	2	30
MCPP	200	U	200.	50	ug/l	96	100	46-173	5	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	101	104	71-174	2	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	99	100	58-155	1	30
Batch number: 132570033A	Sample number(s): 7196426-7196428,7196434									
2,4-D	36	U	36.	12	ug/kg	94		59-122		
Dalapon	90	U	90.	44	ug/kg	61		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	94		54-131		
Dicamba	12	U	12.	4.0	ug/kg	83		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	21		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	121		65-158		
MCPA	2,500	U	2,500.	760	ug/kg	82		56-133		
MCPP (Mecoprop)	2,500	U	2,500.	750	ug/kg	87		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	98		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	94		63-130		
Batch number: 132660014A	Sample number(s): 7196433									
2,4-D	36	U	36.	12	ug/kg	88		59-122		
Dalapon	90	U	90.	44	ug/kg	44		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	91		54-131		
Dicamba	12	U	12.	4.0	ug/kg	84		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	23		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	114		65-158		
MCPA	2,500	U	2,500.	760	ug/kg	80		56-133		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	83		54-134		

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Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	102		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	90		63-130		
Batch number: 132610031A	Sample number(s): 7196445									
6b Perchlorate (Method 6850)	1.0	U	1.0	0.20	ug/l	99		85-115		
Batch number: 132620017A	Sample number(s): 7196426-7196428,7196433-7196439									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	95		85-115		
Batch number: 132600005A	Sample number(s): 7196445									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	57	62	35-84	7	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	89	80	67-117	11	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	101	94	67-128	7	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132600023A	Sample number(s): 7196426-7196428,7196433-7196439									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	78	74	62-87	5	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	94		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	109		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132620006A	Sample number(s): 7196435-7196439									
Aldrin	0.83	U	0.83	0.17	ug/kg	88		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	94		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	94		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	89		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	99		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	98		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	95		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	97		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	101		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	98		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	101		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	104		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	101		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	97		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	99		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	91		62-127		

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Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	98		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	94		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132570005A	Sample number(s): 7196445									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	89	90	70-130	1	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	102	96	70-130	7	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	96	96	70-130	0	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	89	86	70-130	4	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	76	74	70-130	2	30
Batch number: 132620005A	Sample number(s): 7196426-7196428,7196433-7196439									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	94		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	96		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	97		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	67		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	80		49-107		
Batch number: 132610635001	Sample number(s): 7196445									
Aluminum	0.400	U	0.400	0.0828	mg/l	103	103	80-120	0	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	113	114	80-120	1	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	98	98	80-120	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	102	103	80-120	1	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	100	101	80-120	0	20
Boron	0.100	U	0.100	0.0084	mg/l	97	98	80-120	1	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	103	103	80-120	1	20
Calcium	0.400	U	0.400	0.0334	mg/l	105	105	80-120	0	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	100	102	80-120	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	103	103	80-120	0	20
Copper	0.0044	J	0.0200	0.0027	mg/l	106	107	80-120	1	20
Iron	0.400	U	0.400	0.0430	mg/l	103	104	80-120	1	20
Lead	0.0300	U	0.0300	0.0047	mg/l	104	103	80-120	1	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	104	104	80-120	0	20
Magnesium	0.200	U	0.200	0.0167	mg/l	103	103	80-120	0	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	103	104	80-120	1	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	104	105	80-120	1	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	105	105	80-120	0	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	102	103	80-120	0	20
Potassium	1.00	U	1.00	0.0980	mg/l	102	103	80-120	0	20
Sodium	2.00	U	2.00	0.167	mg/l	103	103	80-120	0	20
Tin	0.0400	U	0.0400	0.0029	mg/l	99	100	80-120	0	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	104	105	80-120	1	20
Vanadium	0.0100	U	0.0100	0.0020	mg/l	102	102	80-120	1	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	102	102	80-120	0	20
Zirconium	0.100	U	0.100	0.0084	mg/l	102	102	80-120	1	20
Batch number: 132610639001A	Sample number(s): 7196445									
Silver	0.0010	U	0.0010	0.00011	mg/l	105	105	90-115	0	20
Strontium	0.0020	U	0.0020	0.00034	mg/l	105	103	80-120	2	20
Thallium	0.0010	U	0.0010	0.00015	mg/l	104	109	80-120	5	20
Batch number: 132610639001B	Sample number(s): 7196445									
Selenium	0.0040	U	0.0040	0.00050	mg/l	105	106	80-120	0	20
Batch number: 132620637001	Sample number(s): 7196426-7196428,7196432-7196439									

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Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aluminum	40.0	U	40.0	7.21	mg/kg	99		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	101		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	98		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	101		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	98		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	102		80-120		
Calcium	10.3	J	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	105		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	101		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	99		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	101		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	103		80-120		
Potassium	100 U		100.	8.34	mg/kg	100		80-120		
Sodium	100 U		100.	16.7	mg/kg	99		80-120		
Tin	1.36	J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	99		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	101		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	103		80-120		
Batch number: 132620637001A	Sample number(s): 7196426-7196428,7196432-7196439									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	104		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	103		80-120		
Batch number: 132620637001B	Sample number(s): 7196426-7196428,7196432-7196439									
Selenium	0.400	U	0.400	0.100	mg/kg	107		80-120		
Batch number: 132620638001	Sample number(s): 7196426-7196428,7196432-7196439									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	114		85-120		
Batch number: 132665713003	Sample number(s): 7196445									
3b Mercury 7470A	0.00020	U	0.00020	0.00006 0	mg/l	106	103	90-115	3	20
Batch number: 13256987301A	Sample number(s): 7196445									
2b Chromium VI by EPA 7199	10.0	U	10.0	5.0	ug/l	101	100	90-110	1	20
Batch number: 13263347601C	Sample number(s): 7196445									
1b Anions by 300.0-Fluoride	0.10	U	0.10	0.080	mg/l	102	104	90-110	2	20
Batch number: 13266266201A	Sample number(s): 7196426-7196427,7196432-7196441									
1a Anions by 300.0-Fluoride	1.0	U	1.0	0.40	mg/kg	104		90-110		
Batch number: 13266266201B	Sample number(s): 7196442-7196444									
1a Anions by 300.0-Fluoride	1.0	U	1.0	0.40	mg/kg	104		90-110		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418633
Reported: 09/30/13 at 01:46 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13271243202A	Sample number(s): 7196426,7196429-7196434									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	90		80-120		
Batch number: 13256039401A	Sample number(s): 7196426,7196432-7196436									
15a pH by 9045D						99		95-105		
Batch number: 13256039401B	Sample number(s): 7196437-7196441									
15a pH by 9045D						99		95-105		
Batch number: 13256121521A	Sample number(s): 7196445									
28b pH (9040B and 9040C)						99		99-103		
Batch number: 13263162401A	Sample number(s): 7196426-7196444									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13261001	Sample number(s): 7196426-7196428,7196433,7196435									
2378-TCDD	1.00	U	1.00	0.151	ng/kg	85		67-158		
12378-PeCDD	0.122	J	5.00	0.106	ng/kg	99		70-142		
123478-HxCDD	0.0859	J	5.00	0.0445	ng/kg	100		70-164		
123678-HxCDD	5.00	U	5.00	0.0496	ng/kg	97		76-134		
123789-HxCDD	0.0579	J	5.00	0.0484	ng/kg	98		64-162		
1234678-HpCDD	0.0535	J	5.00	0.0502	ng/kg	96		70-140		
OCDD	0.197	J	10.0	0.0532	ng/kg	98		78-144		
2378-TCDF	1.00	U	1.00	0.143	ng/kg	88		75-158		
12378-PeCDF	0.0876	J	5.00	0.0660	ng/kg	93		80-134		
23478-PeCDF	5.00	U	5.00	0.0633	ng/kg	97		68-160		
123478-HxCDF	5.00	U	5.00	0.0482	ng/kg	96		72-134		
123678-HxCDF	0.0456	J	5.00	0.0403	ng/kg	98		84-130		
123789-HxCDF	0.0750	J	5.00	0.0526	ng/kg	96		78-130		
234678-HxCDF	5.00	U	5.00	0.0421	ng/kg	96		70-156		
1234678-HpCDF	0.0418	J	5.00	0.0219	ng/kg	95		82-122		
1234789-HpCDF	0.0583	J	5.00	0.0419	ng/kg	95		78-138		
OCDF	0.197	J	10.0	0.104	ng/kg	96		63-170		
Batch number: 13266001	Sample number(s): 7196445									
2378-TCDD	2.00	U	2.00	0.452	pg/l	104		60-150		
12378-PeCDD	1.71	J	10.0	0.340	pg/l	105		60-150		
123478-HxCDD	1.45	J	10.0	0.279	pg/l	104		60-150		
123678-HxCDD	1.49	J	10.0	0.273	pg/l	108		60-150		
123789-HxCDD	0.932	J	10.0	0.180	pg/l	104		60-150		
1234678-HpCDD	1.27	J	10.0	0.203	pg/l	102		60-150		
OCDD	2.51	J	20.0	0.252	pg/l	102		60-150		
2378-TCDF	2.00	U	2.00	0.396	pg/l	100		60-150		
12378-PeCDF	1.48	J	10.0	0.190	pg/l	104		60-150		
23478-PeCDF	1.58	J	10.0	0.233	pg/l	103		60-150		
123478-HxCDF	1.70	J	10.0	0.276	pg/l	102		60-150		
123678-HxCDF	1.55	J	10.0	0.253	pg/l	104		60-150		
123789-HxCDF	1.03	J	10.0	0.162	pg/l	104		60-150		
234678-HxCDF	1.30	J	10.0	0.174	pg/l	104		60-150		
1234678-HpCDF	1.58	J	10.0	0.142	pg/l	104		60-150		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418633
Reported: 09/30/13 at 01:46 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
1234789-HpCDF	1.12	J	10.0	0.121	pg/l	104		60-150		
OCDF	2.72	J	20.0	0.328	pg/l	103		60-150		
Batch number: 13261001	Sample number(s): 7196426-7196428,7196433,7196435									
TEQ WHO 2005 - EDLx0.0	U				ng/kg					
Batch number: 13266001	Sample number(s): 7196445									
TEQ WHO 2005 - EDLx0.0	0.525				pg/l					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13260SLC026	Sample number(s): 7196426-7196428,7196433-7196439 UNSPK: 7196426								
Acenaphthene	93	87	48-127	7	30				
Acenaphthylene	98	92	49-121	7	30				
Anthracene	97	89	52-126	9	30				
Benzo(a)anthracene	95	86	44-143	9	30				
Benzo(a)pyrene	91	84	44-140	7	30				
Benzo(b)fluoranthene	107	100	26-142	6	30				
Benzo(e)pyrene	92	85	70-130	7	30				
Benzo(g,h,i)perylene	72	59	33-141	19	30				
Benzo(k)fluoranthene	102	97	54-142	5	30				
Butylbenzylphthalate	116	107	49-151	8	30				
Di-n-butylphthalate	109	102	52-147	6	30				
Chrysene	89	81	29-148	8	30				
Dibenz(a,h)anthracene	80	69	20-137	15	30				
Diethylphthalate	97	93	43-145	4	30				
Dimethylphthalate	96	91	58-129	5	30				
Bis(2-Ethylhexyl)phthalate	123	125	39-167	2	30				
Fluoranthene	94	83	40-148	10	30				
Fluorene	96	89	51-137	7	30				
Indeno(1,2,3-cd)pyrene	80	68	17-136	15	30				
1-Methylnaphthalene	107	100	50-131	6	30				
2-Methylnaphthalene	107	100	35-152	7	30				
Naphthalene	96	93	31-148	4	30				
N-Nitrosodimethylamine	101	94	48-113	6	30				
Di-n-octylphthalate	121	118	52-162	3	30				
Phenanthrene	90	83	29-142	8	30				
Pyrene	87	77	26-143	11	30				
Batch number: 132570033A	Sample number(s): 7196426-7196428,7196434 UNSPK: 7196426								
2,4-D	70	97	42-143	32	35				
Dalapon	24	49	16-98	67*	50				
2,4-DB	97	140	10-179	37	50				
Dicamba	62	81	55-133	27	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418633
Reported: 09/30/13 at 01:46 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dinoseb	30	38	10-52	26	35				
2,4-DP (Dichlorprop)	111	128	32-171	14	50				
MCPA	93	120	23-169	25	50				
MCPP (Mecoprop)	82	92	24-164	11	50				
2,4,5-T	80	103	12-172	26	35				
2,4,5-TP	87	92	10-142	5	35				
Batch number: 132660014A	Sample number(s): 7196433 UNSPK: 7196433								
2,4-D	88	87	42-143	1	35				
Dalapon	30	20	16-98	37	50				
2,4-DB	95	8*	10-179	171*	50				
Dicamba	119	72	55-133	50	50				
Dinoseb	0*	0*	10-52	0	35				
2,4-DP (Dichlorprop)	119	113	32-171	5	50				
MCPA	104	100	23-169	4	50				
MCPP (Mecoprop)	92	90	24-164	2	50				
2,4,5-T	100	98	12-172	1	35				
2,4,5-TP	92	9*	10-142	163*	35				
Batch number: 132610031A	Sample number(s): 7196445 UNSPK: P194439								
6b Perchlorate (Method 6850)	105	98	80-120	7	20				
Batch number: 132620017A	Sample number(s): 7196426-7196428,7196433-7196439 UNSPK: 7196426								
6a Perchlorate (Method 6850)	96	99	80-120	3	20				
Batch number: 132600023A	Sample number(s): 7196426-7196428,7196433-7196439 UNSPK: 7196426								
PCB-1016	102	107	41-135	4	50				
PCB-1260	110	108	40-134	2	50				
Batch number: 132620006A	Sample number(s): 7196435-7196439 UNSPK: 7196435								
Aldrin	88	87	16-126	1	50				
Alpha BHC	91	89	14-140	2	50				
Beta BHC	99	98	42-133	2	50				
Gamma BHC - Lindane	86	86	30-137	0	50				
p,p-DDD	96	95	43-149	1	50				
p,p-DDE	94	95	35-152	1	50				
p,p-DDT	93	93	12-193	1	50				
Delta BHC	91	92	13-153	0	50				
Dieldrin	96	96	41-153	0	50				
Endosulfan I	93	94	26-146	1	50				
Endosulfan II	97	95	34-141	2	50				
Endosulfan Sulfate	102	101	10-181	0	50				
Endrin	100	100	30-152	1	50				
Endrin Aldehyde	83	84	23-138	2	50				
Endrin Ketone	94	93	30-148	1	50				
Heptachlor	87	86	16-152	0	50				
Heptachlor Epoxide	92	93	33-144	1	50				
Methoxychlor	92	92	41-161	1	50				
Batch number: 132620005A	Sample number(s): 7196426-7196428,7196433-7196439 UNSPK: 7196426								
EFH (C12-C14)	92	93	49-123	1	20				
EFH (C15-C20)	93	110	49-123	9	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418633
Reported: 09/30/13 at 01:46 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
EFH (C21-C30)	32*	113	49-123	22*	20				
EFH (C30-C40)	-85 (2)	261 (2)	49-123	38*	20				
EFH (C8-C11)	86	87	49-123	2	20				
Batch number: 132620637001	Sample number(s): 7196426-7196428,7196432-7196439 UNSPK: 7196426 BKG: 7196426								
Aluminum	2099 (2)	2459 (2)	75-125	4	20	15,600	15,700	1	20
Antimony	41*	43*	75-125	5	20	3.96 U	3.96 U	0 (1)	20
Arsenic	95	98	75-125	2	20	3.41 J	3.38 J	1 (1)	20
Barium	96	99	75-125	2	20	81.0	81.3	0	20
Beryllium	99	100	75-125	1	20	0.625 J	0.622 J	0 (1)	20
Boron	96	97	75-125	1	20	3.67 J	3.72 J	1 (1)	20
Cadmium	92	93	75-125	1	20	0.316 J	0.353 J	11 (1)	20
Calcium	205 (2)	229 (2)	75-125	2	20	4,390	4,430	1	20
Chromium	110	113	75-125	1	20	28.7	28.4	1	20
Cobalt	90	90	75-125	0	20	6.36	6.21	2	20
Copper	100	102	75-125	1	20	10.6	11.0	4	20
Iron	658 (2)	1662 (2)	75-125	4	20	24,100	24,300	1	20
Lead	92	89	75-125	2	20	9.95	9.97	0 (1)	20
Lithium	99	101	75-125	2	20	21.3	21.7	2	20
Magnesium	229 (2)	334 (2)	75-125	4	20	5,300	5,370	1	20
Manganese	82 (2)	96 (2)	75-125	2	20	353	345	2	20
Molybdenum	92	93	75-125	1	20	0.355 J	0.360 J	1 (1)	20
Nickel	94	94	75-125	0	20	11.4	11.6	2	20
Phosphorus	89 (2)	107 (2)	75-125	3	20	578	582	1	20
Potassium	142 (2)	166 (2)	75-125	4	20	4,620	4,690	1	20
Sodium	96	98	75-125	2	20	77.8 J	78.7 J	1 (1)	20
Tin	86	86	75-125	1	20	2.61 J	2.69 J	3 (1)	20
Titanium	426 (2)	501 (2)	75-125	5	20	1,030	1,030	1	20
Vanadium	103	108	75-125	3	20	50.7	50.6	0	20
Zinc	97	101	75-125	2	20	59.4	60.2	1	20
Zirconium	92	93	75-125	1	20	6.01	6.15	2 (1)	20
Batch number: 132620637001A	Sample number(s): 7196426-7196428,7196432-7196439 UNSPK: 7196426 BKG: 7196426								
Silver	115	126*	75-125	9	20	0.0269 J	0.0287 J	7 (1)	20
Strontium	134*	182*	75-125	10	20	26.3	28.8	9	20
Thallium	112	131*	75-125	10	20	0.273	0.304	11 (1)	20
Batch number: 132620637001B	Sample number(s): 7196426-7196428,7196432-7196439 UNSPK: 7196426 BKG: 7196426								
Selenium	102	106	75-125	3	20	0.229 J	0.259 J	12 (1)	20
Batch number: 132620638001	Sample number(s): 7196426-7196428,7196432-7196439 UNSPK: 7196426 BKG: 7196426								
3a Mercury 7471A	108	106	65-135	1	20	0.0202	0.0186	8 (1)	20
Batch number: 13266266201A	Sample number(s): 7196426-7196427,7196432-7196441 UNSPK: 7196426 BKG: 7196426								
1a Anions by 300.0-Fluoride	33*		80-120			0.79 J	0.66 J	17 (1)	20
Batch number: 13266266201B	Sample number(s): 7196442-7196444 UNSPK: 7196442 BKG: 7196442								
1a Anions by 300.0-Fluoride	12*		80-120			0.52 J	0.48 J	7 (1)	20
Batch number: 13271243202A	Sample number(s): 7196426,7196429-7196434 UNSPK: 7196426 BKG: 7196426								

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Quality Control Summary

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Reported: 09/30/13 at 01:46 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc	DUP RPD	Dup RPD Max
2a Chromium VI by EPA 7199	88		75-125			0.20	J	0.56	97* (1)	20
Batch number: 13256039401A	Sample number(s): 7196426,7196432-7196436 BKG: 7196426									
15a pH by 9045D						7.11		7.13	0	3
Batch number: 13256039401B	Sample number(s): 7196437-7196441 BKG: 7196441									
15a pH by 9045D						7.81		7.83	0	3
Batch number: 13256121521A	Sample number(s): 7196445 BKG: P196811									
28b pH (9040B and 9040C)						10.3		10.3	0	3
Batch number: 13263162401A	Sample number(s): 7196426-7196444 BKG: 7196426									
14a Moisture Content by 160.3						1.4		1.3	8	20
14a Moisture Content by 160.3						1.4		1.3	8	20
14a Moisture Content by 160.3						1.4		1.3	8	20
Batch number: 13261001	Sample number(s): 7196426-7196428,7196433,7196435 UNSPK: 7196426									
2378-TCDD	90	92	40-135	1	20					
12378-PeCDD	95	99	40-135	3	20					
123478-HxCDD	98	99	40-135	0	20					
123678-HxCDD	95	96	40-135	0	20					
123789-HxCDD	95	94	40-135	2	20					
1234678-HpCDD	91	92	40-135	1	20					
OCDD	59	58	40-135	1	20					
2378-TCDF	96	100	40-135	3	20					
12378-PeCDF	94	93	40-135	2	20					
23478-PeCDF	95	97	40-135	0	20					
123478-HxCDF	97	96	40-135	1	20					
123678-HxCDF	97	99	40-135	1	20					
123789-HxCDF	96	95	40-135	2	20					
234678-HxCDF	96	94	40-135	3	20					
1234678-HpCDF	92	94	40-135	1	20					
1234789-HpCDF	94	94	40-135	1	20					
OCDF	93	91	40-135	3	20					

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13257WAM026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7196445	23*	24*	25*
Blank	92	98	96
LCS	83	93	87
LCSD	97	105	103

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Surrogate Quality Control

Limits:	44-137	62-141	51-136
Analysis Name: 7a SVOC SIM EPA 8270D Batch number: 13260SLC026	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7196426	87	92	109
7196427	88	92	107
7196428	81	87	102
7196433	90	92	109
7196434	91	97	110
7196435	87	90	108
7196436	82	88	107
7196437	87	93	107
7196438	90	95	107
7196439	90	95	111
Blank	88	98	113
LCS	93	101	117
MS	88	92	107
MSD	81	87	102
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO Batch number: 13261A34A	Trifluorotoluene-F	
7196434	91	
7196436	91	
7196437	84	
7196438	84	
7196439	80	
Blank	90	
LCS	86	
LCSD	89	
Limits:	50-142	

Analysis Name: 11b TPH by EPA 8015B GRO Batch number: 13262A94A	Trifluorotoluene-F	
7196425	73	
Blank	74	
LCS	82	
LCSD	82	
Limits:	63-135	

Analysis Name: 24b Herbicides by EPA 8151A Batch number: 132570020A	2,4-Dichlorophenylacetic acid

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418633
Reported: 09/30/13 at 01:46 PM

Surrogate Quality Control

7196445	64
Blank	66
LCS	70
LCSD	72
Limits:	50-150

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132570033A

	2,4-Dichlorophenylacetic acid
7196426	55
7196427	59
7196428	62
7196434	57
Blank	54
LCS	62
MS	59
MSD	62
Limits:	50-150

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132600005A

	Decachlorobiphenyl
7196445	95
Blank	87
LCS	97
LCSD	76
Limits:	45-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132600023A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7196426	109	104
7196427	118	105
7196428	120	105
7196433	119	109
7196434	114	105
7196435	99	94
7196436	110	104
7196437	107	98
7196438	104	92
7196439	108	98
Blank	110	106
LCS	115	105
LCSD	103	97
MS	118	105
MSD	120	105
Limits:	45-120	45-120

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418633
Reported: 09/30/13 at 01:46 PM

Surrogate Quality Control

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132620006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7196435	97	109
7196436	87	100
7196437	87	101
7196438	89	102
7196439	89	100
Blank	89	103
LCS	90	105
MS	88	100
MSD	85	100
Limits:	50-130	20-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132660014A

	2,4-Dichlorophenylacetic acid
7196433	61
Blank	61
LCS	68
MS	71
MSD	68
Limits:	50-150

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132570005A

	Chlorobenzene	Orthoterphenyl
7196445	105	92
Blank	101	88
LCS	109	94
LCSD	110	93
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132620005A

	Chlorobenzene	Orthoterphenyl
7196426	102	79
7196427	102	80
7196428	105	76
7196433	108	88
7196434	122	102
7196435	113	93
7196436	113	94
7196437	114	96
7196438	116	97
7196439	116	96
Blank	120	100
LCS	116	98

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418633
Reported: 09/30/13 at 01:46 PM

Surrogate Quality Control

MS	102	80
MSD	105	76
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13261001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7196426	69	74	66	74	72	75
7196427	62	73	68	77	75	72
7196428	56	65	63	71	69	67
7196433	70	75	69	79	75	71
7196435	53	67	62	70	68	75
Blank	61	69	64	74	71	72
MS	62	73	68	77	75	72
MSD	56	65	63	71	69	67
OPR	59	71	63	73	70	65
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7196426	85	64	55	81	74	79
7196427	91	68	56	81	76	82
7196428	84	63	54	70	70	77
7196433	97	66	53	82	76	83
7196435	77	65	54	71	70	73
Blank	93	62	51	77	75	80
MS	91	68	56	81	76	82
MSD	84	63	54	70	70	77
OPR	92	57	44	80	74	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7196426	78	80	68	61	78
7196427	82	85	71	55	77
7196428	76	77	68	48	67
7196433	82	84	69	60	79
7196435	72	83	65	45	63
Blank	80	81	67	49	72
MS	82	85	71	55	77
MSD	76	77	68	48	67
OPR	80	77	63	50	77
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13266001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7196445	77	95	83	83	85	90
Blank	71	56	42	45	64	77
OPR	80	52	43	45	55	83

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1418633
Reported: 09/30/13 at 01:46 PM

Surrogate Quality Control

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7196445	89	94	79	92	85	86
Blank	52	72	56	65	46	50
OPR	50	70	72	54	47	48
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7196445	86	92	79	76	89	
Blank	72	69	58	70	76	
OPR	68	63	82	67	59	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 14186633 7196425-45

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/12/2013
CarrierName: FedEx
AirbillNo: 796675063303

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130912-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-091213	9/12/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-553-SA5D-SB-0.0-0.5MS	9/12/13 07:30	SO	None	6 - SS-Sleeve	10 day	X	X		X			X		X	X		X				X					X											MS/MSD
SL-553-SA5D-SB-0.0-0.5MS	9/12/13 07:30	SO	None	2 - 8 oz glass	10 day													X		X																	MS/MSD
SL-853-SA5D-SB-0.0-0.5	9/12/13 07:35	SO	None	2 - SS-Sleeve	10 day	X	X		X			X		X	X		X				X					X											
SL-853-SA5D-SB-0.0-0.5	9/12/13 07:35	SO	None	2 - 4 oz glass	10 day													X		X																	
SL-553-SA5D-SB-4.5-5.5	9/12/13 07:45	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X		X	X			X					X											
SL-553-SA5D-SB-4.5-5.5	9/12/13 07:45	SO	None	1 - 4 oz glass	10 day															X																	
SL-553-SA5D-SB-4.5-5.5	9/12/13 07:45	SO	None	2 - Encore	10 day																			X													
SL-551-SA5D-SB-0.0-0.5	9/12/13 09:05	SO	None	2 - SS-Sleeve	10 day	X	X		X			X		X	X		X					X				X											
SL-551-SA5D-SB-0.0-0.5	9/12/13 09:05	SO	None	1 - 4 oz glass	10 day													X																			
SL-551-SA5D-SB-4.0-5.0	9/12/13 09:15	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X		X	X				X				X											
SL-551-SA5D-SB-4.0-5.0	9/12/13 09:15	SO	None	2 - Encore	10 day																			X													
SL-551-SA5D-SB-9.0-10.0	9/12/13 09:25	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X		X	X				X				X											
SL-551-SA5D-SB-9.0-10.0	9/12/13 09:25	SO	None	2 - Encore	10 day																			X													
SL-551-SA5D-SB-14.0-15.0	9/12/13 09:35	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X		X	X				X				X											
SL-551-SA5D-SB-14.0-15.0	9/12/13 09:35	SO	None	2 - Encore	10 day																			X													
SL-551-SA5D-SB-17.5-18.5	9/12/13 09:45	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X		X	X				X				X											
SL-551-SA5D-SB-17.5-18.5	9/12/13 09:45	SO	None	2 - Encore	10 day																			X													

13013 1418633 7196425-45

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/12/2013
CarrierName: FedEx
AirbillNo: 796675063303

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130912-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Sey Myel	09/12/2013	1000									
										9-13-13	0905

13013 14718633 7196425-45

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/12/2013
CarrierName: FedEx
AirbillNo: 796675063303

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130912-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-591-SA5D-SB-0.0-0.5	9/12/13 12:35	SO	None	1 - SS-Sleeve	10 day				X																											
SL-591-SA5D-SB-0.0-0.5	9/12/13 12:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-591-SA5D-SB-6.5-7.5	9/12/13 12:40	SO	None	1 - 16 oz glass	10 day				X									X																		
SL-592-SA5D-SB-0.0-0.5	9/12/13 12:00	SO	None	1 - SS-Sleeve	10 day				X																											
SL-592-SA5D-SB-4.0-5.0	9/12/13 12:05	SO	None	1 - 16 oz glass	10 day				X																											
SL-592-SA5D-SB-10.5-11.5	9/12/13 12:10	SO	None	1 - 16 oz glass	10 day				X																											

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shyf Mysel	09/12/2013	1600									
										9-13-13	0925

COC Rev 2

COC 20130912-02, Page 1 of 1

13013 1418633 7196425-45

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/12/2013
CarrierName: FedEx
AirbillNo: 796675063303

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130912-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB-091213	9/12/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB-091213	9/12/13 15:00	WQ	None	4 - 250 mL Poly	10 day				X										X	X																
EB-091213	9/12/13 15:00	WQ	None	2 - 250 mL Amber	10 day							X			X																					
EB-091213	9/12/13 15:00	WQ	None	1 - 40 mL Vial	10 day												X																			
EB-091213	9/12/13 15:00	WQ	None	4 - 1 L Amber	10 day									X							X															
EB-091213	9/12/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																					X										

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steph Mupel	9/12/2013	1600									
										9-13-13	965

COC Rev 2

COC 20130913-03, Page 1 of 1

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Environmental Sample Administration Receipt Documentation Log

1418633

Client/Project: GM Smith

Date of Receipt: 9-13-13

Time of Receipt: 0905

Source Code: 5.

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	0.9	TB	WI	X	B	
2	↓	0.8	↓	↓	↓	↓	
3	↓	1.7	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Received 3 EB-091213 @ 1500 250mL Poly

Unpacker Signature/Emp#: 5200 **Date/Time:** 9/13/13 1505

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH108

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 27, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/17/2013
Group Number: 1419298
SDG: PH108
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-091613 Water	7200145
SL-505-SA5D-SB-0.0-0.5 Soil	7200146
SL-505-SA5D-SB-4.0-5.0 Soil	7200147
SL-505-SA5D-SB-9.0-10.0 Soil	7200148
SL-505-SA5D-SB-14.0-15.0 Soil	7200149
SL-505-SA5D-SB-19.0-20.0 Soil	7200150

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,



Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-091613 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7200145
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 08:00

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB108 SDG#: PH108-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13262A94A	09/20/2013 13:34	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13262A94A	09/20/2013 13:34	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200146
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 08:05 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH108-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	2.0		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	4.7		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	3.5	J	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.2	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.2	1
12969	Chrysene	218-01-9	16		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.2	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	18	6.2	1
12969	Fluoranthene	206-44-0	5.1		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.3	J	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	0.77	J	1.7	0.68	1
12969	Naphthalene	91-20-3	1.8		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.2	1
12969	Phenanthrene	85-01-8	2.9		1.7	0.68	1
12969	Pyrene	129-00-0	4.5		1.7	0.68	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.						
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	3.9		1.8	0.34	1
10590	p,p-DDT	50-29-3	5.3		1.8	0.36	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	0.38	J	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.44	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.48	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.47	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.23	J	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200146
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 08:05 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH108-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Toxaphene	8001-35-2	34	U	34	15	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	30		18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	16		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	45		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,700		40.9	7.37	1
06944	Antimony	7440-36-0	4.09	U	4.09	0.757	1
06935	Arsenic	7440-38-2	9.67		4.09	0.716	1
06946	Barium	7440-39-3	121		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.880	J	1.02	0.0685	1
07914	Boron	7440-42-8	12.5		10.2	0.859	1
06949	Cadmium	7440-43-9	0.175	J	1.02	0.0777	1
01650	Calcium	7440-70-2	10,400		20.4	3.41	1
06951	Chromium	7440-47-3	37.4		3.07	0.164	1
06952	Cobalt	7440-48-4	9.64		1.02	0.101	1
06953	Copper	7440-50-8	18.7		2.04	0.296	1
01654	Iron	7439-89-6	30,900		81.8	7.40	2
06955	Lead	7439-92-1	15.3		3.07	0.511	1
01656	Lithium	7439-93-2	21.4		4.1	0.35	1
01657	Magnesium	7439-95-4	6,300		10.2	1.71	1
06958	Manganese	7439-96-5	477		1.02	0.0849	1
06960	Molybdenum	7439-98-7	0.477	J	2.04	0.174	1
06961	Nickel	7440-02-0	19.8		2.04	0.133	1
10145	Phosphorus	7723-14-0	484		10.2	2.95	1
01662	Potassium	7440-09-7	5,560		102	8.53	1
01667	Sodium	7440-23-5	102	J	102	17.1	1
06969	Tin	7440-31-5	2.85	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,310		1.02	0.174	1
06971	Vanadium	7440-62-2	61.7		1.02	0.133	1

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Sample Description: SL-505-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200146
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 08:05 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH108-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06972	Zinc	7440-66-6	97.1		4.09	0.204	1
10146	Zirconium	7440-67-7	4.22	J	5.11	0.859	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.285	J	0.409	0.102	2
06142	Silver	7440-22-4	0.0615	J	0.204	0.0266	2
06144	Strontium	7440-24-6	45.9		0.409	0.0695	2
06145	Thallium	7440-28-0	0.414		0.204	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0147	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.92		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200146
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH108-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.134	1
11031	12378-PeCDD	40321-76-4	5.11	U	5.11	0.116	1
11031	123478-HxCDD	39227-28-6	0.225	JBQ	5.11	0.0900	1
11031	123678-HxCDD	57653-85-7	0.863	J	5.11	0.0952	1
11031	123789-HxCDD	19408-74-3	0.870	JB	5.11	0.0938	1
11031	1234678-HpCDD	35822-46-9	11.6	B	5.11	0.135	1
11031	OCDD	3268-87-9	175	B	10.2	0.152	1
11031	2378-TCDF	51207-31-9	0.291	JQ	1.02	0.205	1
11031	12378-PeCDF	57117-41-6	5.58	B	5.11	0.0924	1
11031	23478-PeCDF	57117-31-4	0.351	JQ	5.11	0.0952	1
11031	123478-HxCDF	70648-26-9	0.341	J	5.11	0.0735	1
11031	123678-HxCDF	57117-44-9	0.535	JB	5.11	0.0655	1
11031	123789-HxCDF	72918-21-9	0.577	JBQ	5.11	0.0773	1
11031	234678-HxCDF	60851-34-5	0.292	JQ	5.11	0.0641	1
11031	1234678-HpCDF	67562-39-4	1.90	JB	5.11	0.0469	1
11031	1234789-HpCDF	55673-89-7	0.143	JBQ	5.11	0.0897	1
11031	OCDF	39001-02-0	4.44	JB	10.2	0.174	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.450				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	60	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	66	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	57	17 - 157
13C12-2378-TCDF	46	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	50	26 - 152
13C12-123678-HxCDF	59	26 - 123
13C12-234678-HxCDF	58	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	43	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200146
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 08:05 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH108-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200146
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 08:05 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH108-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/26/2013 05:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132620006A	09/26/2013 15:50	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 19:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132620006A	09/19/2013 16:35	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/21/2013 02:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13261001	09/21/2013 10:27	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13261001	09/18/2013 13:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/24/2013 03:08	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 08:48	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200146
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 08:05 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH108-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 12:50	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 12:50	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 12:50	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 12:50	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:27	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13260039405A	09/17/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200147
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 08:35 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50540 SDG#: PH108-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	0.75	J	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	0.84	J	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.9		1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	0.81	J	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	0.96	J	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	8.7		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	16	J	20	6.5	1
12969	Fluoranthene	206-44-0	1.8		1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	0.73	J	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8		1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.2	J	1.8	0.72	1
12969	Pyrene	129-00-0	1.6	J	1.8	0.72	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.51
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	1.4	J	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.3	J	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.8	J	1.9	0.38	1
10590	Delta BHC	319-86-8	0.91	U	0.91	0.49	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200147
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 08:35 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50540 SDG#: PH108-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1
10590	Methoxychlor	72-43-5	7.4	U	7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	18	J	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	4.0	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	18		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	44		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,600		43.5	7.84	1
06944	Antimony	7440-36-0	4.35	U	4.35	0.804	1
06935	Arsenic	7440-38-2	8.23		4.35	0.761	1
06946	Barium	7440-39-3	136		1.09	0.0359	1
06947	Beryllium	7440-41-7	0.946	J	1.09	0.0728	1
07914	Boron	7440-42-8	11.9		10.9	0.913	1
06949	Cadmium	7440-43-9	1.09	U	1.09	0.0826	1
01650	Calcium	7440-70-2	9,050		21.7	3.63	1
06951	Chromium	7440-47-3	39.8		3.26	0.174	1
06952	Cobalt	7440-48-4	9.46		1.09	0.108	1
06953	Copper	7440-50-8	18.6		2.17	0.315	1
01654	Iron	7439-89-6	33,200		86.9	7.87	2
06955	Lead	7439-92-1	12.9		3.26	0.543	1
01656	Lithium	7439-93-2	24.6		4.3	0.37	1
01657	Magnesium	7439-95-4	7,040		10.9	1.82	1
06958	Manganese	7439-96-5	470		1.09	0.0902	1
06960	Molybdenum	7439-98-7	0.283	J	2.17	0.185	1
06961	Nickel	7440-02-0	21.7		2.17	0.141	1
10145	Phosphorus	7723-14-0	419		10.9	3.14	1
01662	Potassium	7440-09-7	5,000		109	9.06	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200147
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 08:35 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50540 SDG#: PH108-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01667	Sodium	7440-23-5	192	109	18.2	1
06969	Tin	7440-31-5	3.06 J	10.9	0.239	1
06970	Titanium	7440-32-6	1,440	1.09	0.185	1
06971	Vanadium	7440-62-2	67.9	1.09	0.141	1
06972	Zinc	7440-66-6	89.1	4.35	0.217	1
10146	Zirconium	7440-67-7	3.72 J	5.43	0.913	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.214 J	0.435	0.109	2
06142	Silver	7440-22-4	0.0571 J	0.217	0.0283	2
06144	Strontium	7440-24-6	48.2	0.435	0.0739	2
06145	Thallium	7440-28-0	0.394	0.217	0.0326	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0112 J	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.96	0.0100	0.0100	1
	The pH was measured in water at 21.6 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.9	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/26/2013 06:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13261A34A	09/18/2013 23:48	Laura M Krieger	25.51
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326032432	09/17/2013 22:18	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326032432	09/17/2013 22:19	Lois E Hiltz	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132620006A	09/26/2013 16:20	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 19:22	Monica M Souders	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200147
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 08:35 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50540 SDG#: PH108-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132620006A	09/19/2013 16:35	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/21/2013 02:53	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/24/2013 03:12	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 08:52	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 12:53	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 12:53	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 12:53	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 12:53	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:29	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13260039405A	09/17/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200148
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 09:15 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50590 SDG#: PH108-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.7	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.2	J	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.95
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.94	U	0.94	0.19	1
10590	Alpha BHC	319-84-6	0.94	U	0.94	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.94	U	0.94	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.40	1
10590	Delta BHC	319-86-8	0.94	U	0.94	0.51	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.94	U	0.94	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200148
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 09:15 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50590 SDG#: PH108-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.68	1
10590	Heptachlor	76-44-8	0.94	U	0.94	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.94	U	0.94	0.19	1
10590	Methoxychlor	72-43-5	7.6	U	7.6	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.40	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	11		5.6	2.3	1
12952	EFH (C30-C40)	n.a.	26		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,600		44.7	8.06	1
06944	Antimony	7440-36-0	4.47	U	4.47	0.827	1
06935	Arsenic	7440-38-2	6.95		4.47	0.782	1
06946	Barium	7440-39-3	132		1.12	0.0369	1
06947	Beryllium	7440-41-7	0.973	J	1.12	0.0749	1
07914	Boron	7440-42-8	9.81	J	11.2	0.939	1
06949	Cadmium	7440-43-9	1.12	U	1.12	0.0849	1
01650	Calcium	7440-70-2	17,600		22.3	3.73	1
06951	Chromium	7440-47-3	35.8		3.35	0.179	1
06952	Cobalt	7440-48-4	10.9		1.12	0.111	1
06953	Copper	7440-50-8	16.3		2.23	0.324	1
01654	Iron	7439-89-6	33,000		89.4	8.09	2
06955	Lead	7439-92-1	9.50		3.35	0.559	1
01656	Lithium	7439-93-2	27.0		4.5	0.38	1
01657	Magnesium	7439-95-4	6,820		11.2	1.87	1
06958	Manganese	7439-96-5	455		1.12	0.0928	1
06960	Molybdenum	7439-98-7	0.194	J	2.23	0.190	1
06961	Nickel	7440-02-0	23.4		2.23	0.145	1
10145	Phosphorus	7723-14-0	307		11.2	3.23	1
01662	Potassium	7440-09-7	4,020		112	9.32	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200148
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 09:15 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50590 SDG#: PH108-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01667	Sodium	7440-23-5	584		112	18.7	1
06969	Tin	7440-31-5	3.16	J	11.2	0.246	1
06970	Titanium	7440-32-6	1,350		1.12	0.190	1
06971	Vanadium	7440-62-2	66.6		1.12	0.145	1
06972	Zinc	7440-66-6	71.9		4.47	0.223	1
10146	Zirconium	7440-67-7	2.68	J	5.59	0.939	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.447	U	0.447	0.112	2
06142	Silver	7440-22-4	0.0492	J	0.223	0.0291	2
06144	Strontium	7440-24-6	55.8		0.447	0.0760	2
06145	Thallium	7440-28-0	0.416		0.223	0.0335	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183		0.0177	0.0106	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	3.0		1.1	0.45	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.6 C.	n.a.	8.41		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	11.4		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/26/2013 07:05	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13261A34A	09/19/2013 00:24	Laura M Krieger	23.95
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326032432	09/17/2013 22:20	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326032432	09/17/2013 22:21	Lois E Hiltz	n.a.

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200148
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 09:15 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50590 SDG#: PH108-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132620006A	09/26/2013 16:36	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 19:41	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132620006A	09/19/2013 16:35	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/21/2013 01:49	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/24/2013 03:16	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:04	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:00	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:00	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:00	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:00	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:31	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201B	09/20/2013 18:20	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201B	09/19/2013 17:00	Carolyn M Mastropietro	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200148
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 09:15 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50590 SDG#: PH108-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	15a pH by 9045D	SW-846 9045D modified	1	13260039405A	09/17/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200149
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 10:05 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50514 SDG#: PH108-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	J	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.2	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.85
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.92	U	0.92	0.19	1
10590	Alpha BHC	319-84-6	0.92	U	0.92	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.92	U	0.92	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.92	U	0.92	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.92	U	0.92	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200149
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 10:05 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50514 SDG#: PH108-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.92	U	0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.92	U	0.92	0.19	1
10590	Methoxychlor	72-43-5	7.4	U	7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,900		43.5	7.84	1
06944	Antimony	7440-36-0	4.35	U	4.35	0.804	1
06935	Arsenic	7440-38-2	6.31		4.35	0.761	1
06946	Barium	7440-39-3	91.6		1.09	0.0359	1
06947	Beryllium	7440-41-7	0.784	J	1.09	0.0728	1
07914	Boron	7440-42-8	7.03	J	10.9	0.913	1
06949	Cadmium	7440-43-9	1.09	U	1.09	0.0826	1
01650	Calcium	7440-70-2	8,130		21.7	3.63	1
06951	Chromium	7440-47-3	30.9		3.26	0.174	1
06952	Cobalt	7440-48-4	6.72		1.09	0.108	1
06953	Copper	7440-50-8	13.5		2.17	0.315	1
01654	Iron	7439-89-6	27,800		43.5	3.93	1
06955	Lead	7439-92-1	7.17		3.26	0.543	1
01656	Lithium	7439-93-2	24.7		4.3	0.37	1
01657	Magnesium	7439-95-4	5,680		10.9	1.82	1
06958	Manganese	7439-96-5	315		1.09	0.0902	1
06960	Molybdenum	7439-98-7	2.17	U	2.17	0.185	1
06961	Nickel	7440-02-0	16.9		2.17	0.141	1
10145	Phosphorus	7723-14-0	344		10.9	3.14	1
01662	Potassium	7440-09-7	3,290		109	9.06	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200149
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 10:05 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50514 SDG#: PH108-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01667	Sodium	7440-23-5	388	109	18.2	1
06969	Tin	7440-31-5	3.12 J	10.9	0.239	1
06970	Titanium	7440-32-6	1,460	1.09	0.185	1
06971	Vanadium	7440-62-2	53.3	1.09	0.141	1
06972	Zinc	7440-66-6	63.0	4.35	0.217	1
10146	Zirconium	7440-67-7	2.68 J	5.43	0.913	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.435 U	0.435	0.109	2
06142	Silver	7440-22-4	0.0543 J	0.217	0.0283	2
06144	Strontium	7440-24-6	41.8	0.435	0.0739	2
06145	Thallium	7440-28-0	0.342	0.217	0.0326	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182 U	0.0182	0.0109	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride	16984-48-8	3.5	1.1	0.44	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.3 C.	n.a.	8.56	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	9.8	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/26/2013 07:38	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13261A34A	09/19/2013 00:59	Laura M Krieger	21.85
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326032432	09/17/2013 22:22	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326032432	09/17/2013 22:22	Lois E Hiltz	n.a.

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200149
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 10:05 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50514 SDG#: PH108-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132620006A	09/26/2013 16:51	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 19:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132620006A	09/19/2013 16:35	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/20/2013 23:19	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:08	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:03	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:03	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:03	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:03	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:34	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201B	09/20/2013 18:37	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201B	09/19/2013 17:00	Carolyn M Mastropietro	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200149
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 10:05 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50514 SDG#: PH108-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	15a pH by 9045D	SW-846 9045D modified	1	13260039405A	09/17/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200150
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 11:00 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50519 SDG#: PH108-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.2	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The result is < the LOQ. The client was contacted and the data reported.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.78
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.92	U	0.92	0.19	1
10590	Alpha BHC	319-84-6	0.92	U	0.92	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.92	U	0.92	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.92	U	0.92	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.92	U	0.92	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200150
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 11:00 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50519 SDG#: PH108-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.92	U	0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.92	U	0.92	0.19	1
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,800		43.2	7.79	1
06944	Antimony	7440-36-0	4.32	U	4.32	0.799	1
06935	Arsenic	7440-38-2	6.26		4.32	0.756	1
06946	Barium	7440-39-3	106		1.08	0.0356	1
06947	Beryllium	7440-41-7	0.876	J	1.08	0.0724	1
07914	Boron	7440-42-8	7.33	J	10.8	0.907	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0821	1
01650	Calcium	7440-70-2	15,200		21.6	3.61	1
06951	Chromium	7440-47-3	32.7		3.24	0.173	1
06952	Cobalt	7440-48-4	10.4		1.08	0.107	1
06953	Copper	7440-50-8	16.0		2.16	0.313	1
01654	Iron	7439-89-6	31,100		86.4	7.82	2
06955	Lead	7439-92-1	10.3		3.24	0.540	1
01656	Lithium	7439-93-2	27.3		4.3	0.37	1
01657	Magnesium	7439-95-4	6,140		10.8	1.80	1
06958	Manganese	7439-96-5	627		1.08	0.0896	1
06960	Molybdenum	7439-98-7	0.220	J	2.16	0.184	1
06961	Nickel	7440-02-0	25.0		2.16	0.140	1
10145	Phosphorus	7723-14-0	437		10.8	3.12	1
01662	Potassium	7440-09-7	3,360		108	9.01	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200150
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 11:00 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50519 SDG#: PH108-06*

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01667	Sodium		7440-23-5	350		108	18.0	1
06969	Tin		7440-31-5	3.33	J	10.8	0.238	1
06970	Titanium		7440-32-6	1,520		1.08	0.184	1
06971	Vanadium		7440-62-2	61.3		1.08	0.140	1
06972	Zinc		7440-66-6	70.0		4.32	0.216	1
10146	Zirconium		7440-67-7	3.02	J	5.40	0.907	1
		SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium		7782-49-2	0.432	U	0.432	0.108	2
06142	Silver		7440-22-4	0.0460	J	0.216	0.0281	2
06144	Strontium		7440-24-6	59.3		0.432	0.0734	2
06145	Thallium		7440-28-0	0.392		0.216	0.0324	2
		SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A		7439-97-6	0.0184	U	0.0184	0.0111	1
Wet Chemistry		**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0-Fluoride		16984-48-8	3.4		1.1	0.44	1
		SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D		n.a.	8.27		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.							
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3		n.a.	10.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13260SLC026	09/26/2013 08:11	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13260SLC026	09/18/2013 03:00	Sherry L Morrow	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13261A34A	09/19/2013 01:35	Laura M Krieger	21.78
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326032432	09/17/2013 22:23	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326032432	09/17/2013 22:24	Lois E Hiltz	n.a.

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200150
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 11:00 by VC

Submitted: 09/17/2013 10:05
Reported: 09/27/2013 13:19

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50519 SDG#: PH108-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132620006A	09/26/2013 17:07	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132600023A	09/24/2013 20:18	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132600023A	09/17/2013 22:15	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132620006A	09/19/2013 16:35	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132620005A	09/20/2013 23:40	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132620005A	09/19/2013 18:30	Nicholas W Shroyer	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/24/2013 03:19	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:12	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:05	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:05	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:05	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:05	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:36	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
07332	1a Anions by 300.0-Fluoride	EPA 300.0	2	13262262201B	09/20/2013 18:54	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13262262201B	09/19/2013 17:00	Carolyn M Mastropietro	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7200150
LL Group # 1419298
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/16/2013 11:00 by VC

Submitted: 09/17/2013 10:05
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50519 SDG#: PH108-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	15a pH by 9045D	SW-846 9045D modified	1	13260039405A	09/17/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13262162401B	09/19/2013 23:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419298
Reported: 09/27/13 at 01:19 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13260SLC026	Sample number(s): 7200146-7200150									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	101		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	102		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	103		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	98		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	96		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	108		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	116		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	110		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	107		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	106		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	106		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	107		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	102		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	105		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	107		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	114		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	113		78-121		
Naphthalene	0.92	J	1.7	0.67	ug/kg	106		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	110		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	109		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	102		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	104		79-112		
Batch number: 13261A34A	Sample number(s): 7200147-7200150									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	78	79	67-119	2	30
Batch number: 13262A94A	Sample number(s): 7200145									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	119	121	75-135	2	30
Batch number: 132600023A	Sample number(s): 7200146-7200150									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	78	74	62-87	5	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	94		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419298
Reported: 09/27/13 at 01:19 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	109		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132620006A	Sample number(s): 7200146-7200150									
Aldrin	0.83	U	0.83	0.17	ug/kg	88		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	94		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	94		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	89		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	99		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	98		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	95		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	97		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	101		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	98		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	101		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	104		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	101		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	97		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	99		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	91		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	98		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	94		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132620005A	Sample number(s): 7200146-7200150									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	94		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	96		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	97		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	67		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	80		49-107		
Batch number: 132610637002	Sample number(s): 7200146-7200150									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	109		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	99		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	103		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	105		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	99		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	106		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	99		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419298
Reported: 09/27/13 at 01:19 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Sodium	100 U		100.	16.7	mg/kg	98		80-120		
Tin	1.64	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	101		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	104		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	104		80-120		
Batch number: 132610637002A	Sample number(s): 7200146-7200150									
Silver	0.200	U	0.200	0.0260	mg/kg	106		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	108		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	105		80-120		
Batch number: 132610637002B	Sample number(s): 7200146-7200150									
Selenium	0.400	U	0.400	0.100	mg/kg	115		80-120		
Batch number: 132610638002	Sample number(s): 7200146-7200150									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	108		85-120		
Batch number: 13262262201B	Sample number(s): 7200148-7200150									
1a Anions by 300.0-Fluoride	1.0	U	1.0	0.40	mg/kg	98		90-110		
Batch number: 13260039405A	Sample number(s): 7200146-7200150									
15a pH by 9045D						100		95-105		
Batch number: 13262162401B	Sample number(s): 7200146-7200150									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13261001	Sample number(s): 7200146									
2378-TCDD	1.00	U	1.00	0.151	ng/kg	85		67-158		
12378-PeCDD	0.122	J	5.00	0.106	ng/kg	99		70-142		
123478-HxCDD	0.0859	J	5.00	0.0445	ng/kg	100		70-164		
123678-HxCDD	5.00	U	5.00	0.0496	ng/kg	97		76-134		
123789-HxCDD	0.0579	J	5.00	0.0484	ng/kg	98		64-162		
1234678-HpCDD	0.0535	J	5.00	0.0502	ng/kg	96		70-140		
OCDD	0.197	J	10.0	0.0532	ng/kg	98		78-144		
2378-TCDF	1.00	U	1.00	0.143	ng/kg	88		75-158		
12378-PeCDF	0.0876	J	5.00	0.0660	ng/kg	93		80-134		
23478-PeCDF	5.00	U	5.00	0.0633	ng/kg	97		68-160		
123478-HxCDF	5.00	U	5.00	0.0482	ng/kg	96		72-134		
123678-HxCDF	0.0456	J	5.00	0.0403	ng/kg	98		84-130		
123789-HxCDF	0.0750	J	5.00	0.0526	ng/kg	96		78-130		
234678-HxCDF	5.00	U	5.00	0.0421	ng/kg	96		70-156		
1234678-HpCDF	0.0418	J	5.00	0.0219	ng/kg	95		82-122		
1234789-HpCDF	0.0583	J	5.00	0.0419	ng/kg	95		78-138		
OCDF	0.197	J	10.0	0.104	ng/kg	96		63-170		
TEQ WHO 2005 - EDLx0.0	U				ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419298
Reported: 09/27/13 at 01:19 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13260SLC026	Sample number(s): 7200146-7200150 UNSPK: P196426								
Acenaphthene	93	87	48-127	7	30				
Acenaphthylene	98	92	49-121	7	30				
Anthracene	97	89	52-126	9	30				
Benzo(a)anthracene	95	86	44-143	9	30				
Benzo(a)pyrene	91	84	44-140	7	30				
Benzo(b)fluoranthene	107	100	26-142	6	30				
Benzo(e)pyrene	92	85	70-130	7	30				
Benzo(g,h,i)perylene	72	59	33-141	19	30				
Benzo(k)fluoranthene	102	97	54-142	5	30				
Butylbenzylphthalate	116	107	49-151	8	30				
Di-n-butylphthalate	109	102	52-147	6	30				
Chrysene	89	81	29-148	8	30				
Dibenz(a,h)anthracene	80	69	20-137	15	30				
Diethylphthalate	97	93	43-145	4	30				
Dimethylphthalate	96	91	58-129	5	30				
Bis(2-Ethylhexyl)phthalate	123	125	39-167	2	30				
Fluoranthene	94	83	40-148	10	30				
Fluorene	96	89	51-137	7	30				
Indeno(1,2,3-cd)pyrene	80	68	17-136	15	30				
1-Methylnaphthalene	107	100	50-131	6	30				
2-Methylnaphthalene	107	100	35-152	7	30				
Naphthalene	96	93	31-148	4	30				
N-Nitrosodimethylamine	101	94	48-113	6	30				
Di-n-octylphthalate	121	118	52-162	3	30				
Phenanthrene	90	83	29-142	8	30				
Pyrene	87	77	26-143	11	30				
Batch number: 132600023A	Sample number(s): 7200146-7200150 UNSPK: P196426								
PCB-1016	102	107	41-135	4	50				
PCB-1260	110	108	40-134	2	50				
Batch number: 132620006A	Sample number(s): 7200146-7200150 UNSPK: P196435								
Aldrin	88	87	16-126	1	50				
Alpha BHC	91	89	14-140	2	50				
Beta BHC	99	98	42-133	2	50				
Gamma BHC - Lindane	86	86	30-137	0	50				
p,p-DDD	96	95	43-149	1	50				
p,p-DDE	94	95	35-152	1	50				
p,p-DDT	93	93	12-193	1	50				
Delta BHC	91	92	13-153	0	50				
Dieldrin	96	96	41-153	0	50				
Endosulfan I	93	94	26-146	1	50				
Endosulfan II	97	95	34-141	2	50				
Endosulfan Sulfate	102	101	10-181	0	50				
Endrin	100	100	30-152	1	50				
Endrin Aldehyde	83	84	23-138	2	50				
Endrin Ketone	94	93	30-148	1	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419298
Reported: 09/27/13 at 01:19 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Heptachlor	87	86	16-152	0	50				
Heptachlor Epoxide	92	93	33-144	1	50				
Methoxychlor	92	92	41-161	1	50				
Batch number: 132620005A	Sample number(s): 7200146-7200150 UNSPK: P196426								
EFH (C12-C14)	92	93	49-123	1	20				
EFH (C15-C20)	93	110	49-123	9	20				
EFH (C21-C30)	32*	113	49-123	22*	20				
EFH (C30-C40)	-85 (2)	261 (2)	49-123	38*	20				
EFH (C8-C11)	86	87	49-123	2	20				
Batch number: 132610637002	Sample number(s): 7200146-7200150 UNSPK: P201708 BKG: P201708								
Aluminum	83 (2)	3009 (2)	75-125	18	20	27,900	25,000	11	20
Antimony	72*	72*	75-125	1	20	3.88 U	3.88 U	0 (1)	20
Arsenic	94	95	75-125	1	20	6.53	5.30	21* (1)	20
Barium	88	102	75-125	10	20	97.2	91.4	6	20
Beryllium	92	100	75-125	7	20	0.908 J	0.864 J	5 (1)	20
Boron	94	96	75-125	2	20	7.77 J	6.86 J	12 (1)	20
Cadmium	91	88	75-125	4	20	0.971 U	0.143 J	200* (1)	20
Calcium	12397 (2)	-1955 (2)	75-125	107*	20	31,600	47,600	41*	20
Chromium	76	114	75-125	15	20	31.1	28.6	8	20
Cobalt	86	95	75-125	8	20	7.06	6.15	14	20
Copper	92	108	75-125	10	20	13.9	12.5	11	20
Iron	-5015 (2)	1530 (2)	75-125	24*	20	28,600	25,300	12	20
Lead	82	95	75-125	9	20	8.30	7.52	10 (1)	20
Lithium	94	101	75-125	6	20	23.3	21.3	9	20
Magnesium	-142 (2)	382 (2)	75-125	18	20	5,470	5,130	6	20
Manganese	181 (2)	235 (2)	75-125	7	20	254	220	15	20
Molybdenum	88	91	75-125	3	20	0.300 J	1.94 U	200* (1)	20
Nickel	87	96	75-125	7	20	18.2	16.5	10	20
Phosphorus	124	114	75-125	4	20	153	162	5	20
Potassium	101	147*	75-125	12	20	2,430	2,280	6	20
Sodium	84	97	75-125	9	20	611	580	5	20
Tin	85	89	75-125	4	20	2.96 J	2.60 J	13 (1)	20
Titanium	146 (2)	335 (2)	75-125	14	20	1,100	940	16	20
Vanadium	89	112	75-125	11	20	56.7	50.7	11	20
Zinc	85	103	75-125	9	20	51.7	49.7	4	20
Zirconium	94	98	75-125	4	20	3.08 J	4.44 J	36* (1)	20
Batch number: 132610637002A	Sample number(s): 7200146-7200150 UNSPK: P201708 BKG: P201708								
Silver	127*	122	75-125	4	20	0.0726 J	0.0653 J	11 (1)	20
Strontium	300 (2)	280 (2)	75-125	2	20	48.7	57.6	17	20
Thallium	159*	143*	75-125	7	20	0.291	0.329	12 (1)	20
Batch number: 132610637002B	Sample number(s): 7200146-7200150 UNSPK: P201708 BKG: P201708								
Selenium	112	104	75-125	7	20	0.388 U	0.388 U	0 (1)	20
Batch number: 132610638002	Sample number(s): 7200146-7200150 UNSPK: P201708 BKG: P201708								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419298
Reported: 09/27/13 at 01:19 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
3a Mercury 7471A	104	108	65-135	1	20	0.0116 J	0.0125 J	7 (1)	20
Batch number: 13262262201B	Sample number(s): 7200148-7200150 UNSPK: P192803 BKG: P192803								
1a Anions by 300.0-Fluoride	77*		80-120			1.3	1.6	20 (1)	20
Batch number: 13260039405A	Sample number(s): 7200146-7200150 BKG: 7200146								
15a pH by 9045D						7.92	7.90	0	3
Batch number: 13262162401B	Sample number(s): 7200146-7200150 BKG: P194444								
14a Moisture Content by 160.3						15.8	15.6	1	20
Batch number: 13261001	Sample number(s): 7200146 UNSPK: P196426								
2378-TCDD	90	92	40-135	1	20				
12378-PeCDD	95	99	40-135	3	20				
123478-HxCDD	98	99	40-135	0	20				
123678-HxCDD	95	96	40-135	0	20				
123789-HxCDD	95	94	40-135	2	20				
1234678-HpCDD	91	92	40-135	1	20				
OCDD	59	58	40-135	1	20				
2378-TCDF	96	100	40-135	3	20				
12378-PeCDF	94	93	40-135	2	20				
23478-PeCDF	95	97	40-135	0	20				
123478-HxCDF	97	96	40-135	1	20				
123678-HxCDF	97	99	40-135	1	20				
123789-HxCDF	96	95	40-135	2	20				
234678-HxCDF	96	94	40-135	3	20				
1234678-HpCDF	92	94	40-135	1	20				
1234789-HpCDF	94	94	40-135	1	20				
OCDF	93	91	40-135	3	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13260SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7200146	88	94	111
7200147	86	95	109
7200148	86	99	109
7200149	93	105	114
7200150	88	100	113
Blank	88	98	113
LCS	93	101	117
MS	88	92	107
MSD	81	87	102

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419298
Reported: 09/27/13 at 01:19 PM

Surrogate Quality Control

Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13261A34A

	Trifluorotoluene-F
7200147	81
7200148	83
7200149	74
7200150	74
Blank	90
LCS	86
LCSD	89
Limits:	50-142

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13262A94A

	Trifluorotoluene-F
7200145	73
Blank	74
LCS	82
LCSD	82
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132600023A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7200146	112	102
7200147	103	87
7200148	108	103
7200149	112	102
7200150	112	95
Blank	110	106
LCS	115	105
LCSD	103	97
MS	118	105
MSD	120	105
Limits:	45-120	45-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132620006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7200146	90	99
7200147	87	92
7200148	90	97
7200149	92	101
7200150	91	101
Blank	89	103
LCS	90	105

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419298
Reported: 09/27/13 at 01:19 PM

Surrogate Quality Control

MS	88	100
MSD	85	100
Limits:	50-130	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132620005A

	Chlorobenzene	Orthoterphenyl
7200146	110	95
7200147	113	83
7200148	118	97
7200149	120	101
7200150	114	95
Blank	120	100
LCS	116	98
MS	102	80
MSD	105	76
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13261001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7200146	52	66	50	59	58	59
Blank	61	69	64	74	71	72
MS	62	73	68	77	75	72
MSD	56	65	63	71	69	67
OPR	59	71	63	73	70	65
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7200146	79	54	43	75	60	68
Blank	93	62	51	77	75	80
MS	91	68	56	81	76	82
MSD	84	63	54	70	70	77
OPR	92	57	44	80	74	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7200146	66	66	57	46	70
Blank	80	81	67	49	72
MS	82	85	71	55	77
MSD	76	77	68	48	67
OPR	80	77	63	50	77
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1419298 7200145-50

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/16/2013
CarrierName: FedEx
AirbillNo: 796698239794

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130916-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-091613	9/16/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-505-SA5D-SB-0.0-0.5	9/16/13 08:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X				X										
SL-505-SA5D-SB-0.0-0.5	9/16/13 08:05	SO	None	1 - 4 oz glass	10 day													X																		
SL-505-SA5D-SB-4.0-5.0	9/16/13 08:35	SO	None	2 - SS-Sleeve	10 day	X	X					X			X							X				X										
SL-505-SA5D-SB-4.0-5.0	9/16/13 08:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-505-SA5D-SB-4.0-5.0	9/16/13 08:35	SO	None	2 - Encore	10 day																			X												
SL-505-SA5D-SB-9.0-10.0	9/16/13 09:15	SO	None	2 - SS-Sleeve	10 day	X	X		X			X			X							X				X										
SL-505-SA5D-SB-9.0-10.0	9/16/13 09:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-505-SA5D-SB-9.0-10.0	9/16/13 09:15	SO	None	2 - Encore	10 day																			X												
SL-505-SA5D-SB-14.0-15.0	9/16/13 10:05	SO	None	2 - SS-Sleeve	10 day	X	X		X			X			X							X				X										
SL-505-SA5D-SB-14.0-15.0	9/16/13 10:05	SO	None	1 - 4 oz glass	10 day													X																		
SL-505-SA5D-SB-14.0-15.0	9/16/13 10:05	SO	None	2 - Encore	10 day																			X												
SL-505-SA5D-SB-19.0-20.0	9/16/13 11:00	SO	None	2 - SS-Sleeve	10 day	X	X		X			X			X							X				X										
SL-505-SA5D-SB-19.0-20.0	9/16/13 11:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-505-SA5D-SB-19.0-20.0	9/16/13 11:00	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shyf Myal	09/16/2013	1600									
									Bruce Berg	9.17.13	1005

COC Rev 2

COC 20130916-01, Page 1 of 1

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1419298

Environmental Sample Administration Receipt Documentation Log

Client/Project: COM

Date of Receipt: 9.12.13

Time of Receipt: 1005

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	0.8	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Bang 2299 **Date/Time:** 9.12.13 1031

Issued by Dept. 6042 Management

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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SAMPLE DELIVERY GROUP

PH109

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 30, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/18/2013
Group Number: 1419618
SDG: PH109
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-091713 Water	7201704
SL-503-SA5D-SB-0.0-0.5 Soil	7201705
SL-503-SA5D-SB-4.0-5.0 Soil	7201706
SL-504-SA5D-SB-0.0-0.5 Soil	7201707
SL-504-SA5D-SB-4.0-5.0 Soil	7201708
SL-504-SA5D-SB-4.0-5.0MS Soil	7201709
SL-504-SA5D-SB-4.0-5.0MSD Soil	7201710
SL-504-SA5D-SB-4.0-5.0DUP Soil	7201711
SL-804-SA5D-SB-4.0-5.0 Soil	7201712
SL-504-SA5D-SB-9.0-10.0 Soil	7201713
SL-504-SA5D-SB-16.0-17.0 Soil	7201714
SL-501-SA5D-SB-0.0-0.5 Soil	7201715
SL-501-SA5D-SB-4.0-5.0 Soil	7201716
SL-501-SA5D-SB-9.0-10.0 Soil	7201717
SL-501-SA5D-SB-14.0-15.0 Soil	7201718
SL-501-SA5D-SB-19.0-20.0 Soil	7201719
SL-501-SA5D-SB-24.0-25.0 Soil	7201720
SL-501-SA5D-SB-28.0-29.0 Soil	7201721

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-091713 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7201704
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:00

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB109 SDG#: PH109-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13262A94A	09/20/2013 13:59	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13262A94A	09/20/2013 13:59	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201705
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 09:45 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH109-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.62	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.0	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	3.5	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	6.7	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201705
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 09:45 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH109-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,700		43.0	7.75	1
06944	Antimony	7440-36-0	4.30	U	4.30	0.795	1
06935	Arsenic	7440-38-2	6.27		4.30	0.752	1
06946	Barium	7440-39-3	144		1.07	0.0355	1
06947	Beryllium	7440-41-7	1.04	J	1.07	0.0720	1
07914	Boron	7440-42-8	11.4		10.7	0.903	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0817	1
01650	Calcium	7440-70-2	6,590		21.5	3.59	1
06951	Chromium	7440-47-3	40.8		3.22	0.172	1
06952	Cobalt	7440-48-4	10.7		1.07	0.106	1
06953	Copper	7440-50-8	17.9		2.15	0.312	1
01654	Iron	7439-89-6	36,300		86.0	7.78	2
06955	Lead	7439-92-1	11.3		3.22	0.537	1
01656	Lithium	7439-93-2	27.3		4.3	0.37	1
01657	Magnesium	7439-95-4	7,290		10.7	1.80	1
06958	Manganese	7439-96-5	505		1.07	0.0892	1
06960	Molybdenum	7439-98-7	2.15	U	2.15	0.183	1
06961	Nickel	7440-02-0	22.0		2.15	0.140	1
10145	Phosphorus	7723-14-0	289		10.7	3.11	1
01662	Potassium	7440-09-7	4,320		107	8.97	1
01667	Sodium	7440-23-5	127		107	18.0	1
06969	Tin	7440-31-5	3.41	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,570		1.07	0.183	1
06971	Vanadium	7440-62-2	76.1		1.07	0.140	1
06972	Zinc	7440-66-6	74.0		4.30	0.215	1
10146	Zirconium	7440-67-7	4.71	J	5.37	0.903	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.283	J	0.430	0.107	2
06142	Silver	7440-22-4	0.0623	J	0.215	0.0279	2
06144	Strontium	7440-24-6	52.0		0.430	0.0731	2
06145	Thallium	7440-28-0	0.477		0.215	0.0322	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.68		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201705
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 09:45 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH109-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0679 JBQ	1.09	0.0672	1
11031	12378-PeCDD	40321-76-4	0.137 JBQ	5.44	0.0481	1
11031	123478-HxCDD	39227-28-6	0.0734 JBQ	5.44	0.0367	1
11031	123678-HxCDD	57653-85-7	0.353 JB	5.44	0.0391	1
11031	123789-HxCDD	19408-74-3	0.503 JB	5.44	0.0364	1
11031	1234678-HpCDD	35822-46-9	0.691 JB	5.44	0.0411	1
11031	OCDD	3268-87-9	5.01 JB	10.9	0.0299	1
11031	2378-TCDF	51207-31-9	0.0763 JQ	1.09	0.0602	1
11031	12378-PeCDF	57117-41-6	0.360 JB	5.44	0.0285	1
11031	23478-PeCDF	57117-31-4	0.102 JB	5.44	0.0270	1
11031	123478-HxCDF	70648-26-9	0.154 JB	5.44	0.0318	1
11031	123678-HxCDF	57117-44-9	0.102 JB	5.44	0.0288	1
11031	123789-HxCDF	72918-21-9	0.674 JBQ	5.44	0.0338	1
11031	234678-HxCDF	60851-34-5	0.0802 JBQ	5.44	0.0296	1
11031	1234678-HpCDF	67562-39-4	0.148 JB	5.44	0.0126	1
11031	1234789-HpCDF	55673-89-7	0.120 JBQ	5.44	0.0208	1
11031	OCDF	39001-02-0	0.369 JB	10.9	0.0481	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.163			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	63	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	59	24 - 185
13C12-23478-PeCDF	57	21 - 178
13C12-123478-HxCDF	55	26 - 152
13C12-123678-HxCDF	61	26 - 123
13C12-234678-HxCDF	55	28 - 136
13C12-123789-HxCDF	54	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	51	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201705
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 09:45 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH109-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201705
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 09:45 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH109-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 05:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 17:39	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/23/2013 22:05	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 03:48	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/24/2013 03:23	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:17	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:07	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:07	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:07	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:07	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201705
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 09:45 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH109-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:38	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406A	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201706
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 09:55 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50345 SDG#: PH109-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	0.78	J	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.55
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201706
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 09:55 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50345 SDG#: PH109-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,700		46.2	8.34	1
06944	Antimony	7440-36-0	4.62	U	4.62	0.855	1
06935	Arsenic	7440-38-2	6.02		4.62	0.809	1
06946	Barium	7440-39-3	146		1.16	0.0382	1
06947	Beryllium	7440-41-7	0.942	J	1.16	0.0775	1
07914	Boron	7440-42-8	10.2	J	11.6	0.971	1
06949	Cadmium	7440-43-9	0.210	J	1.16	0.0879	1
01650	Calcium	7440-70-2	5,790		23.1	3.86	1
06951	Chromium	7440-47-3	33.1		3.47	0.185	1
06952	Cobalt	7440-48-4	10.2		1.16	0.114	1
06953	Copper	7440-50-8	14.6		2.31	0.335	1
01654	Iron	7439-89-6	31,000		92.5	8.37	2
06955	Lead	7439-92-1	9.48		3.47	0.578	1
01656	Lithium	7439-93-2	30.4		4.6	0.39	1
01657	Magnesium	7439-95-4	6,180		11.6	1.93	1
06958	Manganese	7439-96-5	1,000		1.16	0.0960	1
06960	Molybdenum	7439-98-7	2.31	U	2.31	0.197	1
06961	Nickel	7440-02-0	27.1		2.31	0.150	1
10145	Phosphorus	7723-14-0	324		11.6	3.34	1
01662	Potassium	7440-09-7	3,610		116	9.64	1
01667	Sodium	7440-23-5	443		116	19.3	1
06969	Tin	7440-31-5	2.89	J	11.6	0.254	1
06970	Titanium	7440-32-6	1,700		1.16	0.197	1
06971	Vanadium	7440-62-2	65.7		1.16	0.150	1
06972	Zinc	7440-66-6	66.8		4.62	0.231	1
10146	Zirconium	7440-67-7	3.63	J	5.78	0.971	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.462	U	0.462	0.116	2
06142	Silver	7440-22-4	0.0687	J	0.231	0.0301	2
06144	Strontium	7440-24-6	41.2		0.462	0.0786	2
06145	Thallium	7440-28-0	0.425		0.231	0.0347	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.41		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201706
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 09:55 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50345 SDG#: PH109-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 06:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/20/2013 19:08	Laura M Krieger	21.55
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 14:17	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 14:17	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 17:58	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/23/2013 22:26	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/24/2013 03:34	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201706
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 09:55 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50345 SDG#: PH109-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:21	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:10	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:10	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:10	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:10	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:40	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406A	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201707
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:40 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH109-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	0.76	J	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	0.91	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	0.76	J	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	0.81	J	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	0.92	J	1.8	0.74	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	4.8	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	5.8	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201707
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:40 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH109-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,400		43.5	7.85	1
06944	Antimony	7440-36-0	4.35	U	4.35	0.805	1
06935	Arsenic	7440-38-2	6.07		4.35	0.762	1
06946	Barium	7440-39-3	133		1.09	0.0359	1
06947	Beryllium	7440-41-7	1.03	J	1.09	0.0729	1
07914	Boron	7440-42-8	11.1		10.9	0.914	1
06949	Cadmium	7440-43-9	1.09	U	1.09	0.0827	1
01650	Calcium	7440-70-2	12,500		21.8	3.63	1
06951	Chromium	7440-47-3	38.5		3.26	0.174	1
06952	Cobalt	7440-48-4	10.1		1.09	0.108	1
06953	Copper	7440-50-8	18.9		2.18	0.316	1
01654	Iron	7439-89-6	41,600		87.0	7.88	2
06955	Lead	7439-92-1	10.8		3.26	0.544	1
01656	Lithium	7439-93-2	25.6		4.4	0.37	1
01657	Magnesium	7439-95-4	7,110		10.9	1.82	1
06958	Manganese	7439-96-5	505		1.09	0.0903	1
06960	Molybdenum	7439-98-7	0.239	J	2.18	0.185	1
06961	Nickel	7440-02-0	22.2		2.18	0.141	1
10145	Phosphorus	7723-14-0	352		10.9	3.14	1
01662	Potassium	7440-09-7	4,860		109	9.07	1
01667	Sodium	7440-23-5	203		109	18.2	1
06969	Tin	7440-31-5	3.03	J	10.9	0.239	1
06970	Titanium	7440-32-6	1,480		1.09	0.185	1
06971	Vanadium	7440-62-2	71.4		1.09	0.141	1
06972	Zinc	7440-66-6	74.3		4.35	0.218	1
10146	Zirconium	7440-67-7	3.86	J	5.44	0.914	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.304	J	0.435	0.109	2
06142	Silver	7440-22-4	0.0479	J	0.218	0.0283	2
06144	Strontium	7440-24-6	52.8		0.435	0.0740	2
06145	Thallium	7440-28-0	0.397		0.218	0.0326	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183	U	0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.12		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201707
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:40 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH109-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0559	1
11031	12378-PeCDD	40321-76-4	5.46	U	5.46	0.0566	1
11031	123478-HxCDD	39227-28-6	5.46	U	5.46	0.0272	1
11031	123678-HxCDD	57653-85-7	0.223	JBQ	5.46	0.0295	1
11031	123789-HxCDD	19408-74-3	0.397	JB	5.46	0.0283	1
11031	1234678-HpCDD	35822-46-9	0.463	JB	5.46	0.0370	1
11031	OCDD	3268-87-9	4.64	JB	10.9	0.0215	1
11031	2378-TCDF	51207-31-9	0.162	J	1.09	0.0919	1
11031	12378-PeCDF	57117-41-6	2.65	JB	5.46	0.0440	1
11031	23478-PeCDF	57117-31-4	0.125	JBQ	5.46	0.0463	1
11031	123478-HxCDF	70648-26-9	0.217	JBQ	5.46	0.0364	1
11031	123678-HxCDF	57117-44-9	0.113	JB	5.46	0.0310	1
11031	123789-HxCDF	72918-21-9	0.569	JBQ	5.46	0.0342	1
11031	234678-HxCDF	60851-34-5	0.0962	JB	5.46	0.0341	1
11031	1234678-HpCDF	67562-39-4	0.154	JBQ	5.46	0.0140	1
11031	1234789-HpCDF	55673-89-7	0.150	JBQ	5.46	0.0259	1
11031	OCDF	39001-02-0	0.344	JBQ	10.9	0.0501	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.162				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	59	25 - 181
13C12-123478-HxCDD	59	32 - 141
13C12-123678-HxCDD	58	28 - 130
13C12-123789-HxCDD	58	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	49	24 - 169
13C12-12378-PeCDF	57	24 - 185
13C12-23478-PeCDF	52	21 - 178
13C12-123478-HxCDF	47	26 - 152
13C12-123678-HxCDF	54	26 - 123
13C12-234678-HxCDF	49	28 - 136
13C12-123789-HxCDF	54	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	44	26 - 138
13C12-OCDF	42	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201707
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:40 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH109-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201707
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:40 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH109-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 06:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 18:16	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/23/2013 22:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 04:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/24/2013 03:38	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:25	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:12	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:12	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:12	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:12	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201707
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:40 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH109-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:42	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406A	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201708
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.2
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.5	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201708
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,000		44.5	8.02	1
06944	Antimony	7440-36-0	4.45	U	4.45	0.823	1
06935	Arsenic	7440-38-2	7.48		4.45	0.778	1
06946	Barium	7440-39-3	111		1.11	0.0367	1
06947	Beryllium	7440-41-7	1.04	J	1.11	0.0745	1
07914	Boron	7440-42-8	8.90	J	11.1	0.934	1
06949	Cadmium	7440-43-9	1.11	U	1.11	0.0845	1
01650	Calcium	7440-70-2	36,200		22.2	3.71	1
06951	Chromium	7440-47-3	35.6		3.34	0.178	1
06952	Cobalt	7440-48-4	8.09		1.11	0.110	1
06953	Copper	7440-50-8	16.0		2.22	0.323	1
01654	Iron	7439-89-6	32,700		89.0	8.05	2
06955	Lead	7439-92-1	9.51		3.34	0.556	1
01656	Lithium	7439-93-2	26.7		4.4	0.38	1
01657	Magnesium	7439-95-4	6,260		11.1	1.86	1
06958	Manganese	7439-96-5	291		1.11	0.0923	1
06960	Molybdenum	7439-98-7	0.344	J	2.22	0.189	1
06961	Nickel	7440-02-0	20.8		2.22	0.145	1
10145	Phosphorus	7723-14-0	176		11.1	3.21	1
01662	Potassium	7440-09-7	2,780		111	9.28	1
01667	Sodium	7440-23-5	700		111	18.6	1
06969	Tin	7440-31-5	3.39	J	11.1	0.245	1
06970	Titanium	7440-32-6	1,260		1.11	0.189	1
06971	Vanadium	7440-62-2	65.0		1.11	0.145	1
06972	Zinc	7440-66-6	59.2		4.45	0.222	1
10146	Zirconium	7440-67-7	3.53	J	5.56	0.934	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.445	U	0.445	0.111	2
06142	Silver	7440-22-4	0.0832	J	0.222	0.0289	2
06144	Strontium	7440-24-6	55.8		0.445	0.0756	2
06145	Thallium	7440-28-0	0.333		0.222	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0133	J	0.0189	0.0113	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.17		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201708
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 03:56	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/20/2013 23:18	Laura M Krieger	22.2
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 14:23	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 14:23	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 18:34	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/23/2013 23:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/24/2013 02:49	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201708
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 08:22	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 12:36	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 12:36	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 12:36	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 12:36	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:48	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406A	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201709
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	30		1.9	0.76	1
12969	Acenaphthylene	208-96-8	30		1.9	0.38	1
12969	Anthracene	120-12-7	30		1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	31		1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	29		1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	29		1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	26		19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	30		1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	29		1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	32		20	6.8	1
12969	Di-n-butylphthalate	84-74-2	36		20	6.8	1
12969	Chrysene	218-01-9	29		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	32		1.9	0.76	1
12969	Diethylphthalate	84-66-2	31		20	6.8	1
12969	Dimethylphthalate	131-11-3	30		20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	33		20	6.8	1
12969	Fluoranthene	206-44-0	31		1.9	0.76	1
12969	Fluorene	86-73-7	30		1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	33		1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	33		1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	33		1.9	0.76	1
12969	Naphthalene	91-20-3	30		1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	23		1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	31		20	6.8	1
12969	Phenanthrene	85-01-8	29		1.9	0.76	1
12969	Pyrene	129-00-0	29		1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.1		1	0.2	21.78
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	160		19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	170		19	4.5	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	2.5	J	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201709
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	4.3	J	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,200		44.5	8.02	1
06944	Antimony	7440-36-0	40.3		4.45	0.823	1
06935	Arsenic	7440-38-2	23.2		4.45	0.778	1
06946	Barium	7440-39-3	306		1.11	0.0367	1
06947	Beryllium	7440-41-7	6.16		1.11	0.0745	1
07914	Boron	7440-42-8	218		11.1	0.934	1
06949	Cadmium	7440-43-9	5.07		1.11	0.0845	1
01650	Calcium	7440-70-2	91,300		44.5	7.43	2
06951	Chromium	7440-47-3	52.5		3.34	0.178	1
06952	Cobalt	7440-48-4	56.0		1.11	0.110	1
06953	Copper	7440-50-8	41.7		2.22	0.323	1
01654	Iron	7439-89-6	27,200		44.5	4.03	1
06955	Lead	7439-92-1	23.2		3.34	0.556	1
01656	Lithium	7439-93-2	131		4.4	0.38	1
01657	Magnesium	7439-95-4	5,940		11.1	1.86	1
06958	Manganese	7439-96-5	392		1.11	0.0923	1
06960	Molybdenum	7439-98-7	196		2.22	0.189	1
06961	Nickel	7440-02-0	69.1		2.22	0.145	1
10145	Phosphorus	7723-14-0	314		11.1	3.21	1
01662	Potassium	7440-09-7	3,910		111	9.28	1
01667	Sodium	7440-23-5	1,630		111	18.6	1
06969	Tin	7440-31-5	381		11.1	0.245	1
06970	Titanium	7440-32-6	1,430		1.11	0.189	1
06971	Vanadium	7440-62-2	114		1.11	0.145	1
06972	Zinc	7440-66-6	106		4.45	0.222	1
10146	Zirconium	7440-67-7	108		5.56	0.934	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.48		0.445	0.111	2
06142	Silver	7440-22-4	14.3		0.222	0.0289	2
06144	Strontium	7440-24-6	82.5		0.445	0.0756	2
06145	Thallium	7440-28-0	1.04		0.222	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.210		0.0189	0.0114	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	12.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201709
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 04:27	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/20/2013 23:53	Laura M Krieger	21.78
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 14:24	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 14:25	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 18:53	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/23/2013 23:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/24/2013 02:57	Tara L Snyder	2
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 08:35	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 12:43	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 12:43	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 12:43	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 12:43	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:54	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201709
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201710
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	35		1.9	0.76	1
12969	Acenaphthylene	208-96-8	37		1.9	0.38	1
12969	Anthracene	120-12-7	37		1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	36		1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	34		1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	38		1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	31		19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	36		1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	31		1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	38		21	6.9	1
12969	Di-n-butylphthalate	84-74-2	42		21	6.9	1
12969	Chrysene	218-01-9	34		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	38		1.9	0.76	1
12969	Diethylphthalate	84-66-2	36		21	6.9	1
12969	Dimethylphthalate	131-11-3	36		21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	38		21	6.9	1
12969	Fluoranthene	206-44-0	36		1.9	0.76	1
12969	Fluorene	86-73-7	35		1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	39		1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	39		1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	38		1.9	0.76	1
12969	Naphthalene	91-20-3	35		1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	26		1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	36		21	6.9	1
12969	Phenanthrene	85-01-8	35		1.9	0.76	1
12969	Pyrene	129-00-0	34		1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	9.7		1.1	0.2	24.18
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	150		19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	170		19	4.5	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	2.4	J	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201710
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	4.2	J	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	38,700		44.5	8.02	1
06944	Antimony	7440-36-0	40.0		4.45	0.823	1
06935	Arsenic	7440-38-2	23.4		4.45	0.778	1
06946	Barium	7440-39-3	338		1.11	0.0367	1
06947	Beryllium	7440-41-7	6.59		1.11	0.0745	1
07914	Boron	7440-42-8	223		11.1	0.934	1
06949	Cadmium	7440-43-9	4.88		1.11	0.0845	1
01650	Calcium	7440-70-2	27,500		22.2	3.71	1
06951	Chromium	7440-47-3	61.1		3.34	0.178	1
06952	Cobalt	7440-48-4	60.9		1.11	0.110	1
06953	Copper	7440-50-8	46.1		2.22	0.323	1
01654	Iron	7439-89-6	34,400		89.0	8.05	2
06955	Lead	7439-92-1	25.4		3.34	0.556	1
01656	Lithium	7439-93-2	140		4.4	0.38	1
01657	Magnesium	7439-95-4	7,110		11.1	1.86	1
06958	Manganese	7439-96-5	422		1.11	0.0923	1
06960	Molybdenum	7439-98-7	202		2.22	0.189	1
06961	Nickel	7440-02-0	74.4		2.22	0.145	1
10145	Phosphorus	7723-14-0	303		11.1	3.21	1
01662	Potassium	7440-09-7	4,420		111	9.28	1
01667	Sodium	7440-23-5	1,780		111	18.6	1
06969	Tin	7440-31-5	398		11.1	0.245	1
06970	Titanium	7440-32-6	1,640		1.11	0.189	1
06971	Vanadium	7440-62-2	127		1.11	0.145	1
06972	Zinc	7440-66-6	116		4.45	0.222	1
10146	Zirconium	7440-67-7	112		5.56	0.934	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.32		0.445	0.111	2
06142	Silver	7440-22-4	13.7		0.222	0.0289	2
06144	Strontium	7440-24-6	80.7		0.445	0.0756	2
06145	Thallium	7440-28-0	0.968		0.222	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.208		0.0181	0.0109	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	12.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201710
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 04:58	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/21/2013 01:05	Laura M Krieger	24.18
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 14:25	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 14:26	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 19:11	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/23/2013 23:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/24/2013 03:01	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 08:39	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 12:46	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 12:46	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 12:46	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 12:46	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:56	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201710
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201711
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,600		44.5	8.02	1
06944	Antimony	7440-36-0	4.45	U	4.45	0.823	1
06935	Arsenic	7440-38-2	6.07		4.45	0.778	1
06946	Barium	7440-39-3	105		1.11	0.0367	1
06947	Beryllium	7440-41-7	0.990	J	1.11	0.0745	1
07914	Boron	7440-42-8	7.86	J	11.1	0.934	1
06949	Cadmium	7440-43-9	0.163	J	1.11	0.0845	1
01650	Calcium	7440-70-2	54,600		22.2	3.71	1
06951	Chromium	7440-47-3	32.7		3.34	0.178	1
06952	Cobalt	7440-48-4	7.05		1.11	0.110	1
06953	Copper	7440-50-8	14.4		2.22	0.323	1
01654	Iron	7439-89-6	29,000		44.5	4.03	1
06955	Lead	7439-92-1	8.62		3.34	0.556	1
01656	Lithium	7439-93-2	24.4		4.4	0.38	1
01657	Magnesium	7439-95-4	5,880		11.1	1.86	1
06958	Manganese	7439-96-5	252		1.11	0.0923	1
06960	Molybdenum	7439-98-7	2.22	U	2.22	0.189	1
06961	Nickel	7440-02-0	18.9		2.22	0.145	1
10145	Phosphorus	7723-14-0	186		11.1	3.21	1
01662	Potassium	7440-09-7	2,610		111	9.28	1
01667	Sodium	7440-23-5	664		111	18.6	1
06969	Tin	7440-31-5	2.98	J	11.1	0.245	1
06970	Titanium	7440-32-6	1,080		1.11	0.189	1
06971	Vanadium	7440-62-2	58.1		1.11	0.145	1
06972	Zinc	7440-66-6	56.9		4.45	0.222	1
10146	Zirconium	7440-67-7	5.08	J	5.56	0.934	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.445	U	0.445	0.111	2
06142	Silver	7440-22-4	0.0748	J	0.222	0.0289	2
06144	Strontium	7440-24-6	65.9		0.445	0.0756	2
06145	Thallium	7440-28-0	0.377		0.222	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0143	J	0.0187	0.0112	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.20		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	12.7		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	12.1		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201711
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 07:50 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50445 SDG#: PH109-05DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 08:31	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 12:41	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 12:41	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 12:41	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 12:41	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:52	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406A	09/18/2013 22:20	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201712
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:00 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80445 SDG#: PH109-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.11
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201712
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:00 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80445 SDG#: PH109-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,600		44.6	8.03	1
06944	Antimony	7440-36-0	4.46	U	4.46	0.824	1
06935	Arsenic	7440-38-2	7.15		4.46	0.780	1
06946	Barium	7440-39-3	127		1.11	0.0368	1
06947	Beryllium	7440-41-7	0.862	J	1.11	0.0746	1
07914	Boron	7440-42-8	10.5	J	11.1	0.936	1
06949	Cadmium	7440-43-9	1.11	U	1.11	0.0847	1
01650	Calcium	7440-70-2	65,200		44.6	7.44	2
06951	Chromium	7440-47-3	33.4		3.34	0.178	1
06952	Cobalt	7440-48-4	8.27		1.11	0.110	1
06953	Copper	7440-50-8	16.5		2.23	0.323	1
01654	Iron	7439-89-6	29,400		44.6	4.03	1
06955	Lead	7439-92-1	9.49		3.34	0.557	1
01656	Lithium	7439-93-2	25.9		4.5	0.38	1
01657	Magnesium	7439-95-4	6,460		11.1	1.86	1
06958	Manganese	7439-96-5	368		1.11	0.0925	1
06960	Molybdenum	7439-98-7	2.23	U	2.23	0.189	1
06961	Nickel	7440-02-0	16.8		2.23	0.145	1
10145	Phosphorus	7723-14-0	271		11.1	3.22	1
01662	Potassium	7440-09-7	3,190		111	9.29	1
01667	Sodium	7440-23-5	610		111	18.6	1
06969	Tin	7440-31-5	2.78	J	11.1	0.245	1
06970	Titanium	7440-32-6	1,360		1.11	0.189	1
06971	Vanadium	7440-62-2	63.6		1.11	0.145	1
06972	Zinc	7440-66-6	60.8		4.46	0.223	1
10146	Zirconium	7440-67-7	3.33	J	5.57	0.936	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.127	J	0.446	0.111	2
06142	Silver	7440-22-4	0.0665	J	0.223	0.0290	2
06144	Strontium	7440-24-6	83.7		0.446	0.0758	2
06145	Thallium	7440-28-0	0.467		0.223	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0180	U	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.38		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201712
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:00 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80445 SDG#: PH109-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 07:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/20/2013 19:44	Laura M Krieger	21.11
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 13:58	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 13:58	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 19:29	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/24/2013 00:13	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/24/2013 03:42	Tara L Snyder	2
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201712
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:00 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80445 SDG#: PH109-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:30	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:14	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:14	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:14	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:14	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 06:58	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406A	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201713
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:10 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50490 SDG#: PH109-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.73
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201713
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:10 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50490 SDG#: PH109-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,800		43.3	7.81	1
06944	Antimony	7440-36-0	4.33	U	4.33	0.802	1
06935	Arsenic	7440-38-2	6.58		4.33	0.758	1
06946	Barium	7440-39-3	97.5		1.08	0.0357	1
06947	Beryllium	7440-41-7	0.817	J	1.08	0.0726	1
07914	Boron	7440-42-8	6.57	J	10.8	0.910	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0823	1
01650	Calcium	7440-70-2	12,200		21.7	3.62	1
06951	Chromium	7440-47-3	30.1		3.25	0.173	1
06952	Cobalt	7440-48-4	7.83		1.08	0.107	1
06953	Copper	7440-50-8	13.0		2.17	0.314	1
01654	Iron	7439-89-6	28,500		43.3	3.92	1
06955	Lead	7439-92-1	7.81		3.25	0.542	1
01656	Lithium	7439-93-2	24.3		4.3	0.37	1
01657	Magnesium	7439-95-4	5,730		10.8	1.81	1
06958	Manganese	7439-96-5	382		1.08	0.0899	1
06960	Molybdenum	7439-98-7	2.17	U	2.17	0.184	1
06961	Nickel	7440-02-0	17.9		2.17	0.141	1
10145	Phosphorus	7723-14-0	279		10.8	3.13	1
01662	Potassium	7440-09-7	3,130		108	9.03	1
01667	Sodium	7440-23-5	499		108	18.1	1
06969	Tin	7440-31-5	3.26	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,410		1.08	0.184	1
06971	Vanadium	7440-62-2	56.8		1.08	0.141	1
06972	Zinc	7440-66-6	60.7		4.33	0.217	1
10146	Zirconium	7440-67-7	3.19	J	5.42	0.910	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.433	U	0.433	0.108	2
06142	Silver	7440-22-4	0.0433	J	0.217	0.0282	2
06144	Strontium	7440-24-6	50.7		0.433	0.0737	2
06145	Thallium	7440-28-0	0.464		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0176	U	0.0176	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.28		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201713
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:10 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50490 SDG#: PH109-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 07:35	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/20/2013 20:19	Laura M Krieger	22.73
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 13:59	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 14:00	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 19:48	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/24/2013 00:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201713
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:10 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50490 SDG#: PH109-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:34	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:17	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:17	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:17	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:17	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 07:00	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406A	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-16.0-17.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201714
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:20 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50416 SDG#: PH109-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.4
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-16.0-17.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201714
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:20 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50416 SDG#: PH109-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,200		41.8	7.53	1
06944	Antimony	7440-36-0	4.18	U	4.18	0.773	1
06935	Arsenic	7440-38-2	5.17		4.18	0.731	1
06946	Barium	7440-39-3	68.0		1.04	0.0345	1
06947	Beryllium	7440-41-7	0.559	J	1.04	0.0699	1
07914	Boron	7440-42-8	4.74	J	10.4	0.877	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0793	1
01650	Calcium	7440-70-2	6,510		20.9	3.49	1
06951	Chromium	7440-47-3	21.3		3.13	0.167	1
06952	Cobalt	7440-48-4	5.56		1.04	0.103	1
06953	Copper	7440-50-8	11.3		2.09	0.303	1
01654	Iron	7439-89-6	22,300		41.8	3.78	1
06955	Lead	7439-92-1	5.96		3.13	0.522	1
01656	Lithium	7439-93-2	20.7		4.2	0.35	1
01657	Magnesium	7439-95-4	4,460		10.4	1.74	1
06958	Manganese	7439-96-5	303		1.04	0.0867	1
06960	Molybdenum	7439-98-7	2.09	U	2.09	0.177	1
06961	Nickel	7440-02-0	13.9		2.09	0.136	1
10145	Phosphorus	7723-14-0	345		10.4	3.02	1
01662	Potassium	7440-09-7	2,630		104	8.71	1
01667	Sodium	7440-23-5	291		104	17.4	1
06969	Tin	7440-31-5	2.97	J	10.4	0.230	1
06970	Titanium	7440-32-6	1,240		1.04	0.177	1
06971	Vanadium	7440-62-2	41.5		1.04	0.136	1
06972	Zinc	7440-66-6	51.6		4.18	0.209	1
10146	Zirconium	7440-67-7	2.27	J	5.22	0.877	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.418	U	0.418	0.104	2
06142	Silver	7440-22-4	0.0276	J	0.209	0.0271	2
06144	Strontium	7440-24-6	31.5		0.418	0.0710	2
06145	Thallium	7440-28-0	0.301		0.209	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0180	U	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.14		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-16.0-17.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201714
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:20 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50416 SDG#: PH109-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 08:06	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/20/2013 20:55	Laura M Krieger	22.4
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 14:18	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 14:19	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 20:06	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/24/2013 00:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA5D-SB-16.0-17.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201714
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 08:20 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50416 SDG#: PH109-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:38	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:19	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:19	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:19	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:19	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 07:02	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406A	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201715
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:15 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH109-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	0.97	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.0	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	3.9	J	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	6.5	J	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201715
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:15 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH109-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,000		41.9	7.56	1
06944	Antimony	7440-36-0	4.19	U	4.19	0.776	1
06935	Arsenic	7440-38-2	6.53		4.19	0.734	1
06946	Barium	7440-39-3	142		1.05	0.0346	1
06947	Beryllium	7440-41-7	1.03	J	1.05	0.0703	1
07914	Boron	7440-42-8	11.2		10.5	0.881	1
06949	Cadmium	7440-43-9	1.05	U	1.05	0.0797	1
01650	Calcium	7440-70-2	6,660		21.0	3.50	1
06951	Chromium	7440-47-3	40.9		3.15	0.168	1
06952	Cobalt	7440-48-4	10.3		1.05	0.104	1
06953	Copper	7440-50-8	19.6		2.10	0.304	1
01654	Iron	7439-89-6	35,300		83.9	7.59	2
06955	Lead	7439-92-1	11.3		3.15	0.524	1
01656	Lithium	7439-93-2	25.4		4.2	0.36	1
01657	Magnesium	7439-95-4	7,210		10.5	1.75	1
06958	Manganese	7439-96-5	507		1.05	0.0870	1
06960	Molybdenum	7439-98-7	0.208	J	2.10	0.178	1
06961	Nickel	7440-02-0	22.7		2.10	0.136	1
10145	Phosphorus	7723-14-0	341		10.5	3.03	1
01662	Potassium	7440-09-7	5,360		105	8.75	1
01667	Sodium	7440-23-5	97.6	J	105	17.5	1
06969	Tin	7440-31-5	3.11	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,440		1.05	0.178	1
06971	Vanadium	7440-62-2	74.1		1.05	0.136	1
06972	Zinc	7440-66-6	77.1		4.19	0.210	1
10146	Zirconium	7440-67-7	4.36	J	5.24	0.881	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.292	J	0.419	0.105	2
06142	Silver	7440-22-4	0.0600	J	0.210	0.0273	2
06144	Strontium	7440-24-6	46.1		0.419	0.0713	2
06145	Thallium	7440-28-0	0.476		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0177	U	0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.28		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201715
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:15 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH109-09

CAT No.	Analysis Name		CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans		**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD		1746-01-6	1.09	U	1.09	0.0579	1
11031	12378-PeCDD		40321-76-4	0.114	JBQ	5.44	0.0363	1
11031	123478-HxCDD		39227-28-6	0.0670	JBQ	5.44	0.0310	1
11031	123678-HxCDD		57653-85-7	0.418	JBQ	5.44	0.0334	1
11031	123789-HxCDD		19408-74-3	0.687	JB	5.44	0.0306	1
11031	1234678-HpCDD		35822-46-9	0.858	JB	5.44	0.0338	1
11031	OCDD		3268-87-9	7.60	JB	10.9	0.0219	1
11031	2378-TCDF		51207-31-9	0.0649	J	1.09	0.0532	1
11031	12378-PeCDF		57117-41-6	0.353	JBQ	5.44	0.0226	1
11031	23478-PeCDF		57117-31-4	0.0823	JBQ	5.44	0.0241	1
11031	123478-HxCDF		70648-26-9	0.0857	JBQ	5.44	0.0278	1
11031	123678-HxCDF		57117-44-9	0.0791	JBQ	5.44	0.0233	1
11031	123789-HxCDF		72918-21-9	0.887	JB	5.44	0.0286	1
11031	234678-HxCDF		60851-34-5	0.0871	JBQ	5.44	0.0270	1
11031	1234678-HpCDF		67562-39-4	0.171	JB	5.44	0.0120	1
11031	1234789-HpCDF		55673-89-7	0.102	JBQ	5.44	0.0231	1
11031	OCDF		39001-02-0	0.504	JBQ	10.9	0.0462	1
Toxic Equivalents		**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0		n.a.	0.177				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	59	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	65	26 - 123
13C12-234678-HxCDF	57	28 - 136
13C12-123789-HxCDF	57	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	51	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201715
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:15 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH109-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201715
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:15 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH109-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 08:37	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 20:24	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/24/2013 01:17	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 05:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/24/2013 03:45	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:42	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:22	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:22	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:22	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:22	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201715
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:15 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH109-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 07:04	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406A	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201716
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:25 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH109-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.64
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201716
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:25 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH109-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,600		45.6	8.22	1
06944	Antimony	7440-36-0	4.56	U	4.56	0.844	1
06935	Arsenic	7440-38-2	6.72		4.56	0.798	1
06946	Barium	7440-39-3	138		1.14	0.0376	1
06947	Beryllium	7440-41-7	1.03	J	1.14	0.0764	1
07914	Boron	7440-42-8	13.4		11.4	0.958	1
06949	Cadmium	7440-43-9	1.14	U	1.14	0.0867	1
01650	Calcium	7440-70-2	10,600		22.8	3.81	1
06951	Chromium	7440-47-3	40.8		3.42	0.183	1
06952	Cobalt	7440-48-4	11.9		1.14	0.113	1
06953	Copper	7440-50-8	19.2		2.28	0.331	1
01654	Iron	7439-89-6	38,100		91.3	8.26	2
06955	Lead	7439-92-1	12.1		3.42	0.570	1
01656	Lithium	7439-93-2	29.6		4.6	0.39	1
01657	Magnesium	7439-95-4	8,340		11.4	1.90	1
06958	Manganese	7439-96-5	532		1.14	0.0947	1
06960	Molybdenum	7439-98-7	2.28	U	2.28	0.194	1
06961	Nickel	7440-02-0	25.0		2.28	0.148	1
10145	Phosphorus	7723-14-0	351		11.4	3.30	1
01662	Potassium	7440-09-7	3,970		114	9.51	1
01667	Sodium	7440-23-5	259		114	19.0	1
06969	Tin	7440-31-5	3.46	J	11.4	0.251	1
06970	Titanium	7440-32-6	1,560		1.14	0.194	1
06971	Vanadium	7440-62-2	75.9		1.14	0.148	1
06972	Zinc	7440-66-6	79.8		4.56	0.228	1
10146	Zirconium	7440-67-7	3.70	J	5.70	0.958	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.154	J	0.456	0.114	2
06142	Silver	7440-22-4	0.0541	J	0.228	0.0297	2
06144	Strontium	7440-24-6	58.2		0.456	0.0776	2
06145	Thallium	7440-28-0	0.487		0.228	0.0342	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.25		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201716
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:25 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH109-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201716
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:25 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH109-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.12 U	1.12	0.0615	1
11031	12378-PeCDD	40321-76-4	0.0580 JBQ	5.61	0.0318	1
11031	123478-HxCDD	39227-28-6	5.61 U	5.61	0.0243	1
11031	123678-HxCDD	57653-85-7	0.134 JB	5.61	0.0256	1
11031	123789-HxCDD	19408-74-3	0.169 JBQ	5.61	0.0245	1
11031	1234678-HpCDD	35822-46-9	0.530 JB	5.61	0.0380	1
11031	OCDD	3268-87-9	5.87 JB	11.2	0.0241	1
11031	2378-TCDF	51207-31-9	1.12 U	1.12	0.0445	1
11031	12378-PeCDF	57117-41-6	0.111 JBQ	5.61	0.0219	1
11031	23478-PeCDF	57117-31-4	0.0684 JBQ	5.61	0.0218	1
11031	123478-HxCDF	70648-26-9	0.0730 JB	5.61	0.0260	1
11031	123678-HxCDF	57117-44-9	0.0550 JBQ	5.61	0.0226	1
11031	123789-HxCDF	72918-21-9	0.232 JBQ	5.61	0.0263	1
11031	234678-HxCDF	60851-34-5	0.0726 JBQ	5.61	0.0249	1
11031	1234678-HpCDF	67562-39-4	0.170 JB	5.61	0.0115	1
11031	1234789-HpCDF	55673-89-7	0.0788 JBQ	5.61	0.0205	1
11031	OCDF	39001-02-0	0.375 JB	11.2	0.0450	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0296			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	50	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	53	26 - 152
13C12-123678-HxCDF	60	26 - 123
13C12-234678-HxCDF	55	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	51	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201716
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:25 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH109-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201716
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:25 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH109-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 09:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/20/2013 21:31	Laura M Krieger	22.64
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 14:15	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 14:15	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 20:43	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/24/2013 01:38	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 06:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/24/2013 03:49	Tara L Snyder	2
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:54	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201716
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:25 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH109-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:29	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:29	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:29	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:29	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 07:06	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406A	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201717
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:35 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50190 SDG#: PH109-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	21.37
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201717
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:35 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50190 SDG#: PH109-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,600		43.8	7.90	1
06944	Antimony	7440-36-0	4.38	U	4.38	0.810	1
06935	Arsenic	7440-38-2	7.25		4.38	0.767	1
06946	Barium	7440-39-3	88.0		1.10	0.0361	1
06947	Beryllium	7440-41-7	0.862	J	1.10	0.0734	1
07914	Boron	7440-42-8	7.28	J	11.0	0.920	1
06949	Cadmium	7440-43-9	1.10	U	1.10	0.0832	1
01650	Calcium	7440-70-2	16,000		21.9	3.66	1
06951	Chromium	7440-47-3	28.2		3.29	0.175	1
06952	Cobalt	7440-48-4	8.82		1.10	0.108	1
06953	Copper	7440-50-8	14.0		2.19	0.318	1
01654	Iron	7439-89-6	27,800		43.8	3.96	1
06955	Lead	7439-92-1	8.61		3.29	0.548	1
01656	Lithium	7439-93-2	24.9		4.4	0.37	1
01657	Magnesium	7439-95-4	5,510		11.0	1.83	1
06958	Manganese	7439-96-5	394		1.10	0.0909	1
06960	Molybdenum	7439-98-7	2.19	U	2.19	0.186	1
06961	Nickel	7440-02-0	16.7		2.19	0.142	1
10145	Phosphorus	7723-14-0	299		11.0	3.17	1
01662	Potassium	7440-09-7	3,470		110	9.13	1
01667	Sodium	7440-23-5	224		110	18.3	1
06969	Tin	7440-31-5	3.07	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,450		1.10	0.186	1
06971	Vanadium	7440-62-2	52.8		1.10	0.142	1
06972	Zinc	7440-66-6	62.8		4.38	0.219	1
10146	Zirconium	7440-67-7	2.82	J	5.48	0.920	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.438	U	0.438	0.110	2
06142	Silver	7440-22-4	0.0397	J	0.219	0.0285	2
06144	Strontium	7440-24-6	40.8		0.438	0.0745	2
06145	Thallium	7440-28-0	0.422		0.219	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0181	U	0.0181	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.12		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201717
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:35 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50190 SDG#: PH109-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 09:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/20/2013 22:06	Laura M Krieger	21.37
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 13:57	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 13:57	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 21:01	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/24/2013 01:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201717
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:35 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50190 SDG#: PH109-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 09:59	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:31	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:31	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:31	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:31	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 07:12	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406B	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201718
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:45 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50114 SDG#: PH109-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.74
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201718
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:45 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50114 SDG#: PH109-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,300		42.6	7.68	1
06944	Antimony	7440-36-0	4.26	U	4.26	0.788	1
06935	Arsenic	7440-38-2	4.86		4.26	0.745	1
06946	Barium	7440-39-3	78.6		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.703	J	1.06	0.0713	1
07914	Boron	7440-42-8	6.38	J	10.6	0.894	1
06949	Cadmium	7440-43-9	1.06	U	1.06	0.0809	1
01650	Calcium	7440-70-2	15,700		21.3	3.56	1
06951	Chromium	7440-47-3	25.5		3.19	0.170	1
06952	Cobalt	7440-48-4	4.93		1.06	0.105	1
06953	Copper	7440-50-8	11.9		2.13	0.309	1
01654	Iron	7439-89-6	25,500		42.6	3.85	1
06955	Lead	7439-92-1	6.14		3.19	0.532	1
01656	Lithium	7439-93-2	22.0		4.3	0.36	1
01657	Magnesium	7439-95-4	5,280		10.6	1.78	1
06958	Manganese	7439-96-5	262		1.06	0.0884	1
06960	Molybdenum	7439-98-7	2.13	U	2.13	0.181	1
06961	Nickel	7440-02-0	14.1		2.13	0.138	1
10145	Phosphorus	7723-14-0	384		10.6	3.08	1
01662	Potassium	7440-09-7	3,460		106	8.88	1
01667	Sodium	7440-23-5	200		106	17.8	1
06969	Tin	7440-31-5	3.05	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,390		1.06	0.181	1
06971	Vanadium	7440-62-2	45.9		1.06	0.138	1
06972	Zinc	7440-66-6	60.3		4.26	0.213	1
10146	Zirconium	7440-67-7	2.81	J	5.32	0.894	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.426	U	0.426	0.106	2
06142	Silver	7440-22-4	0.0442	J	0.213	0.0277	2
06144	Strontium	7440-24-6	39.0		0.426	0.0724	2
06145	Thallium	7440-28-0	0.359		0.213	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	J	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.41		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201718
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:45 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50114 SDG#: PH109-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 10:11	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/20/2013 22:42	Laura M Krieger	21.74
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 14:16	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 14:16	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 21:20	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/24/2013 02:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201718
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:45 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50114 SDG#: PH109-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 10:03	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:34	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:34	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:34	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:34	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 07:14	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406B	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201719
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:55 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50119 SDG#: PH109-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.69
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201719
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:55 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50119 SDG#: PH109-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,100		44.0	7.92	1
06944	Antimony	7440-36-0	4.40	U	4.40	0.813	1
06935	Arsenic	7440-38-2	4.76		4.40	0.769	1
06946	Barium	7440-39-3	73.3		1.10	0.0363	1
06947	Beryllium	7440-41-7	0.512	J	1.10	0.0736	1
07914	Boron	7440-42-8	4.84	J	11.0	0.923	1
06949	Cadmium	7440-43-9	1.10	U	1.10	0.0835	1
01650	Calcium	7440-70-2	5,850		22.0	3.67	1
06951	Chromium	7440-47-3	18.3		3.30	0.176	1
06952	Cobalt	7440-48-4	5.98		1.10	0.109	1
06953	Copper	7440-50-8	8.64		2.20	0.319	1
01654	Iron	7439-89-6	20,400		44.0	3.98	1
06955	Lead	7439-92-1	5.50		3.30	0.549	1
01656	Lithium	7439-93-2	19.0		4.4	0.37	1
01657	Magnesium	7439-95-4	4,130		11.0	1.84	1
06958	Manganese	7439-96-5	390		1.10	0.0912	1
06960	Molybdenum	7439-98-7	2.20	U	2.20	0.187	1
06961	Nickel	7440-02-0	12.8		2.20	0.143	1
10145	Phosphorus	7723-14-0	340		11.0	3.18	1
01662	Potassium	7440-09-7	2,720		110	9.16	1
01667	Sodium	7440-23-5	187		110	18.4	1
06969	Tin	7440-31-5	2.94	J	11.0	0.242	1
06970	Titanium	7440-32-6	1,180		1.10	0.187	1
06971	Vanadium	7440-62-2	37.1		1.10	0.143	1
06972	Zinc	7440-66-6	52.8		4.40	0.220	1
10146	Zirconium	7440-67-7	1.52	J	5.49	0.923	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.440	U	0.440	0.110	2
06142	Silver	7440-22-4	0.0321	J	0.220	0.0286	2
06144	Strontium	7440-24-6	26.0		0.440	0.0747	2
06145	Thallium	7440-28-0	0.300		0.220	0.0330	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183	U	0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.38		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201719
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:55 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50119 SDG#: PH109-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 10:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/21/2013 02:16	Laura M Krieger	22.69
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 14:19	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 14:20	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 21:38	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/24/2013 02:42	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201719
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 12:55 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50119 SDG#: PH109-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 10:07	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:37	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:37	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:37	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:37	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 07:16	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406B	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-24.0-25.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201720
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 13:05 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50124 SDG#: PH109-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.3
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-24.0-25.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201720
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 13:05 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50124 SDG#: PH109-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,800		42.8	7.72	1
06944	Antimony	7440-36-0	4.28	U	4.28	0.792	1
06935	Arsenic	7440-38-2	4.50		4.28	0.749	1
06946	Barium	7440-39-3	64.6		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.472	J	1.07	0.0717	1
07914	Boron	7440-42-8	4.04	J	10.7	0.899	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0813	1
01650	Calcium	7440-70-2	4,210		21.4	3.58	1
06951	Chromium	7440-47-3	18.4		3.21	0.171	1
06952	Cobalt	7440-48-4	5.02		1.07	0.106	1
06953	Copper	7440-50-8	10.7		2.14	0.310	1
01654	Iron	7439-89-6	19,400		42.8	3.87	1
06955	Lead	7439-92-1	4.93		3.21	0.535	1
01656	Lithium	7439-93-2	19.6		4.3	0.36	1
01657	Magnesium	7439-95-4	4,010		10.7	1.79	1
06958	Manganese	7439-96-5	329		1.07	0.0888	1
06960	Molybdenum	7439-98-7	2.14	U	2.14	0.182	1
06961	Nickel	7440-02-0	12.2		2.14	0.139	1
10145	Phosphorus	7723-14-0	361		10.7	3.09	1
01662	Potassium	7440-09-7	2,540		107	8.93	1
01667	Sodium	7440-23-5	131		107	17.9	1
06969	Tin	7440-31-5	2.86	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,190		1.07	0.182	1
06971	Vanadium	7440-62-2	34.3		1.07	0.139	1
06972	Zinc	7440-66-6	60.5		4.28	0.214	1
10146	Zirconium	7440-67-7	1.46	J	5.35	0.899	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.428	U	0.428	0.107	2
06142	Silver	7440-22-4	0.214	U	0.214	0.0278	2
06144	Strontium	7440-24-6	27.1		0.428	0.0728	2
06145	Thallium	7440-28-0	0.290		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173	U	0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.47		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-24.0-25.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201720
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 13:05 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50124 SDG#: PH109-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 11:14	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/21/2013 02:52	Laura M Krieger	25.3
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 14:20	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 14:21	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 21:57	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/24/2013 03:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-24.0-25.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201720
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 13:05 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50124 SDG#: PH109-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 10:11	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:39	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:39	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:39	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:39	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 07:18	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406B	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-28.0-29.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201721
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 13:15 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50128 SDG#: PH109-15*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.04
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-28.0-29.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201721
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 13:15 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50128 SDG#: PH109-15*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,600		42.3	7.62	1
06944	Antimony	7440-36-0	4.23	U	4.23	0.782	1
06935	Arsenic	7440-38-2	6.19		4.23	0.740	1
06946	Barium	7440-39-3	65.9		1.06	0.0349	1
06947	Beryllium	7440-41-7	0.546	J	1.06	0.0708	1
07914	Boron	7440-42-8	4.09	J	10.6	0.887	1
06949	Cadmium	7440-43-9	1.06	U	1.06	0.0803	1
01650	Calcium	7440-70-2	5,940		21.1	3.53	1
06951	Chromium	7440-47-3	19.0		3.17	0.169	1
06952	Cobalt	7440-48-4	3.86		1.06	0.105	1
06953	Copper	7440-50-8	9.36		2.11	0.306	1
01654	Iron	7439-89-6	20,800		42.3	3.82	1
06955	Lead	7439-92-1	4.53		3.17	0.528	1
01656	Lithium	7439-93-2	21.5		4.2	0.36	1
01657	Magnesium	7439-95-4	4,320		10.6	1.76	1
06958	Manganese	7439-96-5	201		1.06	0.0877	1
06960	Molybdenum	7439-98-7	2.11	U	2.11	0.180	1
06961	Nickel	7440-02-0	10.1		2.11	0.137	1
10145	Phosphorus	7723-14-0	368		10.6	3.05	1
01662	Potassium	7440-09-7	2,630		106	8.81	1
01667	Sodium	7440-23-5	150		106	17.6	1
06969	Tin	7440-31-5	2.84	J	10.6	0.232	1
06970	Titanium	7440-32-6	1,300		1.06	0.180	1
06971	Vanadium	7440-62-2	37.7		1.06	0.137	1
06972	Zinc	7440-66-6	54.2		4.23	0.211	1
10146	Zirconium	7440-67-7	1.38	J	5.28	0.887	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.423	U	0.423	0.106	2
06142	Silver	7440-22-4	0.0661	J	0.211	0.0275	2
06144	Strontium	7440-24-6	37.3		0.423	0.0718	2
06145	Thallium	7440-28-0	0.344		0.211	0.0317	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0178	U	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.52		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-28.0-29.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201721
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 13:15 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50128 SDG#: PH109-15*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266SLC026	09/27/2013 11:45	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13266SLC026	09/24/2013 12:00	Kelli M Barto	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/21/2013 03:27	Laura M Krieger	24.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326132449	09/18/2013 14:00	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326132449	09/18/2013 14:01	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132680010A	09/26/2013 22:15	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132680010A	09/26/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132640003A	09/24/2013 03:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132640003A	09/23/2013 03:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA5D-SB-28.0-29.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7201721
LL Group # 1419618
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/17/2013 13:15 by VC

Submitted: 09/18/2013 09:10
Reported: 09/30/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50128 SDG#: PH109-15*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132610637002	09/22/2013 10:15	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132610637002B	09/19/2013 13:41	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132610637002A	09/19/2013 13:41	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132610637002A	09/19/2013 13:41	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132610637002A	09/19/2013 13:41	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132610638002	09/19/2013 07:20	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132610637002	09/18/2013 23:48	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132610638002	09/19/2013 02:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13261039406B	09/18/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401A	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419618
Reported: 09/30/13 at 12:36 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13266SLC026	Sample number(s): 7201705-7201710,7201712-7201721									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	107		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	105		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	99		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	101		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	89		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	103		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	99		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	108		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	121		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	98		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	107		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	108		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	102		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	109		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	106		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	111		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	116		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	115		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	108		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	87		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	107		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	101		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	98		79-112		
Batch number: 13262A94A	Sample number(s): 7201704									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	119	121	75-135	2	30
Batch number: 13263A34A	Sample number(s): 7201706,7201708-7201710,7201712-7201714,7201716-7201721									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	81		67-119		
Batch number: 132680010A	Sample number(s): 7201705-7201710,7201712-7201721									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	73	73	62-87	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	94		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419618
Reported: 09/30/13 at 12:36 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	95		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132640003A	Sample number(s): 7201705-7201710,7201712-7201721									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	102		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	110		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	106		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	84		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	84		49-107		
Batch number: 132610637002	Sample number(s): 7201705-7201721									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	109		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	99		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	103		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	105		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	99		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	106		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	99		80-120		
Sodium	100 U		100.	16.7	mg/kg	98		80-120		
Tin	1.64	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	101		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	104		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	104		80-120		
Batch number: 132610637002A	Sample number(s): 7201705-7201721									
Silver	0.200	U	0.200	0.0260	mg/kg	106		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	108		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	105		80-120		
Batch number: 132610637002B	Sample number(s): 7201705-7201721									
Selenium	0.400	U	0.400	0.100	mg/kg	115		80-120		
Batch number: 132610638002	Sample number(s): 7201705-7201721									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	108		85-120		
Batch number: 13261039406A	Sample number(s): 7201705-7201708,7201711-7201716									
15a pH by 9045D						99		95-105		
Batch number: 13261039406B	Sample number(s): 7201717-7201721									

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419618
Reported: 09/30/13 at 12:36 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
15a pH by 9045D					99		95-105		
Batch number: 13268162401A	Sample number(s): 7201705-7201721								
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13268002	Sample number(s): 7201705,7201707,7201715-7201716								
2378-TCDD	0.104 J	1.00	0.0524	ng/kg	96		67-158		
12378-PeCDD	0.103 J	5.00	0.0316	ng/kg	99		70-142		
123478-HxCDD	0.0483 J	5.00	0.0190	ng/kg	97		70-164		
123678-HxCDD	0.0406 J	5.00	0.0203	ng/kg	101		76-134		
123789-HxCDD	0.0644 J	5.00	0.0183	ng/kg	95		64-162		
1234678-HpCDD	0.127 J	5.00	0.0212	ng/kg	96		70-140		
OCDD	0.212 J	10.0	0.0188	ng/kg	94		78-144		
2378-TCDF	1.00 U	1.00	0.0410	ng/kg	102		75-158		
12378-PeCDF	0.0673 J	5.00	0.0183	ng/kg	95		80-134		
23478-PeCDF	0.0538 J	5.00	0.0194	ng/kg	97		68-160		
123478-HxCDF	0.0573 J	5.00	0.0218	ng/kg	97		72-134		
123678-HxCDF	0.0517 J	5.00	0.0189	ng/kg	99		84-130		
123789-HxCDF	0.0692 J	5.00	0.0252	ng/kg	101		78-130		
234678-HxCDF	0.0444 J	5.00	0.0200	ng/kg	97		70-156		
1234678-HpCDF	0.0505 J	5.00	0.00830	ng/kg	96		82-122		
1234789-HpCDF	0.0860 J	5.00	0.0147	ng/kg	98		78-138		
OCDF	0.223 J	10.0	0.0383	ng/kg	96		63-170		
TEQ WHO 2005 - EDLx0.0	0.00870			ng/kg					

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13266SLC026	Sample number(s): 7201705-7201710,7201712-7201721 UNSPK: 7201708								
Acenaphthene	79	92	48-127	17	30				
Acenaphthylene	80	96	49-121	18	30				
Anthracene	80	96	52-126	19	30				
Benzo(a)anthracene	81	95	44-143	17	30				
Benzo(a)pyrene	76	89	44-140	17	30				
Benzo(b)fluoranthene	76	98	26-142	26	30				
Benzo(e)pyrene	69*	80	70-130	16	30				
Benzo(g,h,i)perylene	80	94	33-141	17	30				
Benzo(k)fluoranthene	76	82	54-142	9	30				
Butylbenzylphthalate	86	99	49-151	16	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419618
Reported: 09/30/13 at 12:36 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Di-n-butylphthalate	95	109	52-147	15	30				
Chrysene	76	89	29-148	17	30				
Dibenz(a,h)anthracene	83	98	20-137	18	30				
Diethylphthalate	82	95	43-145	16	30				
Dimethylphthalate	79	95	58-129	19	30				
Bis(2-Ethylhexyl)phthalate	87	100	39-167	15	30				
Fluoranthene	81	96	40-148	17	30				
Fluorene	79	92	51-137	17	30				
Indeno(1,2,3-cd)pyrene	86	102	17-136	18	30				
1-Methylnaphthalene	87	102	50-131	17	30				
2-Methylnaphthalene	87	100	35-152	15	30				
Naphthalene	81	92	31-148	14	30				
N-Nitrosodimethylamine	61	69	48-113	14	30				
Di-n-octylphthalate	81	96	52-162	17	30				
Phenanthrene	78	91	29-142	17	30				
Pyrene	77	89	26-143	15	30				
Batch number: 13263A34A	Sample number(s): 7201706,7201708-7201710,7201712-7201714,7201716-7201721 UNSPK: 7201708								
11a TPH by EPA 8015B GRO	74	80	69-123	19	30				
Batch number: 132680010A	Sample number(s): 7201705-7201710,7201712-7201721 UNSPK: 7201708								
PCB-1016	85	80	41-135	6	50				
PCB-1260	89	89	40-134	1	50				
Batch number: 132640003A	Sample number(s): 7201705-7201710,7201712-7201721 UNSPK: 7201708								
EFH (C12-C14)	79	78	49-123	1	20				
EFH (C15-C20)	89	85	49-123	4	20				
EFH (C21-C30)	91	88	49-123	3	20				
EFH (C30-C40)	75	74	49-123	0	20				
EFH (C8-C11)	73	70	49-123	4	20				
Batch number: 132610637002	Sample number(s): 7201705-7201721 UNSPK: 7201708 BKG: 7201708								
Aluminum	83 (2)	3009 (2)	75-125	18	20	27,900	25,000	11	20
Antimony	72*	72*	75-125	1	20	3.88 U	3.88 U	0 (1)	20
Arsenic	94	95	75-125	1	20	6.53	5.30	21* (1)	20
Barium	88	102	75-125	10	20	97.2	91.4	6	20
Beryllium	92	100	75-125	7	20	0.908 J	0.864 J	5 (1)	20
Boron	94	96	75-125	2	20	7.77 J	6.86 J	12 (1)	20
Cadmium	91	88	75-125	4	20	0.971 U	0.143 J	200* (1)	20
Calcium	12397 (2)	-1955 (2)	75-125	107*	20	31,600	47,600	41*	20
Chromium	76	114	75-125	15	20	31.1	28.6	8	20
Cobalt	86	95	75-125	8	20	7.06	6.15	14	20
Copper	92	108	75-125	10	20	13.9	12.5	11	20
Iron	-5015 (2)	1530 (2)	75-125	24*	20	28,600	25,300	12	20
Lead	82	95	75-125	9	20	8.30	7.52	10 (1)	20
Lithium	94	101	75-125	6	20	23.3	21.3	9	20
Magnesium	-142 (2)	382 (2)	75-125	18	20	5,470	5,130	6	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419618
Reported: 09/30/13 at 12:36 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Manganese	181 (2)	235 (2)	75-125	7	20	254	220	15	20
Molybdenum	88	91	75-125	3	20	0.300 J	1.94 U	200* (1)	20
Nickel	87	96	75-125	7	20	18.2	16.5	10	20
Phosphorus	124	114	75-125	4	20	153	162	5	20
Potassium	101	147*	75-125	12	20	2,430	2,280	6	20
Sodium	84	97	75-125	9	20	611	580	5	20
Tin	85	89	75-125	4	20	2.96 J	2.60 J	13 (1)	20
Titanium	146 (2)	335 (2)	75-125	14	20	1,100	940	16	20
Vanadium	89	112	75-125	11	20	56.7	50.7	11	20
Zinc	85	103	75-125	9	20	51.7	49.7	4	20
Zirconium	94	98	75-125	4	20	3.08 J	4.44 J	36* (1)	20
Batch number: 132610637002A	Sample number(s): 7201705-7201721 UNSPK: 7201708 BKG: 7201708								
Silver	127*	122	75-125	4	20	0.0726 J	0.0653 J	11 (1)	20
Strontium	300 (2)	280 (2)	75-125	2	20	48.7	57.6	17	20
Thallium	159*	143*	75-125	7	20	0.291	0.329	12 (1)	20
Batch number: 132610637002B	Sample number(s): 7201705-7201721 UNSPK: 7201708 BKG: 7201708								
Selenium	112	104	75-125	7	20	0.388 U	0.388 U	0 (1)	20
Batch number: 132610638002	Sample number(s): 7201705-7201721 UNSPK: 7201708 BKG: 7201708								
3a Mercury 7471A	104	108	65-135	1	20	0.0116 J	0.0125 J	7 (1)	20
Batch number: 13261039406A	Sample number(s): 7201705-7201708,7201711-7201716 BKG: 7201708								
15a pH by 9045D						8.17	8.20	0	3
Batch number: 13261039406B	Sample number(s): 7201717-7201721 BKG: 7201721								
15a pH by 9045D						8.52	8.52	0	3
Batch number: 13268162401A	Sample number(s): 7201705-7201721 BKG: 7201708								
14a Moisture Content by 160.3						12.7	12.1	5	20
14a Moisture Content by 160.3						12.7	12.1	5	20
14a Moisture Content by 160.3						12.7	12.1	5	20
Batch number: 13268002	Sample number(s): 7201705,7201707,7201715-7201716 UNSPK: P204677								
2378-TCDD	93	93	40-135	2	20				
12378-PeCDD	98	98	40-135	2	20				
123478-HxCDD	96	95	40-135	3	20				
123678-HxCDD	98	97	40-135	2	20				
123789-HxCDD	95	96	40-135	1	20				
1234678-HpCDD	97	109	40-135	9	20				
OCDD	102	230*	40-135	73*	20				
2378-TCDF	97	97	40-135	1	20				
12378-PeCDF	96	94	40-135	3	20				
23478-PeCDF	95	96	40-135	0	20				
123478-HxCDF	97	97	40-135	2	20				
123678-HxCDF	98	98	40-135	1	20				
123789-HxCDF	97	99	40-135	1	20				
234678-HxCDF	96	96	40-135	2	20				
1234678-HpCDF	96	98	40-135	0	20				
1234789-HpCDF	97	98	40-135	1	20				
OCDF	95	95	40-135	2	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419618
Reported: 09/30/13 at 12:36 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13266SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7201705	83	84	93
7201706	86	90	101
7201707	79	79	93
7201708	78	82	93
7201709	72	75	82
7201710	84	88	97
7201712	83	84	95
7201713	87	89	94
7201714	89	93	103
7201715	81	82	96
7201716	79	81	96
7201717	85	87	98
7201718	82	83	96
7201719	84	86	94
7201720	89	91	101
7201721	83	86	96
Blank	95	101	113
LCS	93	99	110
MS	72	75	82
MSD	84	88	97
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13262A94A

	Trifluorotoluene-F
7201704	73
Blank	74
LCS	82
LCSD	82
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13263A34A

	Trifluorotoluene-F

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Surrogate Quality Control

7201706	76
7201708	80
7201709	78
7201710	85
7201712	81
7201713	79
7201714	84
7201716	75
7201717	79
7201718	85
7201719	81
7201720	83
7201721	78
Blank	85
LCS	90
MS	78
MSD	85
Limits:	50-142

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132680010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7201705	104	89
7201706	108	91
7201707	99	86
7201708	97	86
7201709	105	85
7201710	97	88
7201712	97	84
7201713	98	89
7201714	100	90
7201715	99	89
7201716	93	85
7201717	100	88
7201718	97	85
7201719	101	92
7201720	103	95
7201721	100	94
Blank	106	88
LCS	103	94
LCSD	114	90
MS	105	85
MSD	97	88
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132640003A

	Chlorobenzene	Orthoterphenyl
7201705	104	86
7201706	104	87
7201707	92	68

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Surrogate Quality Control

7201708	100	66
7201709	103	79
7201710	98	81
7201712	99	76
7201713	95	74
7201714	110	96
7201715	103	88
7201716	99	68
7201717	101	78
7201718	110	95
7201719	112	97
7201720	111	97
7201721	112	98
Blank	111	99
LCS	120	100
MS	103	79
MSD	98	81
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13268002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7201705	64	57	55	61	55	54
7201707	62	52	47	54	49	54
7201715	65	59	57	65	57	57
7201716	59	55	53	60	55	55
Blank	71	64	64	72	67	63
MS	73	69	64	72	67	65
MSD	77	75	69	76	70	72
OPR	57	49	49	56	51	49
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7201705	73	51	50	63	69	66
7201707	70	44	42	59	59	58
7201715	88	53	51	69	71	71
7201716	78	51	49	64	66	66
Blank	92	61	60	75	81	79
MS	93	63	64	79	79	79
MSD	89	70	69	84	82	80
OPR	71	47	45	58	64	61
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7201705	65	68	68	52	59
7201707	58	63	64	49	57
7201715	72	77	77	54	66
7201716	65	69	70	50	60
Blank	79	83	84	61	70
MS	79	86	89	64	74

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Surrogate Quality Control

MSD	80	85	87	68	79
OPR	63	66	68	46	52
Limits:	28-130	23-140	17-157	24-169	24-185

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13013 1419618 7201704-21

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/17/2013
CarrierName: FedEx
AirbillNo: 79670779195

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130917-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-091713	9/17/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-503-SA5D-SB-0.0-0.5	9/17/13 09:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-503-SA5D-SB-0.0-0.5	9/17/13 09:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-503-SA5D-SB-4.0-5.0	9/17/13 09:55	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											
SL-503-SA5D-SB-4.0-5.0	9/17/13 09:55	SO	None	2 - Encore	10 day																			X												
SL-504-SA5D-SB-0.0-0.5	9/17/13 07:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-504-SA5D-SB-0.0-0.5	9/17/13 07:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-504-SA5D-SB-4.0-5.0MS	9/17/13 07:50	SO	None	6 - 16 oz glass	10 day	X	X					X			X			X							X											MS/MSD
SL-504-SA5D-SB-4.0-5.0MS	9/17/13 07:50	SO	None	6 - Encore	10 day																			X											MS/MSD
SL-804-SA5D-SB-4.0-5.0	9/17/13 08:00	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-804-SA5D-SB-4.0-5.0	9/17/13 08:00	SO	None	2 - Encore	10 day																			X												
SL-504-SA5D-SB-9.0-10.0	9/17/13 08:10	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-504-SA5D-SB-9.0-10.0	9/17/13 08:10	SO	None	2 - Encore	10 day																			X												
SL-504-SA5D-SB-16.0-17.0	9/17/13 08:20	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-504-SA5D-SB-16.0-17.0	9/17/13 08:20	SO	None	2 - Encore	10 day																			X												
SL-501-SA5D-SB-4.0-5.0	9/17/13 12:25	SO	None	2 - Encore	10 day																			X												
SL-501-SA5D-SB-9.0-10.0	9/17/13 12:35	SO	None	2 - Encore	10 day																			X												
SL-501-SA5D-SB-14.0-15.0	9/17/13 12:45	SO	None	2 - Encore	10 day																			X												
SL-501-SA5D-SB-19.0-20.0	9/17/13 12:55	SO	None	2 - Encore	10 day																			X												
SL-501-SA5D-SB-24.0-25.0	9/17/13 13:05	SO	None	2 - Encore	10 day																			X												
SL-501-SA5D-SB-28.0-29.0	9/17/13 13:15	SO	None	2 - Encore	10 day																			X												

13013 1419618 7201704-21

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/17/2013
CarrierName: FedEx
AirbillNo: 79670779195

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130917-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	09/17/2013	1600									
									[illegible]	9-18-13	0910

COC Rev 2

COC 20130917-01, Page 1 of 2

2 of 2

13013 14196l8 7201704-21

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/17/2013
CarrierName: FedEx
AirbillNo: 796707791952

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130917-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-501-SA5D-SB-0.0-0.5	9/17/13 12:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-501-SA5D-SB-0.0-0.5	9/17/13 12:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-501-SA5D-SB-4.0-5.0	9/17/13 12:25	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-501-SA5D-SB-9.0-10.0	9/17/13 12:35	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-501-SA5D-SB-14.0-15.0	9/17/13 12:45	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-501-SA5D-SB-19.0-20.0	9/17/13 12:55	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-501-SA5D-SB-24.0-25.0	9/17/13 13:05	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-501-SA5D-SB-28.0-29.0	9/17/13 13:15	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Myers	09/17/2013	1600									
										9-18-13	0910

COC Rev 2

COC 20130917-02, Page 1 of 1

1 of 1

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1419618

Client/Project: GM Smith

Date of Receipt: 9-18-13

Time of Receipt: 0910

Source Code: So

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	D131	2.2	TB	WI	Y	B	
2	↓	1.3	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 52∞ **Date/Time:** 9-18-13 1015

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH110

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 03, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/19/2013
Group Number: 1419965
SDG: PH110
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB1-091813 Water	7203246
EB2-091813 Water	7203247
TB-091813 Water	7203248
SL-510-SA5D-SB-0.0-0.5 Soil	7203249
SL-510-SA5D-SB-4.0-5.0 Soil	7203250
SL-513-SA5D-SB-0.0-0.5 Soil	7203251
SL-513-SA5D-SB-4.0-5.0 Soil	7203252
SL-513-SA5D-SB-9.0-10.0 Soil	7203253
SL-513-SA5D-SB-16.0-17.0 Soil	7203254
SL-514-SA5D-SB-0.0-0.5 Soil	7203255
SL-514-SA5D-SB-4.0-5.0 Soil	7203256
SL-509-SA5D-SB-0.0-0.5 Soil	7203257
SL-509-SA5D-SB-4.0-5.0 Soil	7203258

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: EB1-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203246
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:00 by PH

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB118 SDG#: PH110-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.050	U	0.050	0.010	1
12971	Acenaphthylene	208-96-8	0.050	U	0.050	0.010	1
12971	Anthracene	120-12-7	0.050	U	0.050	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.050	U	0.050	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.050	U	0.050	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.050	U	0.050	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.050	U	0.050	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.050	U	0.050	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.050	U	0.050	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.050	1
12971	Di-n-butylphthalate	84-74-2	0.20	J	1.0	0.050	1
12971	Chrysene	218-01-9	0.050	U	0.050	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.050	U	0.050	0.010	1
12971	Diethylphthalate	84-66-2	0.30	J	1.0	0.050	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.050	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	1.0	U	1.0	0.050	1
12971	Fluoranthene	206-44-0	0.050	U	0.050	0.010	1
12971	Fluorene	86-73-7	0.050	U	0.050	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.050	U	0.050	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.050	U	0.050	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.050	U	0.050	0.010	1
12971	Naphthalene	91-20-3	0.050	U	0.050	0.030	1
12971	N-Nitrosodimethylamine	62-75-9	0.050	U	0.050	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.050	1
12971	Phenanthrene	85-01-8	0.050	U	0.050	0.030	1
12971	Pyrene	129-00-0	0.050	U	0.050	0.010	1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	
10407	2,4-D	94-75-7	0.48	U	0.48	0.15	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.96	U	0.96	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.077	1
10407	Dinoseb	88-85-7	0.48	U	0.48	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.48	U	0.48	0.15	1
10407	MCPA	94-74-6	190	U	190	48	1
10407	MCPP	93-65-2	190	U	190	48	1
10407	2,4,5-T	93-76-5	0.048	U	0.048	0.014	1
10407	2,4,5-TP	93-72-1	0.048	U	0.048	0.0096	1
Perchlorate	**SW-846 6850 1/2007**		ug/l		ug/l	ug/l	
06386	6b Perchlorate (Method 6850)	14797-73-0	1.0	U	1.0	0.20	1
Pesticides/PCBs	**SW-846 8081B**		ug/l		ug/l	ug/l	
10589	Aldrin	309-00-2	0.0082	U	0.0082	0.0016	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203246
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:00 by PH

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB118 SDG#: PH110-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Alpha BHC	319-84-6	0.0082	U	0.0082	0.0025	1
10589	Beta BHC	319-85-7	0.0082	U	0.0082	0.0028	1
10589	Gamma BHC - Lindane	58-89-9	0.0082	U	0.0082	0.0016	1
10589	Chlordane	57-74-9	0.41	U	0.41	0.13	1
10589	p,p-DDD	72-54-8	0.016	U	0.016	0.0041	1
10589	p,p-DDE	72-55-9	0.016	U	0.016	0.0041	1
10589	p,p-DDT	50-29-3	0.016	U	0.016	0.0043	1
10589	Delta BHC	319-86-8	0.0082	U	0.0082	0.0028	1
10589	Dieldrin	60-57-1	0.016	U	0.016	0.0044	1
10589	Endosulfan I	959-98-8	0.0082	U	0.0082	0.0035	1
10589	Endosulfan II	33213-65-9	0.016	U	0.016	0.012	1
10589	Endosulfan Sulfate	1031-07-8	0.016	U	0.016	0.0048	1
10589	Endrin	72-20-8	0.016	U	0.016	0.0067	1
10589	Endrin Aldehyde	7421-93-4	0.082	U	0.082	0.016	1
10589	Endrin Ketone	53494-70-5	0.016	U	0.016	0.0041	1
10589	Heptachlor	76-44-8	0.0082	U	0.0082	0.0016	1
10589	Heptachlor Epoxide	1024-57-3	0.0082	U	0.0082	0.0019	1
10589	Methoxychlor	72-43-5	0.082	U	0.082	0.025	1
10589	Mirex	2385-85-5	0.041	U	0.041	0.0082	1
10589	Toxaphene	8001-35-2	2.5	U	2.5	0.82	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.41	U	0.41	0.082	1
13092	Aroclor 5442	12642-23-8	0.41	U	0.41	0.082	1
13092	Aroclor 5460	11126-42-4	0.41	U	0.41	0.091	1
13092	PCB-1016	12674-11-2	0.41	U	0.41	0.082	1
13092	PCB-1221	11104-28-2	0.41	U	0.41	0.082	1
13092	PCB-1232	11141-16-5	0.41	U	0.41	0.16	1
13092	PCB-1242	53469-21-9	0.41	U	0.41	0.082	1
13092	PCB-1248	12672-29-6	0.41	U	0.41	0.082	1
13092	PCB-1254	11097-69-1	0.41	U	0.41	0.082	1
13092	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
13092	PCB-1262	37324-23-5	0.41	U	0.41	0.16	1
13092	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.098	U	0.098	0.049	1
10365	EFH (C15-C20)	n.a.	0.098	U	0.098	0.049	1
10365	EFH (C21-C30)	n.a.	0.098	U	0.098	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.098	1
10365	EFH (C8-C11)	n.a.	0.098	U	0.098	0.049	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: EB1-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203246
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:00 by PH

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB118 SDG#: PH110-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.0464 J	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0083 J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	
01504	1b Anions by 300.0 - Fluoride	16984-48-8	0.10 U	0.10	0.080	1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	0.050 U	0.050	0.015	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.3	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203246
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:00 by PH

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB118 SDG#: PH110-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.93	U	1.93	0.521	1
10915	12378-PeCDD	40321-76-4	9.65	U	9.65	0.296	1
10915	123478-HxCDD	39227-28-6	0.357	JBQ	9.65	0.185	1
10915	123678-HxCDD	57653-85-7	0.204	JBQ	9.65	0.191	1
10915	123789-HxCDD	19408-74-3	0.488	JBQ	9.65	0.184	1
10915	1234678-HpCDD	35822-46-9	0.924	JB	9.65	0.222	1
10915	OCDD	3268-87-9	1.48	JBQ	19.3	0.210	1
10915	2378-TCDF	51207-31-9	1.93	U	1.93	0.372	1
10915	12378-PeCDF	57117-41-6	0.712	JBQ	9.65	0.178	1
10915	23478-PeCDF	57117-31-4	9.65	U	9.65	0.160	1
10915	123478-HxCDF	70648-26-9	0.392	JBQ	9.65	0.190	1
10915	123678-HxCDF	57117-44-9	0.628	JB	9.65	0.189	1
10915	123789-HxCDF	72918-21-9	0.608	JBQ	9.65	0.186	1
10915	234678-HxCDF	60851-34-5	0.400	JBQ	9.65	0.192	1
10915	1234678-HpCDF	67562-39-4	0.629	JB	9.65	0.0973	1
10915	1234789-HpCDF	55673-89-7	0.472	JBQ	9.65	0.107	1
10915	OCDF	39001-02-0	1.66	JB	19.3	0.295	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0788				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB1-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203246
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:00 by PH

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB118 SDG#: PH110-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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Sample Description: EB1-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203246
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:00 by PH

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB118 SDG#: PH110-01EB

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.5 - 8.4 C using an IR thermometer for containers on COC No 20130918-01.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266WAC026	09/24/2013 19:04	Holly Berry	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13266WAC026	09/23/2013 16:30	Seth A Farrier	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13262A94A	09/20/2013 11:53	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13262A94A	09/20/2013 11:53	Marie D Beamenderfer	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132640008A	09/25/2013 02:52	Melissa McDermott	1
06386	6b Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132670002A	09/24/2013 17:21	Richard A Shober	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132630008A	09/25/2013 07:31	Jamie L Brillhart	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132630007A	09/24/2013 12:55	Jessica L Miller	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132630007A	09/20/2013 16:30	Seth A Farrier	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132630008A	09/20/2013 16:30	Seth A Farrier	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132640008A	09/23/2013 10:40	Kelli M Barto	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670027A	09/26/2013 05:44	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132670027A	09/25/2013 11:50	Kelli M Barto	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13267004	09/26/2013 18:14	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13267004	09/24/2013 13:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07044	Antimony	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07035	Arsenic	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07046	Barium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07047	Beryllium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
08014	Boron	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07049	Cadmium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
01750	Calcium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07051	Chromium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07052	Cobalt	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07053	Copper	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
01754	Iron	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07055	Lead	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
01756	Lithium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203246
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:00 by PH

Submitted: 09/19/2013 09:10
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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

EB118 SDG#: PH110-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01757	Magnesium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07058	Manganese	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07060	Molybdenum	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07061	Nickel	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
10143	Phosphorus	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
01762	Potassium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
01767	Sodium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07069	Tin	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07070	Titanium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07071	Vanadium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
07072	Zinc	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
10144	Zirconium	SW-846 6010C	1	132700635002	09/30/2013 15:09	Eric L Eby	1
06041	Selenium	SW-846 6020A	1	132700639001B	09/30/2013 13:38	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	132700639001A	09/30/2013 13:38	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	132700639001A	09/30/2013 13:38	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	132700639001A	09/30/2013 13:38	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	132665713003	09/25/2013 10:04	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132700635002	09/29/2013 22:30	Annamaria Stipkovits	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132700639001	09/29/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132665713003	09/24/2013 05:55	Damary Valentin	1
01504	1b Anions by 300.0 - Fluoride	EPA 300.0	1	13268347601C	09/25/2013 12:51	Sandra J Miller	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13262987151B	09/19/2013 13:35	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13262005104A	09/20/2013 00:01	Michele L Graham	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203247
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:30 by PH

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB218 SDG#: PH110-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.050	U	0.050	0.010	1
12971	Acenaphthylene	208-96-8	0.050	U	0.050	0.010	1
12971	Anthracene	120-12-7	0.050	U	0.050	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.050	U	0.050	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.050	U	0.050	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.050	U	0.050	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.050	U	0.050	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.050	U	0.050	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.050	U	0.050	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.050	1
12971	Di-n-butylphthalate	84-74-2	0.19	J	1.0	0.050	1
12971	Chrysene	218-01-9	0.050	U	0.050	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.050	U	0.050	0.010	1
12971	Diethylphthalate	84-66-2	0.30	J	1.0	0.050	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.050	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	1.0	U	1.0	0.050	1
12971	Fluoranthene	206-44-0	0.050	U	0.050	0.010	1
12971	Fluorene	86-73-7	0.050	U	0.050	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.050	U	0.050	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.050	U	0.050	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.050	U	0.050	0.010	1
12971	Naphthalene	91-20-3	0.050	U	0.050	0.030	1
12971	N-Nitrosodimethylamine	62-75-9	0.050	U	0.050	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.050	1
12971	Phenanthrene	85-01-8	0.050	U	0.050	0.030	1
12971	Pyrene	129-00-0	0.050	U	0.050	0.010	1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	
10407	2,4-D	94-75-7	0.48	U	0.48	0.15	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.97	U	0.97	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.077	1
10407	Dinoseb	88-85-7	0.48	U	0.48	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.48	U	0.48	0.15	1
10407	MCPA	94-74-6	190	U	190	48	1
10407	MCPP	93-65-2	190	U	190	48	1
10407	2,4,5-T	93-76-5	0.048	U	0.048	0.015	1
10407	2,4,5-TP	93-72-1	0.048	U	0.048	0.0097	1
Perchlorate	**SW-846 6850 1/2007**		ug/l		ug/l	ug/l	
06386	6b Perchlorate (Method 6850)	14797-73-0	0.25	J	1.0	0.20	1
Pesticides/PCBs	**SW-846 8081B**		ug/l		ug/l	ug/l	
10589	Aldrin	309-00-2	0.0083	U	0.0083	0.0017	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203247
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:30 by PH

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB218 SDG#: PH110-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Alpha BHC	319-84-6	0.0083	U	0.0083	0.0025	1
10589	Beta BHC	319-85-7	0.0083	U	0.0083	0.0028	1
10589	Gamma BHC - Lindane	58-89-9	0.0083	U	0.0083	0.0017	1
10589	Chlordane	57-74-9	0.42	U	0.42	0.13	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0042	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0042	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0043	1
10589	Delta BHC	319-86-8	0.0083	U	0.0083	0.0028	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0044	1
10589	Endosulfan I	959-98-8	0.0083	U	0.0083	0.0036	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0048	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0068	1
10589	Endrin Aldehyde	7421-93-4	0.083	U	0.083	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0042	1
10589	Heptachlor	76-44-8	0.0083	U	0.0083	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0083	U	0.0083	0.0019	1
10589	Methoxychlor	72-43-5	0.083	U	0.083	0.025	1
10589	Mirex	2385-85-5	0.042	U	0.042	0.0083	1
10589	Toxaphene	8001-35-2	2.5	U	2.5	0.83	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.42	U	0.42	0.083	1
13092	Aroclor 5442	12642-23-8	0.42	U	0.42	0.083	1
13092	Aroclor 5460	11126-42-4	0.42	U	0.42	0.092	1
13092	PCB-1016	12674-11-2	0.42	U	0.42	0.083	1
13092	PCB-1221	11104-28-2	0.42	U	0.42	0.083	1
13092	PCB-1232	11141-16-5	0.42	U	0.42	0.17	1
13092	PCB-1242	53469-21-9	0.42	U	0.42	0.083	1
13092	PCB-1248	12672-29-6	0.42	U	0.42	0.083	1
13092	PCB-1254	11097-69-1	0.42	U	0.42	0.083	1
13092	PCB-1260	11096-82-5	0.42	U	0.42	0.13	1
13092	PCB-1262	37324-23-5	0.42	U	0.42	0.17	1
13092	PCB-1268	11100-14-4	0.42	U	0.42	0.13	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.095	U	0.095	0.047	1
10365	EFH (C15-C20)	n.a.	0.095	U	0.095	0.047	1
10365	EFH (C21-C30)	n.a.	0.095	U	0.095	0.047	1
10365	EFH (C30 - C40)	n.a.	0.47	U	0.47	0.095	1
10365	EFH (C8-C11)	n.a.	0.095	U	0.095	0.047	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: EB2-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203247
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:30 by PH

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB218 SDG#: PH110-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.0550 J	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0025 J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	
01504	1b Anions by 300.0 - Fluoride	16984-48-8	0.10 U	0.10	0.080	1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	0.050 U	0.050	0.015	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.9	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203247
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:30 by PH

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB218 SDG#: PH110-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.511	JBQ	1.91	0.473	1
10915	12378-PeCDD	40321-76-4	0.385	JBQ	9.57	0.270	1
10915	123478-HxCDD	39227-28-6	9.57	U	9.57	0.148	1
10915	123678-HxCDD	57653-85-7	0.317	JBQ	9.57	0.159	1
10915	123789-HxCDD	19408-74-3	9.57	U	9.57	0.150	1
10915	1234678-HpCDD	35822-46-9	0.798	JBQ	9.57	0.225	1
10915	OCDD	3268-87-9	1.03	JB	19.1	0.185	1
10915	2378-TCDF	51207-31-9	1.91	U	1.91	0.322	1
10915	12378-PeCDF	57117-41-6	0.513	JBQ	9.57	0.162	1
10915	23478-PeCDF	57117-31-4	9.57	U	9.57	0.150	1
10915	123478-HxCDF	70648-26-9	0.490	JB	9.57	0.164	1
10915	123678-HxCDF	57117-44-9	0.558	JB	9.57	0.162	1
10915	123789-HxCDF	72918-21-9	0.760	JB	9.57	0.146	1
10915	234678-HxCDF	60851-34-5	0.324	JBQ	9.57	0.158	1
10915	1234678-HpCDF	67562-39-4	0.430	JB	9.57	0.0871	1
10915	1234789-HpCDF	55673-89-7	0.280	JBQ	9.57	0.0991	1
10915	OCDF	39001-02-0	0.949	JB	19.1	0.271	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.186				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	89	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	82	26 - 138
13C12-OCDF	82	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB2-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203247
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:30 by PH

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB218 SDG#: PH110-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB2-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203247
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:30 by PH

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB218 SDG#: PH110-02EB

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.5 - 8.4 C using an IR thermometer for containers on COC No 20130918-01.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13266WAC026	09/24/2013 19:31	Holly Berry	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13266WAC026	09/23/2013 16:30	Seth A Farrier	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13262A94A	09/20/2013 12:18	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13262A94A	09/20/2013 12:18	Marie D Beamenderfer	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132640008A	09/25/2013 03:18	Melissa McDermott	1
06386	6b Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132670002A	09/24/2013 18:00	Richard A Shober	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132630008A	09/25/2013 07:55	Jamie L Brillhart	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132630007A	09/24/2013 13:14	Jessica L Miller	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132630007A	09/20/2013 16:30	Seth A Farrier	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132630008A	09/20/2013 16:30	Seth A Farrier	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132640008A	09/23/2013 10:40	Kelli M Barto	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670027A	09/26/2013 06:05	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132670027A	09/25/2013 11:50	Kelli M Barto	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13267004	09/26/2013 19:11	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13267004	09/24/2013 13:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07044	Antimony	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07035	Arsenic	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07046	Barium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07047	Beryllium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
08014	Boron	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07049	Cadmium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
01750	Calcium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07051	Chromium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07052	Cobalt	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07053	Copper	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
01754	Iron	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07055	Lead	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
01756	Lithium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203247
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 15:30 by PH

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB218 SDG#: PH110-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01757	Magnesium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07058	Manganese	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07060	Molybdenum	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07061	Nickel	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
10143	Phosphorus	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
01762	Potassium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
01767	Sodium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07069	Tin	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07070	Titanium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07071	Vanadium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
07072	Zinc	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
10144	Zirconium	SW-846 6010C	1	132700635002	09/30/2013 15:13	Eric L Eby	1
06041	Selenium	SW-846 6020A	1	132700639001B	09/30/2013 13:40	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	132700639001A	09/30/2013 13:40	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	132700639001A	09/30/2013 13:40	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	132700639001A	09/30/2013 13:40	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	132665713003	09/25/2013 10:06	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132700635002	09/29/2013 22:30	Annamaria Stipkovits	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132700639001	09/29/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132665713003	09/24/2013 05:55	Damary Valentin	1
01504	1b Anions by 300.0 - Fluoride	EPA 300.0	1	13268347601C	09/25/2013 12:35	Sandra J Miller	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13262987151B	09/19/2013 14:20	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13262005104A	09/20/2013 00:04	Michele L Graham	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-091813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7203248
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:00

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB118 SDG#: PH110-03TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13262A94A	09/20/2013 12:43	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13262A94A	09/20/2013 12:43	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203249
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 10:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510-0 SDG#: PH110-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	0.80	J	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.4	J	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.9		1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.1	J	1.8	0.73	1
12969	Fluorene	86-73-7	0.85	J	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	2.0		1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	2.3		1.8	0.73	1
12969	Naphthalene	91-20-3	1.3	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	5.2		1.8	0.73	1
12969	Pyrene	129-00-0	1.9		1.8	0.73	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	0.47	J	1.9	0.38	1
10590	Delta BHC	319-86-8	0.91	U	0.91	0.49	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.65	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203249
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 10:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510-0 SDG#: PH110-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	27	U	27	8.3	1
10592	Aroclor 5442	12642-23-8	27	U	27	8.3	1
10592	Aroclor 5460	11126-42-4	27	U	27	8.3	1
10592	PCB-1016	12674-11-2	14	U	14	2.7	1
10592	PCB-1221	11104-28-2	14	U	14	4.2	1
10592	PCB-1232	11141-16-5	14	U	14	3.4	1
10592	PCB-1242	53469-21-9	14	U	14	3.4	1
10592	PCB-1248	12672-29-6	14	U	14	2.7	1
10592	PCB-1254	11097-69-1	14	U	14	3.6	1
10592	PCB-1260	11096-82-5	14	U	14	3.2	1
10592	PCB-1262	37324-23-5	14	U	14	2.7	1
10592	PCB-1268	11100-14-4	14	U	14	2.7	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.
Reporting limits were raised due to limited sample volume.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	7.4		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	12		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,600		43.7	7.87	1
06944	Antimony	7440-36-0	4.37	U	4.37	0.808	1
06935	Arsenic	7440-38-2	6.35		4.37	0.764	1
06946	Barium	7440-39-3	132		1.09	0.0360	1
06947	Beryllium	7440-41-7	0.964	J	1.09	0.0731	1
07914	Boron	7440-42-8	11.8		10.9	0.917	1
06949	Cadmium	7440-43-9	1.09	U	1.09	0.0830	1
01650	Calcium	7440-70-2	7,720		21.8	3.65	1
06951	Chromium	7440-47-3	37.0		3.27	0.175	1
06952	Cobalt	7440-48-4	10.3		1.09	0.108	1
06953	Copper	7440-50-8	20.5		2.18	0.317	1
01654	Iron	7439-89-6	34,100		218	19.8	5
06955	Lead	7439-92-1	10.9		3.27	0.546	1
01656	Lithium	7439-93-2	24.5		4.4	0.37	1
01657	Magnesium	7439-95-4	7,770		10.9	1.82	1
06958	Manganese	7439-96-5	495		1.09	0.0906	1
06960	Molybdenum	7439-98-7	0.329	J	2.18	0.186	1
06961	Nickel	7440-02-0	22.0		2.18	0.142	1
10145	Phosphorus	7723-14-0	433		10.9	3.15	1
01662	Potassium	7440-09-7	6,770		109	9.10	1
01667	Sodium	7440-23-5	85.1	J	109	18.2	1
06969	Tin	7440-31-5	3.12	J	10.9	0.240	1
06970	Titanium	7440-32-6	1,230		1.09	0.186	1
06971	Vanadium	7440-62-2	69.4		1.09	0.142	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203249
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 10:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510-0 SDG#: PH110-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06972	Zinc	7440-66-6	81.4		4.37	0.218	1
10146	Zirconium	7440-67-7	4.32	J	5.46	0.917	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.298	J	0.437	0.109	2
06142	Silver	7440-22-4	0.0452	J	0.218	0.0284	2
06144	Strontium	7440-24-6	34.1		0.437	0.0742	2
06145	Thallium	7440-28-0	0.396		0.218	0.0327	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0114	J	0.0176	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.58		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203249
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 10:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510-0 SDG#: PH110-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0631 JBQ	1.06	0.0509	1
11031	12378-PeCDD	40321-76-4	0.0739 JBQ	5.30	0.0364	1
11031	123478-HxCDD	39227-28-6	0.0350 JBQ	5.30	0.0310	1
11031	123678-HxCDD	57653-85-7	0.191 JBQ	5.30	0.0334	1
11031	123789-HxCDD	19408-74-3	0.302 JBQ	5.30	0.0297	1
11031	1234678-HpCDD	35822-46-9	0.249 JB	5.30	0.0301	1
11031	OCDD	3268-87-9	0.924 JB	10.6	0.0286	1
11031	2378-TCDF	51207-31-9	1.06 U	1.06	0.0555	1
11031	12378-PeCDF	57117-41-6	0.330 JB	5.30	0.0272	1
11031	23478-PeCDF	57117-31-4	0.113 JBQ	5.30	0.0280	1
11031	123478-HxCDF	70648-26-9	0.114 JB	5.30	0.0292	1
11031	123678-HxCDF	57117-44-9	0.0800 JBQ	5.30	0.0257	1
11031	123789-HxCDF	72918-21-9	0.470 JB	5.30	0.0286	1
11031	234678-HxCDF	60851-34-5	0.0797 JBQ	5.30	0.0262	1
11031	1234678-HpCDF	67562-39-4	0.0788 JBQ	5.30	0.0104	1
11031	1234789-HpCDF	55673-89-7	0.114 JB	5.30	0.0185	1
11031	OCDF	39001-02-0	0.163 JB	10.6	0.0415	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0722			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	63	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	63	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	59	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	51	26 - 152
13C12-123678-HxCDF	59	26 - 123
13C12-234678-HxCDF	53	28 - 136
13C12-123789-HxCDF	56	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	47	26 - 138
13C12-OCDF	45	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203249
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 10:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510-0 SDG#: PH110-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203249
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 10:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510-0 SDG#: PH110-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 05:05	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132680014A	09/30/2013 10:45	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 14:45	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132680014A	09/26/2013 07:00	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/26/2013 00:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 07:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132630637001	09/24/2013 07:37	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132630637001	09/22/2013 23:52	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203249
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 10:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510-0 SDG#: PH110-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132630637001B	09/25/2013 07:40	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132630637001A	09/25/2013 07:40	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132630637001A	09/25/2013 07:40	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132630637001A	09/25/2013 07:40	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638002	09/23/2013 04:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132630637001	09/22/2013 12:05	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638002	09/20/2013 10:30	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13262039404A	09/19/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402A	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203250
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 10:10 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510-4 SDG#: PH110-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	0.92	J	1.9	0.77	1
12969	Naphthalene	91-20-3	1.4	J	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	21.66
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.97	U	0.97	0.20	1
10590	Alpha BHC	319-84-6	0.97	U	0.97	0.20	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.97	U	0.97	0.20	1
10590	Chlordane	57-74-9	20	U	20	4.7	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.41	1
10590	Delta BHC	319-86-8	0.97	U	0.97	0.53	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.97	U	0.97	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.70	1
10590	Heptachlor	76-44-8	0.97	U	0.97	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.97	U	0.97	0.20	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203250
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 10:10 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510-4 SDG#: PH110-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.8	U	7.8	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.41	1
10590	Toxaphene	8001-35-2	39	U	39	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,200		46.4	8.36	1
06944	Antimony	7440-36-0	4.64	U	4.64	0.858	1
06935	Arsenic	7440-38-2	6.00		4.64	0.812	1
06946	Barium	7440-39-3	133		1.16	0.0383	1
06947	Beryllium	7440-41-7	0.955	J	1.16	0.0777	1
07914	Boron	7440-42-8	10.9	J	11.6	0.974	1
06949	Cadmium	7440-43-9	1.16	U	1.16	0.0881	1
01650	Calcium	7440-70-2	10,300		23.2	3.87	1
06951	Chromium	7440-47-3	36.7		3.48	0.185	1
06952	Cobalt	7440-48-4	10.4		1.16	0.115	1
06953	Copper	7440-50-8	18.5		2.32	0.336	1
01654	Iron	7439-89-6	35,400		232	21.0	5
06955	Lead	7439-92-1	10.7		3.48	0.580	1
01656	Lithium	7439-93-2	25.5		4.6	0.39	1
01657	Magnesium	7439-95-4	7,510		11.6	1.94	1
06958	Manganese	7439-96-5	456		1.16	0.0962	1
06960	Molybdenum	7439-98-7	0.216	J	2.32	0.197	1
06961	Nickel	7440-02-0	21.9		2.32	0.151	1
10145	Phosphorus	7723-14-0	347		11.6	3.35	1
01662	Potassium	7440-09-7	4,680		116	9.67	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203250
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 10:10 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510-4 SDG#: PH110-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01667	Sodium	7440-23-5	117	116	19.4	1
06969	Tin	7440-31-5	3.25 J	11.6	0.255	1
06970	Titanium	7440-32-6	1,040	1.16	0.197	1
06971	Vanadium	7440-62-2	67.2	1.16	0.151	1
06972	Zinc	7440-66-6	78.3	4.64	0.232	1
10146	Zirconium	7440-67-7	3.15 J	5.80	0.974	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.165 J	0.464	0.116	2
06142	Silver	7440-22-4	0.0380 J	0.232	0.0301	2
06144	Strontium	7440-24-6	47.9	0.464	0.0788	2
06145	Thallium	7440-28-0	0.401	0.232	0.0348	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0124 J	0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.05	0.0100	0.0100	1
	The pH was measured in water at 22 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.6	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 06:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/21/2013 04:03	Laura M Krieger	21.66
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326232461	09/19/2013 15:17	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326232461	09/19/2013 15:17	Larry E Bevins	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132680014A	09/30/2013 11:00	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 15:04	Monica M Souders	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203250
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 10:10 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510-4 SDG#: PH110-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132680014A	09/26/2013 07:00	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/25/2013 21:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132630637001	09/24/2013 07:41	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132630637001	09/22/2013 23:56	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132630637001B	09/25/2013 07:42	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132630637001A	09/25/2013 07:42	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132630637001A	09/25/2013 07:42	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132630637001A	09/25/2013 07:42	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638002	09/23/2013 04:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132630637001	09/22/2013 12:05	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638002	09/20/2013 10:30	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13262039404A	09/19/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402A	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203251
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:30 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-0 SDG#: PH110-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	0.45	J	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	2.7		1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	2.2		1.9	0.74	1
12969	Naphthalene	91-20-3	0.86	J	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	2.2		1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	41	U	41	14	1
10401	Dalapon	75-99-0	100	U	100	50	1
10401	2,4-DB	94-82-6	19	U	19	7.0	1
10401	Dicamba	1918-00-9	14	U	14	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	860	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	850	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.93	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.85	1
Perchlorate	**SW-846 6850 1/2007**		ug/kg		ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.7	U	5.7	2.4	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203251
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:30 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-0 SDG#: PH110-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,800		44.9	8.08	1
06944	Antimony	7440-36-0	4.49	U	4.49	0.830	1
06935	Arsenic	7440-38-2	4.92		4.49	0.785	1
06946	Barium	7440-39-3	136		1.12	0.0370	1
06947	Beryllium	7440-41-7	0.983	J	1.12	0.0751	1
07914	Boron	7440-42-8	8.61	J	11.2	0.942	1
06949	Cadmium	7440-43-9	1.12	U	1.12	0.0852	1
01650	Calcium	7440-70-2	9,320		22.4	3.75	1
06951	Chromium	7440-47-3	36.4		3.36	0.179	1
06952	Cobalt	7440-48-4	10.6		1.12	0.111	1
06953	Copper	7440-50-8	18.2		2.24	0.325	1
01654	Iron	7439-89-6	35,300		224	20.3	5
06955	Lead	7439-92-1	10.7		3.36	0.561	1
01656	Lithium	7439-93-2	24.7		4.5	0.38	1
01657	Magnesium	7439-95-4	7,130		11.2	1.87	1
06958	Manganese	7439-96-5	447		1.12	0.0931	1
06960	Molybdenum	7439-98-7	2.24	U	2.24	0.191	1
06961	Nickel	7440-02-0	21.3		2.24	0.146	1
10145	Phosphorus	7723-14-0	317		11.2	3.24	1
01662	Potassium	7440-09-7	5,400		112	9.35	1
01667	Sodium	7440-23-5	102	J	112	18.7	1
06969	Tin	7440-31-5	2.93	J	11.2	0.247	1
06970	Titanium	7440-32-6	845		1.12	0.191	1
06971	Vanadium	7440-62-2	61.4		1.12	0.146	1
06972	Zinc	7440-66-6	77.7		4.49	0.224	1
10146	Zirconium	7440-67-7	1.81	J	5.61	0.942	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.157	J	0.449	0.112	2
06142	Silver	7440-22-4	0.0537	J	0.224	0.0292	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203251
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:30 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-0 SDG#: PH110-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06144	Strontium	7440-24-6	43.2	0.449	0.0762	2
06145	Thallium	7440-28-0	0.410	0.224	0.0336	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0176 U	0.0176	0.0105	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	1.8	1.1	0.45	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.02	0.0100	0.0100	1
	The pH was measured in water at 21.8 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.7	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203251
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:30 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-0 SDG#: PH110-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0600	JBQ	1.10	0.0510	1
11031	12378-PeCDD	40321-76-4	0.263	JBQ	5.49	0.0353	1
11031	123478-HxCDD	39227-28-6	0.104	JBQ	5.49	0.0254	1
11031	123678-HxCDD	57653-85-7	0.191	JBQ	5.49	0.0266	1
11031	123789-HxCDD	19408-74-3	0.288	JBQ	5.49	0.0254	1
11031	1234678-HpCDD	35822-46-9	0.193	JBQ	5.49	0.0233	1
11031	OCDD	3268-87-9	0.370	JB	11.0	0.0225	1
11031	2378-TCDF	51207-31-9	1.10	U	1.10	0.0419	1
11031	12378-PeCDF	57117-41-6	0.350	JBQ	5.49	0.0199	1
11031	23478-PeCDF	57117-31-4	0.218	JB	5.49	0.0202	1
11031	123478-HxCDF	70648-26-9	0.158	JB	5.49	0.0281	1
11031	123678-HxCDF	57117-44-9	0.141	JB	5.49	0.0237	1
11031	123789-HxCDF	72918-21-9	0.455	JBQ	5.49	0.0272	1
11031	234678-HxCDF	60851-34-5	0.118	JB	5.49	0.0276	1
11031	1234678-HpCDF	67562-39-4	0.0945	JBQ	5.49	0.00895	1
11031	1234789-HpCDF	55673-89-7	0.139	JBQ	5.49	0.0182	1
11031	OCDF	39001-02-0	0.204	JB	11.0	0.0499	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.107				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	63	32 - 141
13C12-123678-HxCDD	62	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	65	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	61	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	47	26 - 152
13C12-123678-HxCDF	55	26 - 123
13C12-234678-HxCDF	48	28 - 136
13C12-123789-HxCDF	51	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	42	26 - 138
13C12-OCDF	38	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203251
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:30 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-0 SDG#: PH110-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203251
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:30 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-0 SDG#: PH110-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 07:10	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132660014A	09/24/2013 18:30	Melissa McDermott	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 21:10	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 15:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132660014A	09/24/2013 01:00	Sherry L Morrow	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/25/2013 22:17	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 17:19	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132630637001	09/24/2013 07:44	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203251
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:30 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-0 SDG#: PH110-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132630637001	09/23/2013 00:08	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132630637001B	09/25/2013 07:49	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132630637001A	09/25/2013 07:49	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132630637001A	09/25/2013 07:49	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132630637001A	09/25/2013 07:49	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638002	09/23/2013 04:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132630637001	09/22/2013 12:05	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638002	09/20/2013 10:30	Denise K Conners	1
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13267267201A	09/25/2013 18:44	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13267267201A	09/24/2013 11:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13262039404A	09/19/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402A	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203252
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:40 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-4 SDG#: PH110-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.1	J	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	20.42
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	42	U	42	14	1
10401	Dalapon	75-99-0	110	U	110	51	1
10401	2,4-DB	94-82-6	20	U	20	7.3	1
10401	Dicamba	1918-00-9	14	U	14	4.7	1
10401	Dinoseb	88-85-7	28	U	28	11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	20	U	20	11	1
10401	MCPA	94-74-6	2,900	U	2,900	890	1
10401	MCPP (Mecoprop)	93-65-2	2,900	U	2,900	880	1
10401	2,4,5-T	93-76-5	2.0	U	2.0	0.96	1
10401	2,4,5-TP	93-72-1	2.0	U	2.0	0.88	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.9	U	5.9	2.5	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203252
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:40 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-4 SDG#: PH110-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.9	U	5.9	2.3	1
12952	EFH (C15-C20)	n.a.	5.9	U	5.9	2.3	1
12952	EFH (C21-C30)	n.a.	5.9	U	5.9	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.9	U	5.9	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,200		46.5	8.38	1
06944	Antimony	7440-36-0	4.65	U	4.65	0.860	1
06935	Arsenic	7440-38-2	6.82		4.65	0.813	1
06946	Barium	7440-39-3	130		1.16	0.0383	1
06947	Beryllium	7440-41-7	0.953	J	1.16	0.0779	1
07914	Boron	7440-42-8	12.2		11.6	0.976	1
06949	Cadmium	7440-43-9	1.16	U	1.16	0.0883	1
01650	Calcium	7440-70-2	10,500		23.2	3.88	1
06951	Chromium	7440-47-3	39.4		3.49	0.186	1
06952	Cobalt	7440-48-4	10.7		1.16	0.115	1
06953	Copper	7440-50-8	18.4		2.32	0.337	1
01654	Iron	7439-89-6	37,700		232	21.0	5
06955	Lead	7439-92-1	11.3		3.49	0.581	1
01656	Lithium	7439-93-2	28.1		4.6	0.40	1
01657	Magnesium	7439-95-4	8,080		11.6	1.94	1
06958	Manganese	7439-96-5	449		1.16	0.0965	1
06960	Molybdenum	7439-98-7	0.435	J	2.32	0.198	1
06961	Nickel	7440-02-0	21.8		2.32	0.151	1
10145	Phosphorus	7723-14-0	346		11.6	3.36	1
01662	Potassium	7440-09-7	4,730		116	9.69	1
01667	Sodium	7440-23-5	106	J	116	19.4	1
06969	Tin	7440-31-5	3.44	J	11.6	0.256	1
06970	Titanium	7440-32-6	1,150		1.16	0.198	1
06971	Vanadium	7440-62-2	71.7		1.16	0.151	1
06972	Zinc	7440-66-6	83.5		4.65	0.232	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203252
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:40 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-4 SDG#: PH110-07

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
10146	Zirconium		7440-67-7	3.52	J	5.81	0.976	1
		SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium		7782-49-2	0.176	J	0.465	0.116	2
06142	Silver		7440-22-4	0.0439	J	0.232	0.0302	2
06144	Strontium		7440-24-6	45.9		0.465	0.0790	2
06145	Thallium		7440-28-0	0.403		0.232	0.0349	2
		SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A		7439-97-6	0.0149	J	0.0193	0.0116	1
Wet Chemistry		**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	2.0		1.2	0.47	1
		SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.8 C.		n.a.	7.95		0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	14.8		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 07:41	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/21/2013 04:38	Laura M Krieger	20.42
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326232461	09/19/2013 15:13	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326232461	09/19/2013 15:13	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132660014A	09/24/2013 18:56	Melissa McDermott	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/24/2013 21:36	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 15:40	Monica M Souders	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203252
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:40 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-4 SDG#: PH110-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132660014A	09/24/2013 01:00	Sherry L Morrow	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/25/2013 22:38	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132630637001	09/24/2013 07:16	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132630637001	09/22/2013 23:27	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132630637001B	09/25/2013 07:25	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132630637001A	09/25/2013 07:25	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132630637001A	09/25/2013 07:25	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132630637001A	09/25/2013 07:25	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638002	09/23/2013 04:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132630637001	09/22/2013 12:05	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638002	09/20/2013 10:30	Denise K Conners	1
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13267267201A	09/25/2013 17:54	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13267267201A	09/24/2013 11:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13262039404A	09/19/2013 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203252
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:40 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-4 SDG#: PH110-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402A	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203253
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:50 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-9 SDG#: PH110-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.89
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	41	U	41	14	1
10401	Dalapon	75-99-0	100	U	100	50	1
10401	2,4-DB	94-82-6	19	U	19	7.0	1
10401	Dicamba	1918-00-9	14	U	14	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	860	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	850	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.93	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.85	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.7	U	5.7	2.4	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203253
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:50 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-9 SDG#: PH110-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,100		44.1	7.95	1
06944	Antimony	7440-36-0	4.41	U	4.41	0.816	1
06935	Arsenic	7440-38-2	6.11		4.41	0.772	1
06946	Barium	7440-39-3	65.5		1.10	0.0364	1
06947	Beryllium	7440-41-7	0.556	J	1.10	0.0739	1
07914	Boron	7440-42-8	9.71	J	11.0	0.927	1
06949	Cadmium	7440-43-9	0.289	J	1.10	0.0838	1
01650	Calcium	7440-70-2	120,000		110	18.4	5
06951	Chromium	7440-47-3	24.2		3.31	0.177	1
06952	Cobalt	7440-48-4	6.28		1.10	0.109	1
06953	Copper	7440-50-8	13.3		2.21	0.320	1
01654	Iron	7439-89-6	23,600		44.1	3.99	1
06955	Lead	7439-92-1	7.20		3.31	0.552	1
01656	Lithium	7439-93-2	19.7		4.4	0.38	1
01657	Magnesium	7439-95-4	5,900		11.0	1.84	1
06958	Manganese	7439-96-5	414		1.10	0.0916	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	13.8		2.21	0.143	1
10145	Phosphorus	7723-14-0	482		11.0	3.19	1
01662	Potassium	7440-09-7	2,900		110	9.20	1
01667	Sodium	7440-23-5	139		110	18.4	1
06969	Tin	7440-31-5	2.68	J	11.0	0.243	1
06970	Titanium	7440-32-6	952		1.10	0.188	1
06971	Vanadium	7440-62-2	46.5		1.10	0.143	1
06972	Zinc	7440-66-6	55.1		4.41	0.221	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203253
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:50 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-9 SDG#: PH110-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
10146	Zirconium	7440-67-7	2.61	J	5.52	0.927	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.208	J	0.441	0.110	2
06142	Silver	7440-22-4	0.221	U	0.221	0.0287	2
06144	Strontium	7440-24-6	220		2.21	0.375	10
06145	Thallium	7440-28-0	0.270		0.221	0.0331	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0125	J	0.0187	0.0112	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	1.4		1.1	0.45	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.7 C.	n.a.	8.33		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	12.0		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 08:12	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/21/2013 05:14	Laura M Krieger	21.89
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326232461	09/19/2013 15:16	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326232461	09/19/2013 15:16	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132660014A	09/24/2013 19:22	Melissa McDermott	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/26/2013 16:37	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 15:59	Monica M Souders	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203253
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:50 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-9 SDG#: PH110-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132660014A	09/24/2013 01:00	Sherry L Morrow	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/25/2013 22:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132630637001	09/24/2013 07:48	Tara L Snyder	5
06951	Chromium	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132630637001	09/23/2013 00:12	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132630637001B	09/25/2013 07:52	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132630637001A	09/25/2013 07:52	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132630637001A	09/25/2013 08:06	Choon Y Tian	10
06145	Thallium	SW-846 6020A	1	132630637001A	09/25/2013 07:52	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638002	09/23/2013 05:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132630637001	09/22/2013 12:05	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638002	09/20/2013 10:30	Denise K Conners	1
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13267267201A	09/25/2013 19:01	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13267267201A	09/24/2013 11:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13262039404A	09/19/2013 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203253
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 07:50 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

513-9 SDG#: PH110-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402A	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-16.0-17.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203254
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51316 SDG#: PH110-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.28
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	39	U	39	13	1
10401	Dalapon	75-99-0	97	U	97	47	1
10401	2,4-DB	94-82-6	18	U	18	6.7	1
10401	Dicamba	1918-00-9	13	U	13	4.3	1
10401	Dinoseb	88-85-7	26	U	26	9.7	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.7	1
10401	MCPA	94-74-6	2,700	U	2,700	820	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	810	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.88	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.81	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.4	U	5.4	2.3	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-16.0-17.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203254
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51316 SDG#: PH110-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,700		43.2	7.79	1
06944	Antimony	7440-36-0	4.32	U	4.32	0.800	1
06935	Arsenic	7440-38-2	7.10		4.32	0.757	1
06946	Barium	7440-39-3	61.3		1.08	0.0357	1
06947	Beryllium	7440-41-7	0.638	J	1.08	0.0724	1
07914	Boron	7440-42-8	3.44	J	10.8	0.908	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0822	1
01650	Calcium	7440-70-2	5,650		21.6	3.61	1
06951	Chromium	7440-47-3	18.6		3.24	0.173	1
06952	Cobalt	7440-48-4	5.97		1.08	0.107	1
06953	Copper	7440-50-8	12.0		2.16	0.314	1
01654	Iron	7439-89-6	21,200		43.2	3.91	1
06955	Lead	7439-92-1	5.80		3.24	0.541	1
01656	Lithium	7439-93-2	18.9		4.3	0.37	1
01657	Magnesium	7439-95-4	4,400		10.8	1.81	1
06958	Manganese	7439-96-5	311		1.08	0.0897	1
06960	Molybdenum	7439-98-7	2.16	U	2.16	0.184	1
06961	Nickel	7440-02-0	12.1		2.16	0.141	1
10145	Phosphorus	7723-14-0	448		10.8	3.12	1
01662	Potassium	7440-09-7	2,120		108	9.02	1
01667	Sodium	7440-23-5	92.5	J	108	18.1	1
06969	Tin	7440-31-5	2.69	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,190		1.08	0.184	1
06971	Vanadium	7440-62-2	34.8		1.08	0.141	1
06972	Zinc	7440-66-6	56.1		4.32	0.216	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-16.0-17.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203254
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51316 SDG#: PH110-09

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
10146	Zirconium		7440-67-7	1.10	J	5.41	0.908	1
		SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium		7782-49-2	0.432	U	0.432	0.108	2
06142	Silver		7440-22-4	0.216	U	0.216	0.0281	2
06144	Strontium		7440-24-6	24.3		0.432	0.0735	2
06145	Thallium		7440-28-0	0.376		0.216	0.0324	2
		SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A		7439-97-6	0.0103	J	0.0170	0.0102	1
Wet Chemistry		**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	1.2		1.1	0.43	1
		SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.8 C.		n.a.	8.31		0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	7.5		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 08:43	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/21/2013 05:50	Laura M Krieger	23.28
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326232461	09/19/2013 15:12	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326232461	09/19/2013 15:12	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132660014A	09/24/2013 19:49	Melissa McDermott	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132620017A	09/26/2013 16:50	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 16:17	Monica M Souders	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-16.0-17.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203254
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51316 SDG#: PH110-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132660014A	09/24/2013 01:00	Sherry L Morrow	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132620017A	09/20/2013 06:35	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/25/2013 23:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132630637001	09/23/2013 00:17	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132630637001B	09/25/2013 07:54	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132630637001A	09/25/2013 07:54	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132630637001A	09/25/2013 07:54	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132630637001A	09/25/2013 07:54	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638002	09/23/2013 05:16	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132630637001	09/22/2013 12:05	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638002	09/20/2013 10:30	Denise K Conners	1
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13267267201A	09/25/2013 19:18	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13267267201A	09/24/2013 11:00	Carolyn M Mastropietro	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13262039404A	09/19/2013 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA5D-SB-16.0-17.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203254
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51316 SDG#: PH110-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402A	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203255
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:50 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

514-0 SDG#: PH110-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.5	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203255
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:50 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

514-0 SDG#: PH110-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,200		44.8	8.07	1
06944	Antimony	7440-36-0	4.48	U	4.48	0.828	1
06935	Arsenic	7440-38-2	6.41		4.48	0.783	1
06946	Barium	7440-39-3	138		1.12	0.0369	1
06947	Beryllium	7440-41-7	0.979	J	1.12	0.0750	1
07914	Boron	7440-42-8	9.56	J	11.2	0.940	1
06949	Cadmium	7440-43-9	1.12	U	1.12	0.0851	1
01650	Calcium	7440-70-2	11,400		22.4	3.74	1
06951	Chromium	7440-47-3	37.7		3.36	0.179	1
06952	Cobalt	7440-48-4	10.4		1.12	0.111	1
06953	Copper	7440-50-8	18.6		2.24	0.325	1
01654	Iron	7439-89-6	36,600		224	20.3	5
06955	Lead	7439-92-1	10.3		3.36	0.560	1
01656	Lithium	7439-93-2	27.1		4.5	0.38	1
01657	Magnesium	7439-95-4	7,930		11.2	1.87	1
06958	Manganese	7439-96-5	460		1.12	0.0929	1
06960	Molybdenum	7439-98-7	2.24	U	2.24	0.190	1
06961	Nickel	7440-02-0	22.3		2.24	0.145	1
10145	Phosphorus	7723-14-0	300		11.2	3.23	1
01662	Potassium	7440-09-7	4,930		112	9.33	1
01667	Sodium	7440-23-5	173		112	18.7	1
06969	Tin	7440-31-5	3.14	J	11.2	0.246	1
06970	Titanium	7440-32-6	1,240		1.12	0.190	1
06971	Vanadium	7440-62-2	68.9		1.12	0.145	1
06972	Zinc	7440-66-6	77.7		4.48	0.224	1
10146	Zirconium	7440-67-7	4.19	J	5.60	0.940	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.187	J	0.448	0.112	2
06142	Silver	7440-22-4	0.0455	J	0.224	0.0291	2
06144	Strontium	7440-24-6	51.3		0.448	0.0761	2
06145	Thallium	7440-28-0	0.422		0.224	0.0336	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183	U	0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.8 C.	n.a.	8.14		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.4		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203255
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:50 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

514-0 SDG#: PH110-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203255
LL Group # 1419965
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

514-0 SDG#: PH110-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0756 JBQ	1.10	0.0513	1
11031	12378-PeCDD	40321-76-4	0.335 JBQ	5.51	0.0337	1
11031	123478-HxCDD	39227-28-6	0.166 JBQ	5.51	0.0288	1
11031	123678-HxCDD	57653-85-7	0.300 JB	5.51	0.0311	1
11031	123789-HxCDD	19408-74-3	0.384 JB	5.51	0.0288	1
11031	1234678-HpCDD	35822-46-9	0.281 JB	5.51	0.0261	1
11031	OCDD	3268-87-9	0.748 JB	11.0	0.0276	1
11031	2378-TCDF	51207-31-9	0.0607 JQ	1.10	0.0443	1
11031	12378-PeCDF	57117-41-6	0.352 JB	5.51	0.0207	1
11031	23478-PeCDF	57117-31-4	0.276 JBQ	5.51	0.0216	1
11031	123478-HxCDF	70648-26-9	0.223 JBQ	5.51	0.0265	1
11031	123678-HxCDF	57117-44-9	0.214 JB	5.51	0.0231	1
11031	123789-HxCDF	72918-21-9	0.566 JB	5.51	0.0272	1
11031	234678-HxCDF	60851-34-5	0.147 JB	5.51	0.0257	1
11031	1234678-HpCDF	67562-39-4	0.135 JB	5.51	0.00982	1
11031	1234789-HpCDF	55673-89-7	0.0947 JBQ	5.51	0.0184	1
11031	OCDF	39001-02-0	0.308 JBQ	11.0	0.0398	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.176			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	65	28 - 130
13C12-123789-HxCDD	66	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	62	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	51	26 - 152
13C12-123678-HxCDF	58	26 - 123
13C12-234678-HxCDF	53	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	47	26 - 138
13C12-OCDF	45	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203255
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:50 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

514-0 SDG#: PH110-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203255
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:50 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

514-0 SDG#: PH110-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 09:15	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 16:35	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/25/2013 23:42	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 18:15	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132630637001	09/24/2013 07:59	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132630637001	09/23/2013 00:21	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132630637001B	09/25/2013 07:56	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132630637001A	09/25/2013 07:56	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132630637001A	09/25/2013 07:56	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132630637001A	09/25/2013 07:56	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203255
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 08:50 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

514-0 SDG#: PH110-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132620638002	09/23/2013 05:18	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132630637001	09/22/2013 12:05	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638002	09/20/2013 10:30	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13262039404A	09/19/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402A	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203256
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 09:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

514-4 SDG#: PH110-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.78	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.78	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.78	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.78	1
12969	2-Methylnaphthalene	91-57-6	0.85	J	1.9	0.78	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.0	J	1.9	0.78	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	21.66
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203256
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 09:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

514-4 SDG#: PH110-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,100		44.8	8.08	1
06944	Antimony	7440-36-0	4.48	U	4.48	0.829	1
06935	Arsenic	7440-38-2	5.95		4.48	0.784	1
06946	Barium	7440-39-3	110		1.12	0.0370	1
06947	Beryllium	7440-41-7	0.810	J	1.12	0.0751	1
07914	Boron	7440-42-8	10.6	J	11.2	0.941	1
06949	Cadmium	7440-43-9	0.149	J	1.12	0.0852	1
01650	Calcium	7440-70-2	47,300		22.4	3.74	1
06951	Chromium	7440-47-3	31.7		3.36	0.179	1
06952	Cobalt	7440-48-4	9.51		1.12	0.111	1
06953	Copper	7440-50-8	17.5		2.24	0.325	1
01654	Iron	7439-89-6	32,100		224	20.3	5
06955	Lead	7439-92-1	9.78		3.36	0.560	1
01656	Lithium	7439-93-2	25.0		4.5	0.38	1
01657	Magnesium	7439-95-4	7,240		11.2	1.87	1
06958	Manganese	7439-96-5	435		1.12	0.0930	1
06960	Molybdenum	7439-98-7	2.24	U	2.24	0.191	1
06961	Nickel	7440-02-0	20.0		2.24	0.146	1
10145	Phosphorus	7723-14-0	474		11.2	3.24	1
01662	Potassium	7440-09-7	3,450		112	9.35	1
01667	Sodium	7440-23-5	236		112	18.7	1
06969	Tin	7440-31-5	2.98	J	11.2	0.247	1
06970	Titanium	7440-32-6	1,040		1.12	0.191	1
06971	Vanadium	7440-62-2	59.3		1.12	0.146	1
06972	Zinc	7440-66-6	70.7		4.48	0.224	1
10146	Zirconium	7440-67-7	3.34	J	5.60	0.941	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.448	U	0.448	0.112	2
06142	Silver	7440-22-4	0.0401	J	0.224	0.0291	2
06144	Strontium	7440-24-6	100		0.448	0.0762	2
06145	Thallium	7440-28-0	0.369		0.224	0.0336	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0124	J	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.29		0.0100	0.0100	1

The pH was measured in water at 21.7 C.

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203256
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 09:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

514-4 SDG#: PH110-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	14.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 09:46	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/21/2013 06:25	Laura M Krieger	21.66
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326232461	09/19/2013 15:15	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326232461	09/19/2013 15:15	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 16:54	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/26/2013 00:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132630637001	09/24/2013 08:02	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203256
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 09:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

514-4 SDG#: PH110-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132630637001	09/23/2013 00:25	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132630637001B	09/25/2013 07:59	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132630637001A	09/25/2013 07:59	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132630637001A	09/25/2013 07:59	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132630637001A	09/25/2013 07:59	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638002	09/23/2013 05:20	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132630637001	09/22/2013 12:05	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638002	09/20/2013 10:30	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13262039404A	09/19/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402A	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203257
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 13:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

509-0 SDG#: PH110-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.6	J	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	2.3		1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.3	J	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	0.89	J	1.8	0.74	1
12969	Naphthalene	91-20-3	1.6	J	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.1	J	1.8	0.74	1
12969	Pyrene	129-00-0	0.90	J	1.8	0.74	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	6.8		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	12		11	4.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203257
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 13:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

509-0 SDG#: PH110-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,100		43.0	7.74	1
06944	Antimony	7440-36-0	4.30	U	4.30	0.795	1
06935	Arsenic	7440-38-2	5.83		4.30	0.752	1
06946	Barium	7440-39-3	127		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.946	J	1.07	0.0720	1
07914	Boron	7440-42-8	10.3	J	10.7	0.902	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0816	1
01650	Calcium	7440-70-2	6,400		21.5	3.59	1
06951	Chromium	7440-47-3	36.3		3.22	0.172	1
06952	Cobalt	7440-48-4	9.98		1.07	0.106	1
06953	Copper	7440-50-8	18.7		2.15	0.311	1
01654	Iron	7439-89-6	33,600		215	19.4	5
06955	Lead	7439-92-1	11.0		3.22	0.537	1
01656	Lithium	7439-93-2	22.3		4.3	0.37	1
01657	Magnesium	7439-95-4	6,870		10.7	1.79	1
06958	Manganese	7439-96-5	482		1.07	0.0891	1
06960	Molybdenum	7439-98-7	0.232	J	2.15	0.183	1
06961	Nickel	7440-02-0	21.1		2.15	0.140	1
10145	Phosphorus	7723-14-0	332		10.7	3.10	1
01662	Potassium	7440-09-7	5,560		107	8.96	1
01667	Sodium	7440-23-5	89.8	J	107	17.9	1
06969	Tin	7440-31-5	2.76	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,080		1.07	0.183	1
06971	Vanadium	7440-62-2	65.9		1.07	0.140	1
06972	Zinc	7440-66-6	72.6		4.30	0.215	1
10146	Zirconium	7440-67-7	3.79	J	5.37	0.902	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.268	J	0.430	0.107	2
06142	Silver	7440-22-4	0.0515	J	0.215	0.0279	2
06144	Strontium	7440-24-6	35.4		0.430	0.0730	2
06145	Thallium	7440-28-0	0.440		0.215	0.0322	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0129	J	0.0174	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	7.77		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203257
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 13:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

509-0 SDG#: PH110-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203257
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 13:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

509-0 SDG#: PH110-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0485	JB	1.07	0.0445	1
11031	12378-PeCDD	40321-76-4	0.210	JBQ	5.35	0.0334	1
11031	123478-HxCDD	39227-28-6	0.0708	JBQ	5.35	0.0247	1
11031	123678-HxCDD	57653-85-7	0.352	JB	5.35	0.0260	1
11031	123789-HxCDD	19408-74-3	0.501	JB	5.35	0.0240	1
11031	1234678-HpCDD	35822-46-9	0.639	JBQ	5.35	0.0267	1
11031	OCDD	3268-87-9	4.32	JB	10.7	0.0168	1
11031	2378-TCDF	51207-31-9	0.116	J	1.07	0.0415	1
11031	12378-PeCDF	57117-41-6	0.447	JB	5.35	0.0191	1
11031	23478-PeCDF	57117-31-4	0.182	JBQ	5.35	0.0191	1
11031	123478-HxCDF	70648-26-9	0.108	JB	5.35	0.0217	1
11031	123678-HxCDF	57117-44-9	0.0822	JB	5.35	0.0190	1
11031	123789-HxCDF	72918-21-9	0.891	JB	5.35	0.0211	1
11031	234678-HxCDF	60851-34-5	0.0808	JBQ	5.35	0.0192	1
11031	1234678-HpCDF	67562-39-4	0.194	JB	5.35	0.0108	1
11031	1234789-HpCDF	55673-89-7	0.0828	JBQ	5.35	0.0175	1
11031	OCDF	39001-02-0	0.538	JB	10.7	0.0319	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.270				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203257
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 13:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

509-0 SDG#: PH110-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203257
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 13:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

509-0 SDG#: PH110-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 10:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 17:12	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/26/2013 01:49	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 19:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132630637001	09/24/2013 08:06	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132630637001	09/23/2013 00:30	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132630637001B	09/25/2013 08:01	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132630637001A	09/25/2013 08:01	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132630637001A	09/25/2013 08:01	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132630637001A	09/25/2013 08:01	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203257
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 13:00 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

509-0 SDG#: PH110-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132620638002	09/23/2013 05:22	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132630637001	09/22/2013 12:05	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638002	09/20/2013 10:30	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13262039404A	09/19/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402A	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203258
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 13:15 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

509-4 SDG#: PH110-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.0	J	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.0	J	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.19
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203258
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 13:15 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

509-4 SDG#: PH110-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,300		46.0	8.29	1
06944	Antimony	7440-36-0	4.60	U	4.60	0.851	1
06935	Arsenic	7440-38-2	6.74		4.60	0.805	1
06946	Barium	7440-39-3	140		1.15	0.0379	1
06947	Beryllium	7440-41-7	0.981	J	1.15	0.0770	1
07914	Boron	7440-42-8	11.0	J	11.5	0.966	1
06949	Cadmium	7440-43-9	1.15	U	1.15	0.0874	1
01650	Calcium	7440-70-2	9,170		23.0	3.84	1
06951	Chromium	7440-47-3	38.4		3.45	0.184	1
06952	Cobalt	7440-48-4	10.6		1.15	0.114	1
06953	Copper	7440-50-8	18.5		2.30	0.333	1
01654	Iron	7439-89-6	38,200		230	20.8	5
06955	Lead	7439-92-1	10.7		3.45	0.575	1
01656	Lithium	7439-93-2	27.1		4.6	0.39	1
01657	Magnesium	7439-95-4	8,120		11.5	1.92	1
06958	Manganese	7439-96-5	461		1.15	0.0954	1
06960	Molybdenum	7439-98-7	2.30	U	2.30	0.195	1
06961	Nickel	7440-02-0	23.0		2.30	0.149	1
10145	Phosphorus	7723-14-0	321		11.5	3.32	1
01662	Potassium	7440-09-7	3,600		115	9.59	1
01667	Sodium	7440-23-5	162		115	19.2	1
06969	Tin	7440-31-5	3.30	J	11.5	0.253	1
06970	Titanium	7440-32-6	1,020		1.15	0.195	1
06971	Vanadium	7440-62-2	69.6		1.15	0.149	1
06972	Zinc	7440-66-6	76.4		4.60	0.230	1
10146	Zirconium	7440-67-7	3.27	J	5.75	0.966	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.146	J	0.460	0.115	2
06142	Silver	7440-22-4	0.0371	J	0.230	0.0299	2
06144	Strontium	7440-24-6	54.1		0.460	0.0782	2
06145	Thallium	7440-28-0	0.382		0.230	0.0345	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0134	J	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.06		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203258
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 13:15 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

509-4 SDG#: PH110-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	13.9	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 10:48	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13263A34A	09/21/2013 07:01	Laura M Krieger	21.19
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326232461	09/19/2013 15:14	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326232461	09/19/2013 15:14	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 17:31	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/26/2013 00:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132630637001	09/24/2013 08:09	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7203258
LL Group # 1419965
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/18/2013 13:15 by VC

Submitted: 09/19/2013 09:10
Reported: 10/03/2013 15:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

509-4 SDG#: PH110-13*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132630637001	09/23/2013 00:34	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132630637001B	09/25/2013 08:04	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132630637001A	09/25/2013 08:04	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132630637001A	09/25/2013 08:04	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132630637001A	09/25/2013 08:04	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132620638002	09/23/2013 05:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132630637001	09/22/2013 12:05	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132620638002	09/20/2013 10:30	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13262039404A	09/19/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402A	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13266WAC026	Sample number(s): 7203246-7203247									
Acenaphthene	0.050	U	0.050	0.010	ug/l	90	96	77-118	7	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	91	97	80-123	7	30
Anthracene	0.050	U	0.050	0.010	ug/l	92	98	78-123	6	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	110	128*	73-127	15	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	93	98	72-120	5	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	101	106	79-136	5	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	87	94	70-130	8	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	109	125	64-130	13	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	97	101	73-131	4	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	96	111	40-138	14	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	110	117	64-141	6	30
Chrysene	0.050	U	0.050	0.010	ug/l	95	102	76-125	7	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	110	124	58-131	12	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	103	111	64-128	8	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	88	97	23-139	9	30
Bis(2-Ethylhexyl)phthalate	1.0	U	1.0	0.050	ug/l	110	119	70-143	8	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	98	104	79-124	6	30
Fluorene	0.050	U	0.050	0.010	ug/l	93	99	74-115	6	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	104	118	62-130	13	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	95	101	80-126	6	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	93	100	81-124	7	30
Naphthalene	0.050	U	0.050	0.030	ug/l	94	101	75-120	7	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	70	74	36-120	6	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	109	104	57-145	5	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	94	100	75-120	6	30
Pyrene	0.050	U	0.050	0.010	ug/l	106	122	71-130	15	30
Batch number: 13267SLE026	Sample number(s): 7203249-7203258									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	110		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	107		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	106		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	89		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	97		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	103		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	117		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	107		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	101		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	101		85-122		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	105		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	109		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	99		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	105		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	113		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	113		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	104		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	85		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	101		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	102		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		79-112		
Batch number: 13262A94A	Sample number(s): 7203246-7203248									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	119	121	75-135	2	30
Batch number: 13263A34A	Sample number(s): 7203250,7203252-7203254,7203256,7203258									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	81		67-119		
Batch number: 132640008A	Sample number(s): 7203246-7203247									
2,4-D	0.50	U	0.50	0.16	ug/l	104	101	68-155	2	30
Dalapon	1.3	U	1.3	0.25	ug/l	79	73	25-119	9	30
2,4-DB	1.0	U	1.0	0.30	ug/l	101	98	50-163	3	30
Dicamba	0.30	U	0.30	0.080	ug/l	96	96	64-163	0	30
Dinoseb	0.50	U	0.50	0.12	ug/l	114	91	16-163	22	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	125	122	89-162	3	30
MCPA	200 U		200.	50	ug/l	85	85	68-154	0	30
MCPP	200 U		200.	50	ug/l	97	97	46-173	0	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	104	104	71-174	0	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	104	104	58-155	0	30
Batch number: 132660014A	Sample number(s): 7203251-7203254									
2,4-D	36	U	36.	12	ug/kg	88		59-122		
Dalapon	90	U	90.	44	ug/kg	44		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	91		54-131		
Dicamba	12	U	12.	4.0	ug/kg	84		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	23		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	114		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	80		56-133		
MCPP (Mecoprop)	2,500 U		2,500.	750	ug/kg	83		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	102		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	90		63-130		
Batch number: 132620017A	Sample number(s): 7203251-7203254									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	95		85-115		
Batch number: 132670002A	Sample number(s): 7203246-7203247									
6b Perchlorate (Method 6850)	1.0	U	1.0	0.20	ug/l	95		85-115		
Batch number: 132630007A	Sample number(s): 7203246-7203247									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	56	44	35-84	25	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1016	0.40	U	0.40	0.080	ug/l	85	93	67-117	9	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	92	96	67-128	4	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132630008A	Sample number(s): 7203246-7203247									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	83	89	45-125	7	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	87	87	51-139	0	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	97	96	57-127	2	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	88	85	57-133	4	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	93	89	55-145	4	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	99	99	58-130	0	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	82	78	45-140	5	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	98	92	52-133	6	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	96	93	60-135	3	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	94	89	56-128	5	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	94	88	53-123	7	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	92	87	51-130	5	30
Endrin	0.016	U	0.016	0.0065	ug/l	57	72	43-139	23	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	100	85	50-122	16	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	102	87	51-133	16	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	69	67	48-130	2	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	98	94	65-128	4	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	80	76	40-150	5	30
Mirex	0.040	U	0.040	0.0080	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132680014A	Sample number(s): 7203249-7203250									
Aldrin	0.83	U	0.83	0.17	ug/kg	91		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	99		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	95		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	94		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	96		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	97		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	99		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	69		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	101		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	93		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	102		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	104		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	98		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	99		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	98		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	93		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	97		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	100		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132690019A	Sample number(s): 7203249-7203258									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	96*	94*	62-87	2	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	105		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	118		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132670026A	Sample number(s): 7203249-7203258									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	90		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	96		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	96		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	85		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 132670027A	Sample number(s): 7203246-7203247									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	93	92	70-130	1	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	99	97	70-130	2	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	95	95	70-130	1	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	80	69*	70-130	15	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	76	73	70-130	4	30
Batch number: 132620638002	Sample number(s): 7203249-7203258									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	107		85-120		
Batch number: 132630637001	Sample number(s): 7203249-7203258									
Aluminum	40.0	U	40.0	7.21	mg/kg	101		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	106		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	99		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	97		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	96		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	93		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	99		80-120		
Calcium	8.73	J	20.0	3.34	mg/kg	99		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	99		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	100		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	100		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	99		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	99		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	99		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	98		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	98		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	101		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	101		80-120		
Potassium	100 U		100.	8.34	mg/kg	98		80-120		
Sodium	100 U		100.	16.7	mg/kg	97		80-120		
Tin	1.49	J	10.0	0.220	mg/kg	102		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	100		80-120		
Zinc	0.340	J	4.00	0.200	mg/kg	99		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	105		80-120		
Batch number: 132630637001A	Sample number(s): 7203249-7203258									
Silver	0.200	U	0.200	0.0260	mg/kg	102		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	108		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	106		80-120		
Batch number: 132630637001B	Sample number(s): 7203249-7203258									
Selenium	0.400	U	0.400	0.100	mg/kg	112		80-120		
Batch number: 132665713003	Sample number(s): 7203246-7203247									
3b Mercury 7470A	0.00020	U	0.00020	0.00006 0	mg/l	106	103	90-115	3	20
Batch number: 132700635002	Sample number(s): 7203246-7203247									
Aluminum	0.400	U	0.400	0.0828	mg/l	104	104	80-120	0	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	104	102	80-120	2	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	103	102	80-120	1	20
Barium	0.0100	U	0.0100	0.00033	mg/l	101	100	80-120	1	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	97	96	80-120	1	20
Boron	0.100	U	0.100	0.0084	mg/l	96	94	80-120	2	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	105	103	80-120	2	20
Calcium	0.0618	J	0.400	0.0334	mg/l	103	101	80-120	2	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	102	101	80-120	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	105	104	80-120	1	20
Copper	0.0200	U	0.0200	0.0027	mg/l	102	102	80-120	1	20
Iron	0.400	U	0.400	0.0430	mg/l	101	99	80-120	2	20
Lead	0.0300	U	0.0300	0.0047	mg/l	109	107	80-120	2	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	105	103	80-120	2	20
Magnesium	0.200	U	0.200	0.0167	mg/l	102	100	80-120	2	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	102	101	80-120	1	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	103	102	80-120	1	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	106	105	80-120	1	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	103	102	80-120	1	20
Potassium	1.00	U	1.00	0.0980	mg/l	103	101	80-120	2	20
Sodium	2.00	U	2.00	0.167	mg/l	102	100	80-120	2	20
Tin	0.0400	U	0.0400	0.0029	mg/l	101	100	80-120	1	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	104	102	80-120	2	20
Vanadium	0.0100	U	0.0100	0.0020	mg/l	103	102	80-120	1	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	102	101	80-120	1	20
Zirconium	0.100	U	0.100	0.0084	mg/l	105	103	80-120	2	20
Batch number: 132700639001A	Sample number(s): 7203246-7203247									
Silver	0.0010	U	0.0010	0.00011	mg/l	103	101	90-115	2	20
Strontium	0.0020	U	0.0020	0.00034	mg/l	103	102	80-120	1	20
Thallium	0.0010	U	0.0010	0.00015	mg/l	100	102	80-120	2	20
Batch number: 132700639001B	Sample number(s): 7203246-7203247									
Selenium	0.0040	U	0.0040	0.00050	mg/l	105	102	80-120	3	20
Batch number: 13262987151B	Sample number(s): 7203246-7203247									
2b Chromium VI by EPA 7199	0.050	U	0.050	0.015	ug/l	104	104	90-110	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13267267201A	Sample number(s): 7203251-7203254									
1a Anions by 300.0 - Fluoride	1.0	U	1.0	0.40	mg/kg	102		90-110		
Batch number: 13268347601C	Sample number(s): 7203246-7203247									
1b Anions by 300.0 - Fluoride	0.10	U	0.10	0.080	mg/l	97	98	90-110	2	20
Batch number: 13262005104A	Sample number(s): 7203246-7203247									
28b pH (9040B and 9040C)						101		99-103		
Batch number: 13262039404A	Sample number(s): 7203249-7203258									
15a pH by 9045D						99		95-105		
Batch number: 13268162402A	Sample number(s): 7203249-7203258									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13267004	Sample number(s): 7203246-7203247									
2378-TCDD	0.904	J	2.00	0.521	pg/l	93		60-150		
12378-PeCDD	0.685	J	10.0	0.331	pg/l	96		60-150		
123478-HxCDD	0.300	J	10.0	0.215	pg/l	93		60-150		
123678-HxCDD	0.518	J	10.0	0.227	pg/l	97		60-150		
123789-HxCDD	0.348	J	10.0	0.204	pg/l	94		60-150		
1234678-HpCDD	0.963	J	10.0	0.201	pg/l	94		60-150		
OCDD	1.39	J	20.0	0.224	pg/l	91		60-150		
2378-TCDF	2.00	U	2.00	0.391	pg/l	92		60-150		
12378-PeCDF	0.645	J	10.0	0.183	pg/l	94		60-150		
23478-PeCDF	0.240	J	10.0	0.172	pg/l	93		60-150		
123478-HxCDF	0.389	J	10.0	0.190	pg/l	96		60-150		
123678-HxCDF	0.407	J	10.0	0.187	pg/l	96		60-150		
123789-HxCDF	0.534	J	10.0	0.205	pg/l	96		60-150		
234678-HxCDF	0.311	J	10.0	0.180	pg/l	96		60-150		
1234678-HpCDF	0.862	J	10.0	0.0935	pg/l	97		60-150		
1234789-HpCDF	0.625	J	10.0	0.107	pg/l	95		60-150		
OCDF	1.37	J	20.0	0.305	pg/l	96		60-150		
Batch number: 13268002	Sample number(s): 7203249,7203251,7203255,7203257									
2378-TCDD	0.104	J	1.00	0.0524	ng/kg	96		67-158		
12378-PeCDD	0.103	J	5.00	0.0316	ng/kg	99		70-142		
123478-HxCDD	0.0483	J	5.00	0.0190	ng/kg	97		70-164		
123678-HxCDD	0.0406	J	5.00	0.0203	ng/kg	101		76-134		
123789-HxCDD	0.0644	J	5.00	0.0183	ng/kg	95		64-162		
1234678-HpCDD	0.127	J	5.00	0.0212	ng/kg	96		70-140		
OCDD	0.212	J	10.0	0.0188	ng/kg	94		78-144		
2378-TCDF	1.00	U	1.00	0.0410	ng/kg	102		75-158		
12378-PeCDF	0.0673	J	5.00	0.0183	ng/kg	95		80-134		
23478-PeCDF	0.0538	J	5.00	0.0194	ng/kg	97		68-160		
123478-HxCDF	0.0573	J	5.00	0.0218	ng/kg	97		72-134		
123678-HxCDF	0.0517	J	5.00	0.0189	ng/kg	99		84-130		
123789-HxCDF	0.0692	J	5.00	0.0252	ng/kg	101		78-130		
234678-HxCDF	0.0444	J	5.00	0.0200	ng/kg	97		70-156		
1234678-HpCDF	0.0505	J	5.00	0.00830	ng/kg	96		82-122		
1234789-HpCDF	0.0860	J	5.00	0.0147	ng/kg	98		78-138		
OCDF	0.223	J	10.0	0.0383	ng/kg	96		63-170		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13267004	Sample number(s): 7203246-7203247								
TEQ WHO 2005 - EDLx0.0	0.139			pg/l					
Batch number: 13268002	Sample number(s): 7203249,7203251,7203255,7203257								
TEQ WHO 2005 - EDLx0.0	0.00870			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13267SLE026	Sample number(s): 7203249-7203258 UNSPK: 7203249								
Acenaphthene	104	109	48-127	4	30				
Acenaphthylene	103	108	49-121	5	30				
Anthracene	102	101	52-126	1	30				
Benzo(a)anthracene	101	103	44-143	2	30				
Benzo(a)pyrene	90	92	44-140	2	30				
Benzo(b)fluoranthene	91	92	26-142	0	30				
Benzo(e)pyrene	82	84	70-130	2	30				
Benzo(g,h,i)perylene	88	89	33-141	2	30				
Benzo(k)fluoranthene	94	100	54-142	5	30				
Butylbenzylphthalate	108	108	49-151	0	30				
Di-n-butylphthalate	117	120	52-147	2	30				
Chrysene	92	92	29-148	0	30				
Dibenz(a,h)anthracene	97	99	20-137	2	30				
Diethylphthalate	99	103	43-145	3	30				
Dimethylphthalate	97	100	58-129	3	30				
Bis(2-Ethylhexyl)phthalate	117	112	39-167	4	30				
Fluoranthene	99	101	40-148	1	30				
Fluorene	91	94	51-137	3	30				
Indeno(1,2,3-cd)pyrene	94	95	17-136	2	30				
1-Methylnaphthalene	111	110	50-131	1	30				
2-Methylnaphthalene	110	109	35-152	1	30				
Naphthalene	103	102	31-148	1	30				
N-Nitrosodimethylamine	82	83	48-113	1	30				
Di-n-octylphthalate	105	107	52-162	1	30				
Phenanthrene	89	87	29-142	2	30				
Pyrene	90	91	26-143	0	30				
Batch number: 13263A34A	Sample number(s): 7203250,7203252-7203254,7203256,7203258 UNSPK: P201708								
11a TPH by EPA 8015B GRO	74	80	69-123	19	30				
Batch number: 132660014A	Sample number(s): 7203251-7203254 UNSPK: P196433								
2,4-D	88	87	42-143	1	35				
Dalapon	30	20	16-98	37	50				
2,4-DB	95	8*	10-179	171*	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dicamba	119	72	55-133	50	50				
Dinoseb	0*	0*	10-52	0	35				
2,4-DP (Dichlorprop)	119	113	32-171	5	50				
MCPA	104	100	23-169	4	50				
MCPP (Mecoprop)	92	90	24-164	2	50				
2,4,5-T	100	98	12-172	1	35				
2,4,5-TP	92	9*	10-142	163*	35				
Batch number: 132620017A	Sample number(s): 7203251-7203254 UNSPK: P196426								
6a Perchlorate (Method 6850)	96	99	80-120	3	20				
Batch number: 132670002A	Sample number(s): 7203246-7203247 UNSPK: 7203246								
6b Perchlorate (Method 6850)	95	95	80-120	0	20				
Batch number: 132680014A	Sample number(s): 7203249-7203250 UNSPK: P204677								
Aldrin	86	87	16-126	1	50				
Alpha BHC	86	86	14-140	0	50				
Beta BHC	91	85	42-133	6	50				
Gamma BHC - Lindane	81	83	30-137	3	50				
p,p-DDD	88	90	43-149	2	50				
p,p-DDE	91	85	35-152	6	50				
p,p-DDT	89	85	12-193	4	50				
Delta BHC	91	92	13-153	2	50				
Dieldrin	92	90	41-153	2	50				
Endosulfan I	85	84	26-146	1	50				
Endosulfan II	90	87	34-141	3	50				
Endosulfan Sulfate	92	92	10-181	0	50				
Endrin	89	89	30-152	0	50				
Endrin Aldehyde	87	86	23-138	0	50				
Endrin Ketone	87	86	30-148	1	50				
Heptachlor	88	89	16-152	1	50				
Heptachlor Epoxide	88	88	33-144	1	50				
Methoxychlor	91	91	41-161	0	50				
Batch number: 132690019A	Sample number(s): 7203249-7203258 UNSPK: P208982								
PCB-1016	102	108	41-135	5	50				
PCB-1260	113	123	40-134	9	50				
Batch number: 132670026A	Sample number(s): 7203249-7203258 UNSPK: 7203249								
EFH (C12-C14)	94	88	49-123	7	20				
EFH (C15-C20)	174*	187*	49-123	6	20				
EFH (C21-C30)	100	104	49-123	1	20				
EFH (C30-C40)	116	165*	49-123	13	20				
EFH (C8-C11)	82	77	49-123	6	20				
Batch number: 132620638002	Sample number(s): 7203249-7203258 UNSPK: 7203253 BKG: 7203253								
3a Mercury 7471A	108	107	65-135	0	20	0.0110 J	0.0165 U	200* (1)	20
Batch number: 132630637001	Sample number(s): 7203249-7203258 UNSPK: 7203252 BKG: 7203252								
Aluminum	3787 (2)	4234 (2)	75-125	3	20	24,900	23,200	7	20
Antimony	63*	64*	75-125	1	20	3.96 U	3.96 U	0 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Arsenic	96	89	75-125	6	20	5.81	5.82	0 (1)	20
Barium	97	96	75-125	1	20	110	109	1	20
Beryllium	97	95	75-125	1	20	0.812 J	0.794 J	2 (1)	20
Boron	93	93	75-125	0	20	10.4	9.32 J	11 (1)	20
Cadmium	85	87	75-125	2	20	0.990 U	0.990 U	0 (1)	20
Calcium	256 (2)	264 (2)	75-125	0	20	8,930	10,300	15	20
Chromium	121	121	75-125	0	20	33.6	32.1	4	20
Cobalt	89	87	75-125	2	20	9.11	9.34	2	20
Copper	103	102	75-125	0	20	15.7	15.5	1	20
Iron	13196 (2)	1049 (2)	75-125	31*	20	32,100	31,300	3	20
Lead	99	85	75-125	9	20	9.61	9.62	0 (1)	20
Lithium	99	100	75-125	1	20	24.0	22.9	4	20
Magnesium	376 (2)	537 (2)	75-125	4	20	6,880	6,680	3	20
Manganese	228 (2)	169 (2)	75-125	6	20	383	392	2	20
Molybdenum	91	90	75-125	1	20	0.370 J	1.98 U	200* (1)	20
Nickel	94	90	75-125	3	20	18.6	18.5	1	20
Phosphorus	150*	113	75-125	9	20	295	302	3	20
Potassium	143 (2)	153 (2)	75-125	2	20	4,030	3,860	4	20
Sodium	94	94	75-125	0	20	90.3 J	90.6 J	0 (1)	20
Tin	87	86	75-125	1	20	2.93 J	2.67 J	9 (1)	20
Titanium	643 (2)	655 (2)	75-125	1	20	979	877	11	20
Vanadium	142*	124	75-125	7	20	61.1	58.1	5	20
Zinc	94	92	75-125	1	20	71.2	69.0	3	20
Zirconium	99	99	75-125	0	20	3.00 J	4.76 J	45* (1)	20
Batch number: 132630637001A	Sample number(s): 7203249-7203258 UNSPK: 7203252 BKG: 7203252								
Silver	97	103	75-125	7	20	0.0374 J	0.0319 J	16 (1)	20
Strontium	83 (2)	151 (2)	75-125	11	20	39.1	39.6	1	20
Thallium	91	109	75-125	10	20	0.343	0.318	8 (1)	20
Batch number: 132630637001B	Sample number(s): 7203249-7203258 UNSPK: 7203252 BKG: 7203252								
Selenium	94	106	75-125	11	20	0.150 J	0.132 J	13 (1)	20
Batch number: 13267267201A	Sample number(s): 7203251-7203254 UNSPK: 7203252 BKG: 7203252								
1a Anions by 300.0 - Fluoride	43*		80-120			1.7	1.4	25* (1)	20
Batch number: 13262005104A	Sample number(s): 7203246-7203247 BKG: P202720								
28b pH (9040B and 9040C)						7.4	7.4	0	3
Batch number: 13262039404A	Sample number(s): 7203249-7203258 BKG: 7203249								
15a pH by 9045D						7.58	7.61	0	3
Batch number: 13268162402A	Sample number(s): 7203249-7203258 BKG: 7203250								
14a Moisture Content by 160.3						14.6	14.5	1	20
Batch number: 13268002	Sample number(s): 7203249,7203251,7203255,7203257 UNSPK: P204677								
2378-TCDD	93	93	40-135	2	20				
12378-PeCDD	98	98	40-135	2	20				
123478-HxCDD	96	95	40-135	3	20				
123678-HxCDD	98	97	40-135	2	20				
123789-HxCDD	95	96	40-135	1	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1234678-HpCDD	97	109	40-135	9	20				
OCDD	102	230*	40-135	73*	20				
2378-TCDF	97	97	40-135	1	20				
12378-PeCDF	96	94	40-135	3	20				
23478-PeCDF	95	96	40-135	0	20				
123478-HxCDF	97	97	40-135	2	20				
123678-HxCDF	98	98	40-135	1	20				
123789-HxCDF	97	99	40-135	1	20				
234678-HxCDF	96	96	40-135	2	20				
1234678-HpCDF	96	98	40-135	0	20				
1234789-HpCDF	97	98	40-135	1	20				
OCDF	95	95	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13266WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7203246	93	98	96
7203247	96	101	99
Blank	98	102	98
LCS	100	103	101
LCSD	107	112	109
Limits:	44-137	62-141	51-136

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13267SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7203249	90	90	107
7203250	89	91	104
7203251	92	95	106
7203252	89	92	104
7203253	86	89	101
7203254	93	96	110
7203255	91	93	103
7203256	94	96	105
7203257	91	92	111
7203258	88	92	108
Blank	95	100	110
LCS	98	103	112

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Quality Control Summary

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Reported: 10/03/13 at 03:26 PM

Surrogate Quality Control

MS	92	93	110
MSD	93	95	110
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13262A94A

	Trifluorotoluene-F
7203246	74
7203247	75
7203248	73
Blank	74
LCS	82
LCSD	82
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13263A34A

	Trifluorotoluene-F
7203250	77
7203252	75
7203253	82
7203254	84
7203256	75
7203258	82
Blank	85
LCS	90
MS	78
MSD	85
Limits:	50-142

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132630007A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7203246	101	41*
7203247	85	38*
Blank	94	80
LCS	97	61
LCSD	102	60
Limits:	45-120	45-120

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132630008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7203246	97	52
7203247	96	55
Blank	105	108
LCS	82	77
LCSD	79	80

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Surrogate Quality Control

Limits: 60-140 20-120

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 132640008A

	2,4-Dichlorophenylacetic acid
7203246	75
7203247	87
Blank	75
LCS	77
LCSD	77

Limits: 50-150

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132660014A

	2,4-Dichlorophenylacetic acid
7203251	66
7203252	66
7203253	69
7203254	64
Blank	61
LCS	68
MS	71
MSD	68

Limits: 50-150

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132680014A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7203249	85	107
7203250	87	101
Blank	96	105
LCS	99	107
MS	84	98
MSD	85	99

Limits: 50-130 20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132690019A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7203249	113	117
7203250	125*	131*
7203251	115	122*
7203252	128*	137*
7203253	123*	135*
7203254	123*	130*
7203255	126*	133*

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Surrogate Quality Control

7203256	129*	134*
7203257	122*	123*
7203258	120	122*
Blank	114	117
LCS	120	135*
LCSD	132*	139*
MS	117	118
MSD	123*	123*
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132670026A

	Chlorobenzene	Orthoterphenyl
7203249	107	85
7203250	94	66
7203251	97	77
7203252	103	75
7203253	102	87
7203254	105	90
7203255	99	82
7203256	107	86
7203257	105	83
7203258	90	47*
Blank	113	93
LCS	109	94
MS	114	79
MSD	107	77
Limits:	37-125	66-123

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132670027A

	Chlorobenzene	Orthoterphenyl
7203246	105	88
7203247	102	89
Blank	118	93
LCS	125	88
LCSD	117	91
Limits:	45-126	69-119

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13267004

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7203246	71	74	72	73	73	80
7203247	74	76	76	77	77	89
Blank	73	75	75	74	74	75
OPR	72	77	72	71	72	79
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Surrogate Quality Control

7203246	75	77	73	77	79	79
7203247	82	82	82	79	83	83
Blank	77	80	79	78	82	80
OPR	78	79	76	80	79	78
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7203246	79	82	77	68	72
7203247	83	87	87	73	76
Blank	81	83	84	68	72
OPR	79	85	82	69	75
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13268002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7203249	71	55	51	59	53	56
7203251	68	55	47	55	48	51
7203255	65	55	51	58	53	55
7203257	72	67	62	70	65	66
Blank	71	64	64	72	67	63
MS	73	69	64	72	67	65
MSD	77	75	69	76	70	72
OPR	57	49	49	56	51	49
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7203249	75	47	45	63	67	63
7203251	75	42	38	65	63	62
7203255	81	47	45	65	65	65
7203257	87	62	61	78	76	77
Blank	92	61	60	75	81	79
MS	93	63	64	79	79	79
MSD	89	70	69	84	82	80
OPR	71	47	45	58	64	61
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7203249	65	67	70	54	59
7203251	63	65	64	51	61
7203255	66	70	71	51	62
7203257	77	82	83	61	73
Blank	79	83	84	61	70
MS	79	86	89	64	74
MSD	80	85	87	68	79
OPR	63	66	68	46	52

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1419965
Reported: 10/03/13 at 03:26 PM

Surrogate Quality Control

Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Gp# 1419965 Sample# 7203246-56

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/18/2013
CarrierName: FedEx
AirbillNo: 796718874011

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130918-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-091813	9/18/13 15:00	WQ	None	4 - 1 L Amber	10 day									X							X															
EB1-091813	9/18/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																					X										
EB2-091813	9/18/13 15:30	WQ	HCl	2 - 1 L Amber	10 day																					X										

Special Instructions:

Sampler: Pam Hart

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Myers	09/18/2013	1600									
									Bruce Hunz	9.19.13	910

COC Rev 2

COC 20130918-01, Page 1 of 1

acct# 13013 Cp# 1419965 Samp6# 7203246-56

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/18/2013
CarrierName: FedEx
AirbillNo: 796718874011

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130918-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-091813	9/18/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB1-091813	9/18/13 15:00	WQ	None	3 - 250 mL Amber	10 day							X			X							X														
EB1-091813	9/18/13 15:00	WQ	None	4 - 250 mL Poly	10 day				X										X	X																
EB1-091813	9/18/13 15:00	WQ	None	1 - 40 mL Vial	10 day												X																			
EB1-091813	9/18/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											
EB2-091813	9/18/13 15:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB2-091813	9/18/13 15:30	WQ	None	4 - 250 mL Poly	10 day				X										X	X																
EB2-091813	9/18/13 15:30	WQ	None	3 - 250 mL Amber	10 day							X			X							X														
EB2-091813	9/18/13 15:30	WQ	None	4 - 1 L Amber	10 day									X							X															
EB2-091813	9/18/13 15:30	WQ	HCl	3 - 40 mL Vial	10 day																				X											
EB2-091813	9/18/13 15:30	WQ	None	1 - 40 mL Vial	10 day												X																			

Special Instructions:

Sampler: Pa Hart

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	9/18/2013	1600									
									Brandy Ny	9.19.13	910

COC Rev 2

COC 20130918-02, Page 1 of 1

acct#13013 Cp# 1419965 Sample# 7203246-56

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/18/2013

CarrierName: FedEx

AirbillNo: 796718874011

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20130918-03

Cooler #: 3

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-091813	9/18/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-510-SA5D-SB-0.0-0.5	9/18/13 10:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X				X											
SL-510-SA5D-SB-0.0-0.5	9/18/13 10:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-510-SA5D-SB-4.0-5.0	9/18/13 10:10	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X			X				X											
SL-510-SA5D-SB-4.0-5.0	9/18/13 10:10	SO	None	2 - Encore	10 day																			X												
SL-513-SA5D-SB-0.0-0.5	9/18/13 07:30	SO	None	2 - SS-Sleeve	10 day	X	X		X			X		X	X		X				X					X										
SL-513-SA5D-SB-0.0-0.5	9/18/13 07:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-513-SA5D-SB-4.0-5.0	9/18/13 07:40	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X		X	X			X					X										
SL-513-SA5D-SB-4.0-5.0	9/18/13 07:40	SO	None	2 - Encore	10 day																			X												
SL-513-SA5D-SB-9.0-10.0	9/18/13 07:50	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X		X	X			X					X										
SL-513-SA5D-SB-9.0-10.0	9/18/13 07:50	SO	None	2 - Encore	10 day																			X												
SL-513-SA5D-SB-16.0-17.0	9/18/13 08:00	SO	None	2 - 16 oz glass	10 day	X	X		X			X			X		X	X			X					X										
SL-513-SA5D-SB-16.0-17.0	9/18/13 08:00	SO	None	2 - Encore	10 day																			X												
SL-514-SA5D-SB-0.0-0.5	9/18/13 08:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-514-SA5D-SB-0.0-0.5	9/18/13 08:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-514-SA5D-SB-4.0-5.0	9/18/13 09:00	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-514-SA5D-SB-4.0-5.0	9/18/13 09:00	SO	None	2 - Encore	10 day																			X												
SL-509-SA5D-SB-0.0-0.5	9/18/13 13:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-509-SA5D-SB-0.0-0.5	9/18/13 13:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-509-SA5D-SB-4.0-5.0	9/18/13 13:15	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-509-SA5D-SB-4.0-5.0	9/18/13 13:15	SO	None	2 - Encore	10 day																			X												

Rec by Brandy Bailey ELLE 9.19.13 910

acct#13013 Gp#1419965 Sample#7203246-58

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/18/2013
CarrierName: FedEx
AirbillNo: 796718874011

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130918-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Cater

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stacy Mypel	09/18/2013	1600									
									Brent Mu	9.19.13	910

COC Rev 2

COC 20130918-03, Page 2 of 2

Nicole Maljovec 13013/1419965/7203246-58

From: Zakowski, Cherie [ZakowskiCA@cdmsmith.com]
Sent: Thursday, September 19, 2013 2:57 PM
To: Nicole Maljovec; Burgesser, Todd
Cc: Hartman, Pamela; Mysel, Stefanie
Subject: RE: 9/18 EB- High Temp upon Receipt

Yes - Please do continue with the analyses.

Thanks

Cherie Zakowski
Project Manager/Scientist
CDM Smith
555 17th Street, Suite 1100
Denver, CO 80202
Direct Phone: 720-264-1109
Main Phone: 303-383-2300
Fax: 303-308-3003

-----Original Message-----
From: Nicole Maljovec [mailto:nmaljovec@lancasterlabs.com]
Sent: Thursday, September 19, 2013 12:55 PM
To: Burgesser, Todd; Zakowski, Cherie
Cc: Hartman, Pamela; Mysel, Stefanie
Subject: 9/18 EB- High Temp upon Receipt

Hi all,
Cooler 1 was slightly over temperature upon receipt today. The temperature range was 6.5-8.4°C. We're guessing the ice bags shifted in transit. There wasn't any ice below the bottles. The cooler contained the amber liters for the EB. I'm assuming you would like to continue with analysis. If not, please let me know.

Thanks!
Nicole

Nicole Maljovec
Eurofins Lancaster Labs
Phone: 717-556-7259

-----Original Message-----
From: Mysel, Stefanie [mailto:MyselSJ@cdmsmith.com]
Sent: Wednesday, September 18, 2013 5:44 PM
To: !US19_SSFLShip; Burgesser, Todd
Cc: Hartman, Pamela; Mysel, Stefanie
Subject: SSFL 09/18/2013 COC

3 coolers were shipped to your lab for delivery tomorrow. These samples are from today's sampling. Samples were collected from subarea 5D. The airbill number for today's shipment is 796718874011. Let me know if you have any questions or issues. Attached is an excel table with sample names, dates and times from today's sampling. We will be sending 2 equipment blanks today for thursday delivery.

Regards,

Stefanie

Stefanie J. Mysel
Geologist

CDM Smith
111 Academy Way

eurofins | Lancaster Laboratories

G# 1419965

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 9-19-13

Time of Receipt: 910

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	03258	8.0 8.4 6.5 8.4 8.1	ST	WI	Y	B	COC # 20130918-01
2	DT121	2.1	TB	↓	↓	↓	
3	↓	1.1	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Cooler #1 no Ice on bottom, Ambers in bubble wrap bag, Sm bags of Ice around Ambers

Unpacker Signature/Emp#: Brianely Bary 2299 **Date/Time:** 9-19-13 1054

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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SAMPLE DELIVERY GROUP

PH111

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 08, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/20/2013
Group Number: 1420240
SDG: PH111
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-091913 Water	7204675
SL-577-SA5D-SB-0.0-0.5 Soil	7204676
SL-579-SA5D-SB-0.0-0.5 Soil	7204677
SL-579-SA5D-SB-0.0-0.5 Soil	7204678
SL-579-SA5D-SB-0.0-0.5 Soil	7204679
SL-879-SA5D-SB-0.0-0.5 Soil	7204680
SL-580-SA5D-SB-0.0-0.5 Soil	7204681
SL-581-SA5D-SB-0.0-0.5 Soil	7204682
SL-581-SA5D-SB-2.5-3.5 Soil	7204683
SL-576-SA5D-SB-0.0-0.5 Soil	7204684
SL-576-SA5D-SB-3.5-4.5 Soil	7204685
SL-578-SA5D-SB-0.0-0.5 Soil	7204686

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-091913 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7204675
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:00

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB111 SDG#: PH111-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13268A94A	09/25/2013 14:15	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13268A94A	09/25/2013 14:15	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-577-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204676
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 10:40 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57700 SDG#: PH111-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.0	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	25	U	25	10	5
12952	EFH (C15-C20)	n.a.	25	U	25	10	5
12952	EFH (C21-C30)	n.a.	49		25	10	5
12952	EFH (C30-C40)	n.a.	150		51	20	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-577-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204676
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 10:40 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57700 SDG#: PH111-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	25	U	25	10	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,100		39.3	7.08	1
06944	Antimony	7440-36-0	3.93	U	3.93	0.726	1
06935	Arsenic	7440-38-2	1.81	J	3.93	0.687	1
06946	Barium	7440-39-3	40.2		0.982	0.0324	1
06947	Beryllium	7440-41-7	0.544	J	0.982	0.0658	1
07914	Boron	7440-42-8	14.5		9.82	0.825	1
06949	Cadmium	7440-43-9	0.799	J	0.982	0.0746	1
01650	Calcium	7440-70-2	4,390		19.6	3.28	1
06951	Chromium	7440-47-3	34.9		2.95	0.157	1
06952	Cobalt	7440-48-4	5.54		0.982	0.0972	1
06953	Copper	7440-50-8	8.01		1.96	0.285	1
01654	Iron	7439-89-6	25,600		39.3	3.55	1
06955	Lead	7439-92-1	5.52		2.95	0.491	1
01656	Lithium	7439-93-2	26.8		3.9	0.33	1
01657	Magnesium	7439-95-4	7,100		9.82	1.64	1
06958	Manganese	7439-96-5	244		0.982	0.0815	1
06960	Molybdenum	7439-98-7	1.96	U	1.96	0.167	1
06961	Nickel	7440-02-0	8.63		1.96	0.128	1
10145	Phosphorus	7723-14-0	615		9.82	2.84	1
01662	Potassium	7440-09-7	1,980		98.2	8.19	1
01667	Sodium	7440-23-5	111		98.2	16.4	1
06969	Tin	7440-31-5	2.37	J	9.82	0.216	1
06970	Titanium	7440-32-6	997		1.96	0.334	2
06971	Vanadium	7440-62-2	62.7		0.982	0.128	1
06972	Zinc	7440-66-6	50.6		3.93	0.196	1
10146	Zirconium	7440-67-7	6.01		4.91	0.825	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.253	J	0.393	0.0982	2
06142	Silver	7440-22-4	0.196	U	0.196	0.0255	2
06144	Strontium	7440-24-6	21.5		0.393	0.0668	2
06145	Thallium	7440-28-0	0.187	J	0.196	0.0295	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0225		0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.16		0.0100	0.0100	1
	The pH was measured in water at 20.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-577-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204676
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 10:40 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57700 SDG#: PH111-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-577-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204676
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 10:40 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57700 SDG#: PH111-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0714 JBQ	0.996	0.0514	1
11031	12378-PeCDD	40321-76-4	0.0627 JBQ	4.98	0.0267	1
11031	123478-HxCDD	39227-28-6	0.0610 JBQ	4.98	0.0172	1
11031	123678-HxCDD	57653-85-7	0.0773 JBQ	4.98	0.0183	1
11031	123789-HxCDD	19408-74-3	0.0378 JBQ	4.98	0.0174	1
11031	1234678-HpCDD	35822-46-9	0.148 JBQ	4.98	0.0219	1
11031	OCDD	3268-87-9	0.620 JB	9.96	0.0221	1
11031	2378-TCDF	51207-31-9	0.996 U	0.996	0.0393	1
11031	12378-PeCDF	57117-41-6	0.107 JBQ	4.98	0.0199	1
11031	23478-PeCDF	57117-31-4	0.0442 JBQ	4.98	0.0199	1
11031	123478-HxCDF	70648-26-9	0.0751 JBQ	4.98	0.0174	1
11031	123678-HxCDF	57117-44-9	0.0551 JBQ	4.98	0.0153	1
11031	123789-HxCDF	72918-21-9	0.0745 JB	4.98	0.0198	1
11031	234678-HxCDF	60851-34-5	0.0553 JBQ	4.98	0.0167	1
11031	1234678-HpCDF	67562-39-4	0.0872 JB	4.98	0.0102	1
11031	1234789-HpCDF	55673-89-7	0.0451 JB	4.98	0.0151	1
11031	OCDF	39001-02-0	0.181 JBQ	9.96	0.0353	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00900			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	66	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	55	26 - 152
13C12-123678-HxCDF	63	26 - 123
13C12-234678-HxCDF	56	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	48	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-577-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204676
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 10:40 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57700 SDG#: PH111-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-577-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204676
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 10:40 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57700 SDG#: PH111-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 11:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 17:49	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/26/2013 14:21	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 20:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132680637001	10/01/2013 19:32	Katlin N Cataldi	2
06971	Vanadium	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132680637001	09/27/2013 18:58	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132680637001B	09/26/2013 23:37	David K Beck	2
06142	Silver	SW-846 6020A	1	132680637001A	09/26/2013 23:37	David K Beck	2
06144	Strontium	SW-846 6020A	1	132680637001A	09/26/2013 23:37	David K Beck	2
06145	Thallium	SW-846 6020A	1	132680637001A	09/26/2013 23:37	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-577-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204676
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 10:40 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57700 SDG#: PH111-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132680638001	09/27/2013 04:40	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132680637001	09/26/2013 09:53	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132680638001	09/26/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13264039401A	09/21/2013 09:25	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-579-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204677
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57900 SDG#: PH111-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.1	U	5.1	2.1	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.73	1
10590	p,p-DDE	72-55-9	0.86	J	1.7	0.34	1
10590	p,p-DDT	50-29-3	0.98	J	1.7	0.36	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
	Reporting limits were raised due to interference from the sample matrix.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-579-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204677
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57900 SDG#: PH111-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.996	U	0.996	0.0491	1
11031	12378-PeCDD	40321-76-4	4.98	U	4.98	0.0281	1
11031	123478-HxCDD	39227-28-6	0.0742	JB	4.98	0.0255	1
11031	123678-HxCDD	57653-85-7	0.316	JB	4.98	0.0272	1
11031	123789-HxCDD	19408-74-3	0.390	JB	4.98	0.0255	1
11031	1234678-HpCDD	35822-46-9	1.36	JB	4.98	0.0230	1
11031	OCDD	3268-87-9	12.9	B	9.96	0.0166	1
11031	2378-TCDF	51207-31-9	0.113	JQ	0.996	0.0482	1
11031	12378-PeCDF	57117-41-6	0.226	JBQ	4.98	0.0222	1
11031	23478-PeCDF	57117-31-4	0.235	JB	4.98	0.0217	1
11031	123478-HxCDF	70648-26-9	0.125	JBQ	4.98	0.0259	1
11031	123678-HxCDF	57117-44-9	0.121	JB	4.98	0.0236	1
11031	123789-HxCDF	72918-21-9	0.506	JB	4.98	0.0257	1
11031	234678-HxCDF	60851-34-5	0.139	JBQ	4.98	0.0253	1
11031	1234678-HpCDF	67562-39-4	0.422	JB	4.98	0.0137	1
11031	1234789-HpCDF	55673-89-7	0.0917	JB	4.98	0.0196	1
11031	OCDF	39001-02-0	0.803	JB	9.96	0.0250	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.234				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	88	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-579-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204677
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57900 SDG#: PH111-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-579-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204677
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57900 SDG#: PH111-03BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132660016A	09/26/2013 17:28	Richard A Shober	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132680014A	09/28/2013 18:16	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132680014A	09/26/2013 07:00	Joseph S Feister	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132660016A	09/24/2013 06:35	Maria Davenport	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 21:05	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-579-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204678
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57900 SDG#: PH111-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	100		5.1	2.1	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	2.9		0.84	0.17	1
10590	Alpha BHC	319-84-6	3.0		0.84	0.17	1
10590	Beta BHC	319-85-7	3.1		1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	2.8		0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	6.4		1.7	0.33	1
10590	p,p-DDE	72-55-9	7.1		1.7	0.33	1
10590	p,p-DDT	50-29-3	7.5		1.7	0.35	1
10590	Delta BHC	319-86-8	3.1		0.84	0.46	1
10590	Dieldrin	60-57-1	6.6		1.7	0.33	1
10590	Endosulfan I	959-98-8	3.0		0.84	0.22	1
10590	Endosulfan II	33213-65-9	6.2		1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	6.3		1.7	0.33	1
10590	Endrin	72-20-8	6.6		1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	6.1		1.7	0.33	1
10590	Endrin Ketone	53494-70-5	6.0		1.8	0.61	1
10590	Heptachlor	76-44-8	3.1		0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	3.0		0.84	0.17	1
10590	Methoxychlor	72-43-5	33		6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-579-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204678
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57900 SDG#: PH111-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.7	B	1.01	0.0494	1
11031	12378-PeCDD	40321-76-4	98.4	B	5.03	0.0454	1
11031	123478-HxCDD	39227-28-6	97.0	B	5.03	0.0334	1
11031	123678-HxCDD	57653-85-7	98.4	B	5.03	0.0354	1
11031	123789-HxCDD	19408-74-3	96.2	B	5.03	0.0336	1
11031	1234678-HpCDD	35822-46-9	99.2	B	5.03	0.0383	1
11031	OCDD	3268-87-9	219	B	10.1	0.0281	1
11031	2378-TCDF	51207-31-9	19.6		1.01	0.0709	1
11031	12378-PeCDF	57117-41-6	96.5	B	5.03	0.0316	1
11031	23478-PeCDF	57117-31-4	95.4	B	5.03	0.0323	1
11031	123478-HxCDF	70648-26-9	97.4	B	5.03	0.0488	1
11031	123678-HxCDF	57117-44-9	98.3	B	5.03	0.0426	1
11031	123789-HxCDF	72918-21-9	98.4	B	5.03	0.0491	1
11031	234678-HxCDF	60851-34-5	96.9	B	5.03	0.0462	1
11031	1234678-HpCDF	67562-39-4	97.0	B	5.03	0.0240	1
11031	1234789-HpCDF	55673-89-7	97.9	B	5.03	0.0408	1
11031	OCDF	39001-02-0	191	B	10.1	0.0424	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-579-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204678
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57900 SDG#: PH111-03MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132660016A	09/26/2013 17:41	Richard A Shober	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132680014A	09/28/2013 18:32	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132680014A	09/26/2013 07:00	Joseph S Feister	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132660016A	09/24/2013 06:35	Maria Davenport	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 22:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-579-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204679
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57900 SDG#: PH111-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	100		5.1	2.1	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	3.0		0.84	0.17	1
10590	Alpha BHC	319-84-6	3.0		0.84	0.17	1
10590	Beta BHC	319-85-7	2.9		1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	2.9		0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	6.6		1.7	0.33	1
10590	p,p-DDE	72-55-9	6.7		1.7	0.33	1
10590	p,p-DDT	50-29-3	7.2		1.7	0.35	1
10590	Delta BHC	319-86-8	3.2		0.84	0.46	1
10590	Dieldrin	60-57-1	6.4		1.7	0.33	1
10590	Endosulfan I	959-98-8	3.0		0.84	0.22	1
10590	Endosulfan II	33213-65-9	6.0		1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	6.3		1.7	0.33	1
10590	Endrin	72-20-8	6.6		1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	6.1		1.7	0.33	1
10590	Endrin Ketone	53494-70-5	5.9		1.8	0.61	1
10590	Heptachlor	76-44-8	3.1		0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	3.0		0.84	0.17	1
10590	Methoxychlor	72-43-5	33		6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	1.6		0.10	0.10	1

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

*=This limit was used in the evaluation of the final result

Sample Description: SL-579-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204679
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57900 SDG#: PH111-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.4	B	0.988	0.0440	1
11031	12378-PeCDD	40321-76-4	96.6	B	4.94	0.0322	1
11031	123478-HxCDD	39227-28-6	94.0	B	4.94	0.0344	1
11031	123678-HxCDD	57653-85-7	96.5	B	4.94	0.0374	1
11031	123789-HxCDD	19408-74-3	94.9	B	4.94	0.0372	1
11031	1234678-HpCDD	35822-46-9	109	B	4.94	0.0388	1
11031	OCDD	3268-87-9	468	B	9.88	0.0283	1
11031	2378-TCDF	51207-31-9	19.3		0.988	0.0546	1
11031	12378-PeCDF	57117-41-6	93.5	B	4.94	0.0277	1
11031	23478-PeCDF	57117-31-4	95.3	B	4.94	0.0286	1
11031	123478-HxCDF	70648-26-9	95.8	B	4.94	0.0317	1
11031	123678-HxCDF	57117-44-9	97.4	B	4.94	0.0285	1
11031	123789-HxCDF	72918-21-9	97.8	B	4.94	0.0328	1
11031	234678-HxCDF	60851-34-5	95.1	B	4.94	0.0300	1
11031	1234678-HpCDF	67562-39-4	96.8	B	4.94	0.0234	1
11031	1234789-HpCDF	55673-89-7	96.5	B	4.94	0.0343	1
11031	OCDF	39001-02-0	188	B	9.88	0.0293	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-579-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204679
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57900 SDG#: PH111-03MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132660016A	09/26/2013 17:53	Richard A Shober	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132680014A	09/28/2013 18:47	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132680014A	09/26/2013 07:00	Joseph S Feister	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132660016A	09/24/2013 06:35	Maria Davenport	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	09/27/2013 22:58	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-879-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204680
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:35 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

87900 SDG#: PH111-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.1	U	5.1	2.1	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	0.82	J	1.7	0.33	1
10590	p,p-DDT	50-29-3	1.0	J	1.7	0.35	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-879-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204680
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:35 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

87900 SDG#: PH111-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0995	JBQ	0.980	0.0405	1
11031	12378-PeCDD	40321-76-4	0.166	JBQ	4.90	0.0370	1
11031	123478-HxCDD	39227-28-6	0.121	JBQ	4.90	0.0310	1
11031	123678-HxCDD	57653-85-7	0.697	JB	4.90	0.0321	1
11031	123789-HxCDD	19408-74-3	0.882	JB	4.90	0.0293	1
11031	1234678-HpCDD	35822-46-9	5.30	B	4.90	0.0297	1
11031	OCDD	3268-87-9	54.4	B	9.80	0.0278	1
11031	2378-TCDF	51207-31-9	0.307	JQ	0.980	0.0778	1
11031	12378-PeCDF	57117-41-6	0.588	JB	4.90	0.0323	1
11031	23478-PeCDF	57117-31-4	0.664	JB	4.90	0.0316	1
11031	123478-HxCDF	70648-26-9	0.212	JB	4.90	0.0337	1
11031	123678-HxCDF	57117-44-9	0.220	JB	4.90	0.0291	1
11031	123789-HxCDF	72918-21-9	0.745	JB	4.90	0.0353	1
11031	234678-HxCDF	60851-34-5	0.208	JB	4.90	0.0299	1
11031	1234678-HpCDF	67562-39-4	1.05	JB	4.90	0.0184	1
11031	1234789-HpCDF	55673-89-7	0.170	JBQ	4.90	0.0277	1
11031	OCDF	39001-02-0	2.82	JB	9.80	0.0270	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.594				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	70	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-879-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204680
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:35 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

87900 SDG#: PH111-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-879-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204680
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:35 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

87900 SDG#: PH111-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132660016A	09/26/2013 18:06	Richard A Shober	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132680014A	09/28/2013 19:02	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132680014A	09/26/2013 07:00	Joseph S Feister	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132660016A	09/24/2013 06:35	Maria Davenport	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	10/01/2013 23:48	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204681
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 08:00 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58000 SDG#: PH111-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.1	U	5.1	2.1	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.40	U	0.40	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.7 C.	n.a.	5.81		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	1.1		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132660016A	09/26/2013 18:19	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132660016A	09/24/2013 06:35	Maria Davenport	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13275243202A	10/04/2013 02:49	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13264039401A	09/21/2013 09:25	Noah M Rainbow	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13275243202A	10/02/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204682
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 09:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58100 SDG#: PH111-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	0.98	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.1	J	1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	18	6.0	1
12969	Fluoranthene	206-44-0	1.1	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.6	J	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7		1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	0.87	J	1.7	0.67	1
12969	Pyrene	129-00-0	0.90	J	1.7	0.67	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.42	U	0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.20		0.0100	0.0100	1
	The pH was measured in water at 20.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204682
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 09:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58100 SDG#: PH111-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 11:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13275243202A	10/04/2013 03:03	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13264039401A	09/21/2013 09:25	Noah M Rainbow	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13275243202A	10/02/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204683
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 09:40 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58125 SDG#: PH111-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	0.74	J	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.78		0.44	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.32		0.0100	0.0100	1
	The pH was measured in water at 20.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204683
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 09:40 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58125 SDG#: PH111-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 12:22	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13275243202A	10/04/2013 03:39	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13264039401A	09/21/2013 09:25	Noah M Rainbow	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13275243202A	10/02/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-576-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204684
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 13:10 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57600 SDG#: PH111-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	91	U	91	45	1
10401	2,4-DB	94-82-6	17	U	17	6.9	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	24	U	24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.1	1
10401	MCPA	94-74-6	2,500	U	2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	2,500	U	2,500	760	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.83	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.76	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.33	1
10590	p,p-DDT	50-29-3	0.40	J	1.7	0.35	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	10		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	25		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-576-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204684
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 13:10 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57600 SDG#: PH111-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-576-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204684
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 13:10 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57600 SDG#: PH111-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.982	U	0.982	0.0281	1
11031	12378-PeCDD	40321-76-4	0.0919	JBQ	4.91	0.0227	1
11031	123478-HxCDD	39227-28-6	0.0940	JB	4.91	0.0264	1
11031	123678-HxCDD	57653-85-7	0.377	JB	4.91	0.0285	1
11031	123789-HxCDD	19408-74-3	0.397	JB	4.91	0.0254	1
11031	1234678-HpCDD	35822-46-9	3.44	JB	4.91	0.0169	1
11031	OCDD	3268-87-9	30.5	B	9.82	0.0153	1
11031	2378-TCDF	51207-31-9	0.278	JQ	0.982	0.0493	1
11031	12378-PeCDF	57117-41-6	0.366	JB	4.91	0.0226	1
11031	23478-PeCDF	57117-31-4	0.475	JB	4.91	0.0220	1
11031	123478-HxCDF	70648-26-9	0.156	JB	4.91	0.0229	1
11031	123678-HxCDF	57117-44-9	0.149	JB	4.91	0.0214	1
11031	123789-HxCDF	72918-21-9	0.294	JB	4.91	0.0218	1
11031	234678-HxCDF	60851-34-5	0.160	JB	4.91	0.0207	1
11031	1234678-HpCDF	67562-39-4	0.748	JB	4.91	0.0120	1
11031	1234789-HpCDF	55673-89-7	0.104	JB	4.91	0.0172	1
11031	OCDF	39001-02-0	1.34	JB	9.82	0.0162	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.369				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	70	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-576-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204684
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 13:10 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57600 SDG#: PH111-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-576-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204684
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 13:10 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57600 SDG#: PH111-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132680018A	09/27/2013 02:47	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132680014A	09/28/2013 19:17	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132680014A	09/26/2013 07:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132680018A	09/26/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/26/2013 02:32	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	10/02/2013 00:45	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-576-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204685
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 13:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57635 SDG#: PH111-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	27.11
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	95	U	95	47	1
10401	2,4-DB	94-82-6	18	U	18	6.6	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.5	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.5	1
10401	MCPA	94-74-6	2,700	U	2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	800	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.87	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.80	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.1	U	7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-576-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204685
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 13:30 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57635 SDG#: PH111-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	5.7	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13270A31A	09/27/2013 17:12	Laura M Krieger	27.11
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326332476	09/20/2013 14:31	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326332476	09/20/2013 14:31	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132680018A	09/27/2013 03:14	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132680014A	09/28/2013 19:33	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132680014A	09/26/2013 07:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132680018A	09/26/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/26/2013 02:11	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204686
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 12:35 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57800 SDG#: PH111-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.2	J	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.2	J	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	2.6		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.1	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	0.89	J	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	3.0		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	130		19	6.3	1
12969	Fluoranthene	206-44-0	3.7		1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.86	J	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.4	J	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	2.9		1.8	0.70	1
12969	Naphthalene	91-20-3	1.9		1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	2.6		1.8	0.70	1
12969	Pyrene	129-00-0	2.8		1.8	0.70	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	96	U	96	47	1
10401	2,4-DB	94-82-6	18	U	18	8.2	1
10401	Dicamba	1918-00-9	13	U	13	4.3	1
10401	Dinoseb	88-85-7	26	U	26	9.6	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.6	1
10401	MCPA	94-74-6	2,700	U	2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	800	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.87	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.80	1
	Reporting limits were raised due to interference from the sample matrix.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	2.6	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	17		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	36		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204686
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 12:35 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57800 SDG#: PH111-10*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	6.2	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204686
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 12:35 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57800 SDG#: PH111-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0297	1
11031	12378-PeCDD	40321-76-4	0.0832	JBQ	5.08	0.0247	1
11031	123478-HxCDD	39227-28-6	0.0716	JB	5.08	0.0242	1
11031	123678-HxCDD	57653-85-7	0.320	JB	5.08	0.0249	1
11031	123789-HxCDD	19408-74-3	0.348	JB	5.08	0.0228	1
11031	1234678-HpCDD	35822-46-9	2.40	JB	5.08	0.0182	1
11031	OCDD	3268-87-9	23.2	B	10.2	0.0135	1
11031	2378-TCDF	51207-31-9	0.175	J	1.02	0.0451	1
11031	12378-PeCDF	57117-41-6	0.234	JB	5.08	0.0203	1
11031	23478-PeCDF	57117-31-4	0.364	JBQ	5.08	0.0196	1
11031	123478-HxCDF	70648-26-9	0.113	JBQ	5.08	0.0183	1
11031	123678-HxCDF	57117-44-9	0.143	JB	5.08	0.0173	1
11031	123789-HxCDF	72918-21-9	0.504	JB	5.08	0.0209	1
11031	234678-HxCDF	60851-34-5	0.150	JB	5.08	0.0172	1
11031	1234678-HpCDF	67562-39-4	0.597	JB	5.08	0.0142	1
11031	1234789-HpCDF	55673-89-7	0.0881	JBQ	5.08	0.0200	1
11031	OCDF	39001-02-0	1.32	JB	10.2	0.0131	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.215				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204686
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 12:35 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57800 SDG#: PH111-10*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7204686
LL Group # 1420240
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/19/2013 12:35 by VC

Submitted: 09/20/2013 09:15
Reported: 10/08/2013 11:35

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57800 SDG#: PH111-10*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13267SLE026	09/26/2013 12:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13267SLE026	09/25/2013 08:00	Kerrie A Freeburn	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132680018A	09/27/2013 03:41	Elizabeth J Marin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132680018A	09/26/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132670026A	09/26/2013 02:53	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132670026A	09/25/2013 08:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13268002	10/02/2013 01:41	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13268002	09/25/2013 12:00	Brett M Weidman	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420240
Reported: 10/08/13 at 11:35 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13267SLE026	Sample number(s): 7204676,7204682-7204683,7204686									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	110		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	107		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	106		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	89		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	97		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	103		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	117		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	107		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	101		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	101		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	105		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	109		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	99		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	105		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	113		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	113		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	104		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	85		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	101		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	102		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		79-112		
Batch number: 13268A94A	Sample number(s): 7204675									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	101	105	75-135	3	30
Batch number: 13270A31A	Sample number(s): 7204685									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	81		67-119		
Batch number: 132680018A	Sample number(s): 7204684-7204686									
2,4-D	36	U	36.	12	ug/kg	108		59-122		
Dalapon	90	U	90.	44	ug/kg	87		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	101		54-131		
Dicamba	12	U	12.	4.0	ug/kg	87		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	10		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	122		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	93		56-133		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	86		54-134		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420240
Reported: 10/08/13 at 11:35 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	103		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	100		63-130		
Batch number: 132660016A	Sample number(s): 7204677-7204681									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	97		85-115		
Batch number: 132680014A	Sample number(s): 7204677-7204680,7204684-7204685									
Aldrin	0.83	U	0.83	0.17	ug/kg	91		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	99		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	95		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	94		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	96		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	97		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	99		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	69		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	101		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	93		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	102		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	104		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	98		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	99		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	98		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	93		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	97		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	100		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132690019A	Sample number(s): 7204676									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	96*	94*	62-87	2	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	105		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	118		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132670026A	Sample number(s): 7204676,7204684-7204686									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	90		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	96		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	96		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	85		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 132680637001	Sample number(s): 7204676									
Aluminum	40.0	U	40.0	7.21	mg/kg	96		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	98		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	97		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	94		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420240
Reported: 10/08/13 at 11:35 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Beryllium	1.00	U	1.00	0.0670	mg/kg	93		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	89		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	97		80-120		
Calcium	7.61	J	20.0	3.34	mg/kg	98		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	100		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	99		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	99		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	97		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	102		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	97		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	96		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	94		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	97		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	101		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	101		80-120		
Potassium	100 U		100.	8.34	mg/kg	95		80-120		
Sodium	100 U		100.	16.7	mg/kg	96		80-120		
Tin	1.45	J	10.0	0.220	mg/kg	96		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	96		80-120		
Zinc	0.570	J	4.00	0.200	mg/kg	99		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	99		80-120		
Batch number: 132680637001A	Sample number(s): 7204676									
Silver	0.200	U	0.200	0.0260	mg/kg	104		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	104		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	107		80-120		
Batch number: 132680637001B	Sample number(s): 7204676									
Selenium	0.400	U	0.400	0.100	mg/kg	99		80-120		
Batch number: 132680638001	Sample number(s): 7204676									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	97		85-120		
Batch number: 13275243202A	Sample number(s): 7204681-7204683									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	92		80-120		
Batch number: 13264039401A	Sample number(s): 7204676,7204681-7204683									
15a pH by 9045D						99		95-105		
Batch number: 13268162402B	Sample number(s): 7204676-7204686									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13268002	Sample number(s): 7204676-7204680,7204684,7204686									
2378-TCDD	0.104	J	1.00	0.0524	ng/kg	96		67-158		
12378-PeCDD	0.103	J	5.00	0.0316	ng/kg	99		70-142		
123478-HxCDD	0.0483	J	5.00	0.0190	ng/kg	97		70-164		
123678-HxCDD	0.0406	J	5.00	0.0203	ng/kg	101		76-134		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420240
Reported: 10/08/13 at 11:35 AM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123789-HxCDD	0.0644	J	5.00	0.0183	ng/kg	95		64-162		
1234678-HpCDD	0.127	J	5.00	0.0212	ng/kg	96		70-140		
OCDD	0.212	J	10.0	0.0188	ng/kg	94		78-144		
2378-TCDF	1.00	U	1.00	0.0410	ng/kg	102		75-158		
12378-PeCDF	0.0673	J	5.00	0.0183	ng/kg	95		80-134		
23478-PeCDF	0.0538	J	5.00	0.0194	ng/kg	97		68-160		
123478-HxCDF	0.0573	J	5.00	0.0218	ng/kg	97		72-134		
123678-HxCDF	0.0517	J	5.00	0.0189	ng/kg	99		84-130		
123789-HxCDF	0.0692	J	5.00	0.0252	ng/kg	101		78-130		
234678-HxCDF	0.0444	J	5.00	0.0200	ng/kg	97		70-156		
1234678-HpCDF	0.0505	J	5.00	0.00830	ng/kg	96		82-122		
1234789-HpCDF	0.0860	J	5.00	0.0147	ng/kg	98		78-138		
OCDF	0.223	J	10.0	0.0383	ng/kg	96		63-170		
TEQ WHO 2005 - EDLx0.0	0.00870				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13267SLE026	Sample number(s): 7204676,7204682-7204683,7204686 UNSPK: P203249								
Acenaphthene	104	109	48-127	4	30				
Acenaphthylene	103	108	49-121	5	30				
Anthracene	102	101	52-126	1	30				
Benzo(a)anthracene	101	103	44-143	2	30				
Benzo(a)pyrene	90	92	44-140	2	30				
Benzo(b)fluoranthene	91	92	26-142	0	30				
Benzo(e)pyrene	82	84	70-130	2	30				
Benzo(g,h,i)perylene	88	89	33-141	2	30				
Benzo(k)fluoranthene	94	100	54-142	5	30				
Butylbenzylphthalate	108	108	49-151	0	30				
Di-n-butylphthalate	117	120	52-147	2	30				
Chrysene	92	92	29-148	0	30				
Dibenz(a,h)anthracene	97	99	20-137	2	30				
Diethylphthalate	99	103	43-145	3	30				
Dimethylphthalate	97	100	58-129	3	30				
Bis(2-Ethylhexyl)phthalate	117	112	39-167	4	30				
Fluoranthene	99	101	40-148	1	30				
Fluorene	91	94	51-137	3	30				
Indeno(1,2,3-cd)pyrene	94	95	17-136	2	30				
1-Methylnaphthalene	111	110	50-131	1	30				
2-Methylnaphthalene	110	109	35-152	1	30				
Naphthalene	103	102	31-148	1	30				
N-Nitrosodimethylamine	82	83	48-113	1	30				
Di-n-octylphthalate	105	107	52-162	1	30				
Phenanthrene	89	87	29-142	2	30				
Pyrene	90	91	26-143	0	30				

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420240
Reported: 10/08/13 at 11:35 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13270A31A	Sample number(s): 7204685 UNSPK: P208982								
11a TPH by EPA 8015B GRO	92	81	69-123	1	30				
Batch number: 132680018A	Sample number(s): 7204684-7204686 UNSPK: P208982								
2,4-D	90	110	42-143	21	35				
Dalapon	57	65	16-98	12	50				
2,4-DB	96	104	10-179	8	50				
Dicamba	68	77	55-133	12	50				
Dinoseb	21	18	10-52	16	35				
2,4-DP (Dichlorprop)	105	113	32-171	7	50				
MCPA	78	85	23-169	8	50				
MCPP (Mecoprop)	72	81	24-164	12	50				
2,4,5-T	84	104	12-172	21	35				
2,4,5-TP	88	97	10-142	10	35				
Batch number: 132660016A	Sample number(s): 7204677-7204681 UNSPK: 7204677								
6a Perchlorate (Method 6850)	102	99	80-120	3	20				
Batch number: 132680014A	Sample number(s): 7204677-7204680,7204684-7204685 UNSPK: 7204677								
Aldrin	86	87	16-126	1	50				
Alpha BHC	86	86	14-140	0	50				
Beta BHC	91	85	42-133	6	50				
Gamma BHC - Lindane	81	83	30-137	3	50				
p,p-DDD	88	90	43-149	2	50				
p,p-DDE	91	85	35-152	6	50				
p,p-DDT	89	85	12-193	4	50				
Delta BHC	91	92	13-153	2	50				
Dieldrin	92	90	41-153	2	50				
Endosulfan I	85	84	26-146	1	50				
Endosulfan II	90	87	34-141	3	50				
Endosulfan Sulfate	92	92	10-181	0	50				
Endrin	89	89	30-152	0	50				
Endrin Aldehyde	87	86	23-138	0	50				
Endrin Ketone	87	86	30-148	1	50				
Heptachlor	88	89	16-152	1	50				
Heptachlor Epoxide	88	88	33-144	1	50				
Methoxychlor	91	91	41-161	0	50				
Batch number: 132690019A	Sample number(s): 7204676 UNSPK: P208982								
PCB-1016	102	108	41-135	5	50				
PCB-1260	113	123	40-134	9	50				
Batch number: 132670026A	Sample number(s): 7204676,7204684-7204686 UNSPK: P203249								
EFH (C12-C14)	94	88	49-123	7	20				
EFH (C15-C20)	174*	187*	49-123	6	20				
EFH (C21-C30)	100	104	49-123	1	20				
EFH (C30-C40)	116	165*	49-123	13	20				
EFH (C8-C11)	82	77	49-123	6	20				
Batch number: 132680637001	Sample number(s): 7204676 UNSPK: P211497 BKG: P211497								
Aluminum	3790	4255	75-125	4	20	21,400	21,600	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420240
Reported: 10/08/13 at 11:35 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
	(2)	(2)									
Antimony	26*	28*	75-125	11	20	3.96	U	3.88	U	0 (1)	20
Arsenic	91	96	75-125	6	20	4.63		3.56	J	26* (1)	20
Barium	92	86	75-125	2	20	140		148		5	20
Beryllium	95	91	75-125	0	20	0.807	J	0.773	J	4 (1)	20
Boron	100	96	75-125	1	20	2.91	J	11.0		116* (1)	20
Cadmium	90	88	75-125	1	20	0.790	J	0.919	J	15 (1)	20
Calcium	5761 (2)	2417 (2)	75-125	20	20	49,100		49,700		1	20
Chromium	120	122	75-125	2	20	29.1		29.7		2	20
Cobalt	87	81	75-125	4	20	8.63		10.8		23*	20
Copper	89	93	75-125	3	20	28.7		26.8		7	20
Iron	-20245 (2)	-21138 (2)	75-125	5	20	51,700		42,600		19	20
Lead	87	91	75-125	4	20	10.5		9.77		7 (1)	20
Lithium	98	98	75-125	2	20	24.0		24.2		1	20
Magnesium	266 (2)	312 (2)	75-125	1	20	8,020		8,190		2	20
Manganese	150 (2)	68 (2)	75-125	12	20	259		308		17	20
Molybdenum	87	86	75-125	2	20	1.98	U	1.94	U	0 (1)	20
Nickel	79	76	75-125	1	20	20.9		22.2		6	20
Phosphorus	165 (2)	173 (2)	75-125	2	20	402		406		1	20
Potassium	207*	193*	75-125	1	20	3,880		3,970		2	20
Sodium	94	93	75-125	2	20	126		127		1 (1)	20
Tin	76	75	75-125	2	20	2.48	J	2.51	J	1 (1)	20
Titanium	790 (2)	747 (2)	75-125	1	20	869		892		3	20
Vanadium	123	122	75-125	1	20	61.2		61.6		1	20
Zinc	82	86	75-125	3	20	80.2		77.2		4	20
Zirconium	89	88	75-125	2	20	6.20		6.18		0 (1)	20
Batch number: 132680637001A	Sample number(s): 7204676 UNSPK: P211497 BKG: P211497										
Silver	103	96	75-125	4	20	0.198	U	0.194	U	0 (1)	20
Strontium	1026 (2)	638 (2)	75-125	17	20	107		134		23*	20
Thallium	87	95	75-125	6	20	0.321		0.341		6 (1)	20
Batch number: 132680637001B	Sample number(s): 7204676 UNSPK: P211497 BKG: P211497										
Selenium	100	105	75-125	8	20	0.157	J	0.120	J	26* (1)	20
Batch number: 132680638001	Sample number(s): 7204676 UNSPK: P211497 BKG: P211497										
3a Mercury 7471A	118	115	65-135	3	20	0.0131	J	0.0160	J	20 (1)	20
Batch number: 13275243202A	Sample number(s): 7204681-7204683 UNSPK: P202095 BKG: P202095										
2a Chromium VI by EPA 7199	60*		75-125			1.0		0.67		41* (1)	20
Batch number: 13264039401A	Sample number(s): 7204676,7204681-7204683 BKG: 7204676										
15a pH by 9045D						6.16		6.13		0	3
Batch number: 13268162402B	Sample number(s): 7204676-7204686 BKG: 7204677										
14a Moisture Content by 160.3						1.7		1.6		4	20
14a Moisture Content by 160.3						1.7		1.6		4	20
14a Moisture Content by 160.3						1.7		1.6		4	20

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420240
Reported: 10/08/13 at 11:35 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13268002	Sample number(s): 7204676-7204680,7204684,7204686 UNSPK: 7204677								
2378-TCDD	93	93	40-135	2	20				
12378-PeCDD	98	98	40-135	2	20				
123478-HxCDD	96	95	40-135	3	20				
123678-HxCDD	98	97	40-135	2	20				
123789-HxCDD	95	96	40-135	1	20				
1234678-HpCDD	97	109	40-135	9	20				
OCDD	102	230*	40-135	73*	20				
2378-TCDF	97	97	40-135	1	20				
12378-PeCDF	96	94	40-135	3	20				
23478-PeCDF	95	96	40-135	0	20				
123478-HxCDF	97	97	40-135	2	20				
123678-HxCDF	98	98	40-135	1	20				
123789-HxCDF	97	99	40-135	1	20				
234678-HxCDF	96	96	40-135	2	20				
1234678-HpCDF	96	98	40-135	0	20				
1234789-HpCDF	97	98	40-135	1	20				
OCDF	95	95	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13267SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7204676	91	94	105
7204682	78	74	95
7204683	84	82	99
7204686	86	85	100
Blank	95	100	110
LCS	98	103	112
MS	92	93	110
MSD	93	95	110
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13268A94A

	Trifluorotoluene-F
7204675	73
Blank	74
LCS	77
LCSD	79

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420240
Reported: 10/08/13 at 11:35 AM

Surrogate Quality Control

Limits: 63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13270A31A

	Trifluorotoluene-F
7204685	80
Blank	92
LCS	86
MS	86
MSD	81

Limits: 50-142

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132680014A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7204677	86	101
7204678	84	98
7204679	85	99
7204680	75	94
7204684	74	95
7204685	78	100
Blank	96	105
LCS	99	107
MS	84	98
MSD	85	99

Limits: 50-130 20-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132680018A

	2,4-Dichlorophenylacetic acid
7204684	61
7204685	64
7204686	59
Blank	69
LCS	69
MS	54
MSD	63

Limits: 50-150

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132690019A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7204676	112	121*
Blank	114	117
LCS	120	135*
LCSD	132*	139*
MS	117	118
MSD	123*	123*

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420240
Reported: 10/08/13 at 11:35 AM

Surrogate Quality Control

Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132670026A

	Chlorobenzene	Orthoterphenyl
7204676	93	83
7204684	103	89
7204685	112	95
7204686	104	81
Blank	113	93
LCS	109	94
MS	114	79
MSD	107	77
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13268002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7204676	64	61	55	63	56	55
7204677	74	73	67	73	69	71
7204678	73	69	64	72	67	65
7204679	77	75	69	76	70	72
7204680	69	64	67	76	69	65
7204684	69	71	67	74	70	74
7204686	72	76	72	77	73	71
Blank	71	64	64	72	67	63
MS	73	69	64	72	67	65
MSD	77	75	69	76	70	72
OPR	57	49	49	56	51	49
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7204676	70	54	48	72	69	67
7204677	87	69	69	82	79	79
7204678	93	63	64	79	79	79
7204679	89	70	69	84	82	80
7204680	92	69	70	71	79	77
7204684	89	71	70	75	78	74
7204686	90	74	74	79	79	78
Blank	92	61	60	75	81	79
MS	93	63	64	79	79	79
MSD	89	70	69	84	82	80
OPR	71	47	45	58	64	61
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7204676	66	68	65	52	64
7204677	78	86	88	65	77

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420240
Reported: 10/08/13 at 11:35 AM

Surrogate Quality Control

7204678	79	86	89	64	74
7204679	80	85	87	68	79
7204680	79	83	87	63	70
7204684	76	82	84	64	73
7204686	79	85	87	69	78
Blank	79	83	84	61	70
MS	79	86	89	64	74
MSD	80	85	87	68	79
OPR	63	66	68	46	52
Limits:	28-130	23-140	17-157	24-169	24-185

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13013 1420240 7204675-86

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/19/2013
CarrierName: FedEx
AirbillNo: 796728971050

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130919-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-091913	9/19/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-577-SA5D-SB-0.0-0.5	9/19/13 10:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-577-SA5D-SB-0.0-0.5	9/19/13 10:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-579-SA5D-SB-0.0-0.5MS	9/19/13 08:30	SO	None	3 - SS-Sleeve	10 day									X			X					X														MS/MSD
SL-879-SA5D-SB-0.0-0.5	9/19/13 08:35	SO	None	1 - SS-Sleeve	10 day									X			X					X														
SL-580-SA5D-SB-0.0-0.5	9/19/13 08:00	SO	None	1 - SS-Sleeve	10 day												X																			
SL-580-SA5D-SB-0.0-0.5	9/19/13 08:00	SO	None	2 - 4 oz glass	10 day													X		X																
SL-581-SA5D-SB-0.0-0.5	9/19/13 09:30	SO	None	1 - SS-Sleeve	10 day							X																								
SL-581-SA5D-SB-0.0-0.5	9/19/13 09:30	SO	None	2 - 4 oz glass	10 day													X		X																
SL-581-SA5D-SB-2.5-3.5	9/19/13 09:40	SO	None	1 - SS-Sleeve	10 day							X																								
SL-581-SA5D-SB-2.5-3.5	9/19/13 09:40	SO	None	2 - 4 oz glass	10 day													X		X																
SL-576-SA5D-SB-0.0-0.5	9/19/13 13:10	SO	None	1 - SS-Sleeve	10 day									X							X	X				X									
SL-576-SA5D-SB-3.5-4.5	9/19/13 13:30	SO	None	1 - SS-Sleeve	10 day																X	X				X									
SL-576-SA5D-SB-3.5-4.5	9/19/13 13:30	SO	None	2 - Encore	10 day																				X										
SL-578-SA5D-SB-0.0-0.5	9/19/13 12:35	SO	None	1 - SS-Sleeve	10 day							X		X							X					X									

Special Instructions:

Sampler: V. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephen Thyer	09/19/2013	1600									
									Brenneke Bay	9.20.13	915

1 of 1

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1420240

Client/Project: CDM

Date of Receipt: 9.20.13

Time of Receipt: 915

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT46	1.8	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brenedy Bauch 2299 **Date/Time:** 9.20.13 944

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH112

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 04, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/24/2013
Group Number: 1420976
SDG: PH112
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-092313 Water	7208980
SL-568-SA5D-SB-0.0-0.5 Soil	7208981
SL-568-SA5D-SB-2.5-3.5 Soil	7208982
SL-568-SA5D-SB-2.5-3.5MS Soil	7208983
SL-568-SA5D-SB-2.5-3.5MSD Soil	7208984
SL-568-SA5D-SB-2.5-3.5DUP Soil	7208985
SL-868-SA5D-SB-2.5-3.5 Soil	7208986
SL-571-SA5D-SB-0.0-0.5 Soil	7208987
SL-572-SA5D-SB-0.0-0.5 Soil	7208988
SL-574-SA5D-SB-0.0-0.5 Soil	7208989
SL-583-SA5D-SB-0.0-0.5 Soil	7208990

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-092313 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7208980
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

112TB SDG#: PH112-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13268A94A	09/25/2013 15:06	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13268A94A	09/25/2013 15:06	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208981
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 07:30 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH112-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	17	U	17	6.8	10
12969	Acenaphthylene	208-96-8	17	U	17	3.4	10
12969	Anthracene	120-12-7	17	U	17	3.4	10
12969	Benzo(a)anthracene	56-55-3	16	J	17	6.8	10
12969	Benzo(a)pyrene	50-32-8	22		17	6.8	10
12969	Benzo(b)fluoranthene	205-99-2	41		17	6.8	10
12969	Benzo(e)pyrene	192-97-2	39	J	170	34	10
12969	Benzo(g,h,i)perylene	191-24-2	18		17	6.8	10
12969	Benzo(k)fluoranthene	207-08-9	17	J	17	6.8	10
12969	Butylbenzylphthalate	85-68-7	110	J	180	61	10
12969	Di-n-butylphthalate	84-74-2	180	U	180	61	10
12969	Chrysene	218-01-9	32		17	3.4	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.8	10
12969	Diethylphthalate	84-66-2	180	U	180	61	10
12969	Dimethylphthalate	131-11-3	180	U	180	61	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	61	10
12969	Fluoranthene	206-44-0	37		17	6.8	10
12969	Fluorene	86-73-7	17	U	17	6.8	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	11	J	17	6.8	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	6.8	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	6.8	10
12969	Naphthalene	91-20-3	17	U	17	6.8	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.8	10
12969	Di-n-octylphthalate	117-84-0	180	U	180	61	10
12969	Phenanthrene	85-01-8	17		17	6.8	10
12969	Pyrene	129-00-0	35		17	6.8	10
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	93	U	93	45	1
10401	2,4-DB	94-82-6	17	U	17	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	770	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.84	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.77	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.83	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.83	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208981
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 07:30 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH112-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	p,p-DDT	50-29-3	4.5	U	4.5	4.5	1
10590	Delta BHC	319-86-8	0.51	J	0.85	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	1.3	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.46	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.44	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.68	1
10590	Endrin	72-20-8	1.7	U	1.7	0.42	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.8	J	1.8	0.61	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	1.2	U	1.2	1.2	1
10590	Methoxychlor	72-43-5	4.1	J	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.78	1
10590	Toxaphene	8001-35-2	76	U	76	76	1
Reporting limits were raised due to interference from the sample matrix.							
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	15	J	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	60		17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	130	U	130	51	25
12952	EFH (C15-C20)	n.a.	130	U	130	51	25
12952	EFH (C21-C30)	n.a.	280		130	51	25
12952	EFH (C30-C40)	n.a.	1,100		260	100	25
12952	EFH (C8-C11)	n.a.	130	U	130	51	25
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,800		40.3	7.27	1
06944	Antimony	7440-36-0	4.03	U	4.03	0.746	1
06935	Arsenic	7440-38-2	4.15		4.03	0.706	1
06946	Barium	7440-39-3	140		1.01	0.0333	1
06947	Beryllium	7440-41-7	0.458	J	1.01	0.0676	1
07914	Boron	7440-42-8	7.90	J	10.1	0.847	1
06949	Cadmium	7440-43-9	0.868	J	1.01	0.0767	1
01650	Calcium	7440-70-2	16,500		20.2	3.37	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208981
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 07:30 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH112-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06951	Chromium	7440-47-3	24.0		3.03	0.161	1
06952	Cobalt	7440-48-4	7.00		1.01	0.0999	1
06953	Copper	7440-50-8	22.3		2.02	0.293	1
01654	Iron	7439-89-6	22,500		40.3	3.65	1
06955	Lead	7439-92-1	10.5		3.03	0.504	1
01656	Lithium	7439-93-2	16.0		4.0	0.34	1
01657	Magnesium	7439-95-4	6,990		10.1	1.68	1
06958	Manganese	7439-96-5	287		1.01	0.0837	1
06960	Molybdenum	7439-98-7	1.44	J	2.02	0.171	1
06961	Nickel	7440-02-0	20.3		2.02	0.131	1
10145	Phosphorus	7723-14-0	715		10.1	2.91	1
01662	Potassium	7440-09-7	3,520		101	8.41	1
01667	Sodium	7440-23-5	224		101	16.8	1
06969	Tin	7440-31-5	2.54	J	10.1	0.222	1
06970	Titanium	7440-32-6	790		1.01	0.171	1
06971	Vanadium	7440-62-2	50.1		1.01	0.131	1
06972	Zinc	7440-66-6	68.8		4.03	0.202	1
10146	Zirconium	7440-67-7	11.0		5.04	0.847	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.324	J	0.403	0.101	2
06142	Silver	7440-22-4	0.110	J	0.202	0.0262	2
06144	Strontium	7440-24-6	66.1		0.403	0.0686	2
06145	Thallium	7440-28-0	0.277		0.202	0.0303	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0287		0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.64		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208981
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 07:30 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH112-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.102	JQ	1.00	0.0378	1
11031	12378-PeCDD	40321-76-4	5.00	U	5.00	0.0592	1
11031	123478-HxCDD	39227-28-6	0.713	JB	5.00	0.0476	1
11031	123678-HxCDD	57653-85-7	1.53	JB	5.00	0.0515	1
11031	123789-HxCDD	19408-74-3	1.25	JB	5.00	0.0492	1
11031	1234678-HpCDD	35822-46-9	39.9	B	5.00	0.0474	1
11031	OCDD	3268-87-9	411	B	10.0	0.0472	1
11031	2378-TCDF	51207-31-9	0.702	JQ	1.00	0.114	1
11031	12378-PeCDF	57117-41-6	2.73	JB	5.00	0.0580	1
11031	23478-PeCDF	57117-31-4	1.34	JB	5.00	0.0531	1
11031	123478-HxCDF	70648-26-9	0.679	JB	5.00	0.0396	1
11031	123678-HxCDF	57117-44-9	0.649	JB	5.00	0.0392	1
11031	123789-HxCDF	72918-21-9	0.566	JB	5.00	0.0402	1
11031	234678-HxCDF	60851-34-5	0.653	JB	5.00	0.0376	1
11031	1234678-HpCDF	67562-39-4	5.94	B	5.00	0.0238	1
11031	1234789-HpCDF	55673-89-7	0.444	JB	5.00	0.0280	1
11031	OCDF	39001-02-0	12.0	B	10.0	0.0295	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.68				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208981
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 07:30 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH112-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208981
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

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3201 Jermantown Road
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Fairfax VA 22030

56800 SDG#: PH112-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLC026	10/01/2013 10:17	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLC026	09/30/2013 09:00	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132680018A	09/27/2013 04:07	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132730002A	10/02/2013 10:21	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 18:08	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132730002A	09/30/2013 14:00	Wanda F Oswald	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132680018A	09/26/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132690027A	09/27/2013 22:56	Heather E Williams	25
12959	EFH soil ext.(microwave)	SW-846 3546	1	132690027A	09/27/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/02/2013 16:22	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208981
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 07:30 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH112-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132740637001	10/04/2013 01:06	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132740637001	10/04/2013 01:06	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132740637001	10/03/2013 14:46	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132740637001	10/04/2013 01:06	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132740637001B	10/03/2013 06:28	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637001A	10/03/2013 06:28	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637001A	10/03/2013 06:28	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132740637001A	10/03/2013 06:28	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638001	10/03/2013 04:29	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637001	10/02/2013 09:39	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638001	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13267039401A	09/24/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401B	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208982
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	0.94	J	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.2	J	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	2.1		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.87	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.2	J	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.5	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	2.1		1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	0.93	J	1.8	0.70	1
12969	Pyrene	129-00-0	1.9		1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.37
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	96	U	96	47	1
10401	2,4-DB	94-82-6	18	U	18	6.6	1
10401	Dicamba	1918-00-9	13	U	13	4.3	1
10401	Dinoseb	88-85-7	26	U	26	9.6	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.6	1
10401	MCPA	94-74-6	2,700	U	2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	800	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.87	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.80	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.88	U	0.88	0.18	1
10590	Alpha BHC	319-84-6	0.88	U	0.88	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.88	U	0.88	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208982
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.88	U	0.88	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.88	U	0.88	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.88	U	0.88	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.88	U	0.88	0.18	1
10590	Methoxychlor	72-43-5	7.1	U	7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	7.3	J	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	22		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	26		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,900		42.6	7.69	1
06944	Antimony	7440-36-0	4.26	U	4.26	0.789	1
06935	Arsenic	7440-38-2	4.32		4.26	0.746	1
06946	Barium	7440-39-3	102		1.07	0.0352	1
06947	Beryllium	7440-41-7	0.602	J	1.07	0.0714	1
07914	Boron	7440-42-8	10.1	J	10.7	0.896	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208982
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.342	J	1.07	0.0810	1
01650	Calcium	7440-70-2	39,600		21.3	3.56	1
06951	Chromium	7440-47-3	33.3		3.20	0.171	1
06952	Cobalt	7440-48-4	8.49		1.07	0.106	1
06953	Copper	7440-50-8	17.1		2.13	0.309	1
01654	Iron	7439-89-6	27,700		42.6	3.86	1
06955	Lead	7439-92-1	7.55		3.20	0.533	1
01656	Lithium	7439-93-2	35.1		4.3	0.36	1
01657	Magnesium	7439-95-4	7,660		10.7	1.78	1
06958	Manganese	7439-96-5	283		1.07	0.0885	1
06960	Molybdenum	7439-98-7	2.13	U	2.13	0.181	1
06961	Nickel	7440-02-0	18.6		2.13	0.139	1
10145	Phosphorus	7723-14-0	468		10.7	3.08	1
01662	Potassium	7440-09-7	3,590		107	8.89	1
01667	Sodium	7440-23-5	200		107	17.8	1
06969	Tin	7440-31-5	3.30	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,170		2.13	0.362	2
06971	Vanadium	7440-62-2	60.1		1.07	0.139	1
06972	Zinc	7440-66-6	83.4		4.26	0.213	1
10146	Zirconium	7440-67-7	4.53	J	5.33	0.896	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.195	J	0.426	0.107	2
06142	Silver	7440-22-4	0.0348	J	0.213	0.0277	2
06144	Strontium	7440-24-6	95.6		1.07	0.181	5
06145	Thallium	7440-28-0	0.302		0.213	0.0320	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0123	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.99		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208982
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLC026	10/01/2013 10:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLC026	09/30/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13270A31A	09/27/2013 18:24	Laura M Krieger	24.37
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326732497	09/24/2013 16:22	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326732497	09/24/2013 16:23	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132680018A	09/27/2013 04:34	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132730002A	10/02/2013 10:36	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 18:26	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132730002A	09/30/2013 14:00	Wanda F Oswald	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132680018A	09/26/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132690027A	09/27/2013 20:49	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132690027A	09/27/2013 09:30	David S Schrum	1
01643	Aluminum	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132740637001	10/04/2013 09:00	Eric L Eby	2
06971	Vanadium	SW-846 6010C	1	132740637001	10/04/2013 00:42	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132740637001	10/03/2013 15:41	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132740637001B	10/03/2013 06:11	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637001A	10/03/2013 06:11	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637001A	10/03/2013 06:59	Choon Y Tian	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208982
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132740637001A	10/03/2013 06:11	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638001	10/03/2013 04:31	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637001	10/02/2013 09:39	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638001	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13267039401A	09/24/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401B	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208983
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	24		1.8	0.70	1
12969	Acenaphthylene	208-96-8	25		1.8	0.35	1
12969	Anthracene	120-12-7	25		1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	28		1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	26		1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	29		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	27		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	13		1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	33		1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	44		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	27		19	6.3	1
12969	Chrysene	218-01-9	29		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	15		1.8	0.70	1
12969	Diethylphthalate	84-66-2	26		19	6.3	1
12969	Dimethylphthalate	131-11-3	25		19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	31		19	6.3	1
12969	Fluoranthene	206-44-0	28		1.8	0.70	1
12969	Fluorene	86-73-7	25		1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	15		1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	27		1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	26		1.8	0.70	1
12969	Naphthalene	91-20-3	26		1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	27		1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	43		19	6.3	1
12969	Phenanthrene	85-01-8	25		1.8	0.70	1
12969	Pyrene	129-00-0	28		1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	10		1.0	0.2	23.85
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	80		38	13	1
10401	Dalapon	75-99-0	130		96	47	1
10401	2,4-DB	94-82-6	85		18	6.6	1
10401	Dicamba	1918-00-9	6.1	J	13	4.3	1
10401	Dinoseb	88-85-7	32		26	9.6	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	94		18	9.6	1
10401	MCPA	94-74-6	7,000		2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	6,400		2,700	800	1
10401	2,4,5-T	93-76-5	7.5		1.8	0.87	1
10401	2,4,5-TP	93-72-1	7.8		1.8	0.80	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	2.9		0.88	0.18	1
10590	Alpha BHC	319-84-6	2.7		0.88	0.18	1
10590	Beta BHC	319-85-7	2.7		2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	2.6		0.88	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208983
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	5.8		1.8	0.35	1
10590	p,p-DDE	72-55-9	5.8		1.8	0.35	1
10590	p,p-DDT	50-29-3	6.2		1.8	0.37	1
10590	Delta BHC	319-86-8	2.4		0.88	0.48	1
10590	Dieldrin	60-57-1	6.0		1.8	0.35	1
10590	Endosulfan I	959-98-8	2.3		0.88	0.23	1
10590	Endosulfan II	33213-65-9	4.7		1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	5.3		1.8	0.35	1
10590	Endrin	72-20-8	5.8		1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	5.1		1.8	0.35	1
10590	Endrin Ketone	53494-70-5	5.3		1.9	0.64	1
10590	Heptachlor	76-44-8	2.9		0.88	0.18	1
10590	Heptachlor Epoxide	1024-57-3	2.9		0.88	0.18	1
10590	Methoxychlor	72-43-5	30		7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	180		18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	55		18	4.7	1
10592	PCB-1260	11096-82-5	200		18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.9	J	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	8.3		5.3	2.1	1
12952	EFH (C21-C30)	n.a.	26		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	49		11	4.3	1
12952	EFH (C8-C11)	n.a.	4.0	J	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,600		42.2	7.61	1
06944	Antimony	7440-36-0	23.0		4.22	0.781	1
06935	Arsenic	7440-38-2	19.6		4.22	0.739	1
06946	Barium	7440-39-3	300		1.06	0.0348	1
06947	Beryllium	7440-41-7	5.70		1.06	0.0707	1
07914	Boron	7440-42-8	214		10.6	0.887	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208983
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	5.29	1.06	0.0802	1
01650	Calcium	7440-70-2	47,800	21.1	3.53	1
06951	Chromium	7440-47-3	59.3	3.17	0.169	1
06952	Cobalt	7440-48-4	55.2	1.06	0.104	1
06953	Copper	7440-50-8	42.7	2.11	0.306	1
01654	Iron	7439-89-6	22,300	42.2	3.82	1
06955	Lead	7439-92-1	21.5	3.17	0.528	1
01656	Lithium	7439-93-2	131	4.2	0.36	1
01657	Magnesium	7439-95-4	6,700	10.6	1.76	1
06958	Manganese	7439-96-5	405	1.06	0.0876	1
06960	Molybdenum	7439-98-7	196	2.11	0.179	1
06961	Nickel	7440-02-0	65.7	2.11	0.137	1
10145	Phosphorus	7723-14-0	651	10.6	3.05	1
01662	Potassium	7440-09-7	4,100	106	8.80	1
01667	Sodium	7440-23-5	1,190	106	17.6	1
06969	Tin	7440-31-5	358	10.6	0.232	1
06970	Titanium	7440-32-6	1,350	2.11	0.359	2
06971	Vanadium	7440-62-2	114	1.06	0.137	1
06972	Zinc	7440-66-6	114	4.22	0.211	1
10146	Zirconium	7440-67-7	105	5.28	0.887	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.43	0.422	0.106	2
06142	Silver	7440-22-4	11.8	0.211	0.0274	2
06144	Strontium	7440-24-6	108	1.06	0.179	5
06145	Thallium	7440-28-0	0.820	0.211	0.0317	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.203	0.0166	0.0099	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	6.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLC026	10/01/2013 11:24	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLC026	09/30/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	2	13270A31A	09/27/2013 19:00	Laura M Krieger	23.85

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208983
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326732497	09/24/2013 16:23	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326732497	09/24/2013 16:24	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132680018A	09/27/2013 05:01	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132730002A	10/02/2013 10:51	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 18:45	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132730002A	09/30/2013 14:00	Wanda F Oswald	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132680018A	09/26/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132690027A	09/27/2013 21:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132690027A	09/27/2013 09:30	David S Schrum	1
01643	Aluminum	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132740637001	10/04/2013 00:54	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132740637001	10/04/2013 00:54	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132740637001	10/04/2013 09:04	Eric L Eby	2
06971	Vanadium	SW-846 6010C	1	132740637001	10/04/2013 00:54	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132740637001	10/03/2013 14:33	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132740637001	10/04/2013 00:54	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132740637001B	10/03/2013 06:18	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637001A	10/03/2013 06:18	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637001A	10/03/2013 07:13	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132740637001A	10/03/2013 06:18	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638001	10/03/2013 04:37	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637001	10/02/2013 09:39	Denise K Conners	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208983
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638001	10/02/2013 12:35	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401B	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208984
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	25		1.8	0.71	1
12969	Acenaphthylene	208-96-8	27		1.8	0.35	1
12969	Anthracene	120-12-7	27		1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	28		1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	28		1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	34		1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	28		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	13		1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	34		1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	40		19	6.4	1
12969	Di-n-butylphthalate	84-74-2	30		19	6.4	1
12969	Chrysene	218-01-9	28		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	15		1.8	0.71	1
12969	Diethylphthalate	84-66-2	28		19	6.4	1
12969	Dimethylphthalate	131-11-3	27		19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	40		19	6.4	1
12969	Fluoranthene	206-44-0	29		1.8	0.71	1
12969	Fluorene	86-73-7	26		1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	15		1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	28		1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	27		1.8	0.71	1
12969	Naphthalene	91-20-3	26		1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	28		1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	56		19	6.4	1
12969	Phenanthrene	85-01-8	26		1.8	0.71	1
12969	Pyrene	129-00-0	31		1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	10		1.1	0.2	26.71
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	99		38	13	1
10401	Dalapon	75-99-0	140		96	47	1
10401	2,4-DB	94-82-6	93		18	6.6	1
10401	Dicamba	1918-00-9	6.8	J	13	4.3	1
10401	Dinoseb	88-85-7	27		26	9.6	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	100		18	9.6	1
10401	MCPA	94-74-6	7,500		2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	7,200		2,700	800	1
10401	2,4,5-T	93-76-5	9.3		1.8	0.87	1
10401	2,4,5-TP	93-72-1	8.6		1.8	0.80	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	2.6		0.88	0.18	1
10590	Alpha BHC	319-84-6	2.4		0.88	0.18	1
10590	Beta BHC	319-85-7	2.5		2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	2.2		0.88	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208984
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	5.2		1.8	0.35	1
10590	p,p-DDE	72-55-9	5.2		1.8	0.35	1
10590	p,p-DDT	50-29-3	5.5		1.8	0.37	1
10590	Delta BHC	319-86-8	1.5		0.88	0.48	1
10590	Dieldrin	60-57-1	5.5		1.8	0.35	1
10590	Endosulfan I	959-98-8	1.9		0.88	0.23	1
10590	Endosulfan II	33213-65-9	3.8		1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	4.7		1.8	0.35	1
10590	Endrin	72-20-8	5.2		1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	4.8		1.8	0.35	1
10590	Endrin Ketone	53494-70-5	4.6		1.9	0.64	1
10590	Heptachlor	76-44-8	2.6		0.88	0.18	1
10590	Heptachlor Epoxide	1024-57-3	2.6		0.88	0.18	1
10590	Methoxychlor	72-43-5	27		7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	190		18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	54		18	4.7	1
10592	PCB-1260	11096-82-5	220		18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.6	J	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	9.6		5.3	2.1	1
12952	EFH (C21-C30)	n.a.	48		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	110		11	4.3	1
12952	EFH (C8-C11)	n.a.	4.0	J	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,600		41.4	7.46	1
06944	Antimony	7440-36-0	21.7		4.14	0.766	1
06935	Arsenic	7440-38-2	20.5		4.14	0.725	1
06946	Barium	7440-39-3	292		1.04	0.0342	1
06947	Beryllium	7440-41-7	5.67		1.04	0.0693	1
07914	Boron	7440-42-8	217		10.4	0.869	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208984
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	5.38	1.04	0.0787	1
01650	Calcium	7440-70-2	49,700	20.7	3.46	1
06951	Chromium	7440-47-3	55.9	3.11	0.166	1
06952	Cobalt	7440-48-4	55.2	1.04	0.102	1
06953	Copper	7440-50-8	42.5	2.07	0.300	1
01654	Iron	7439-89-6	21,000	41.4	3.75	1
06955	Lead	7439-92-1	21.7	3.11	0.518	1
01656	Lithium	7439-93-2	130	4.1	0.35	1
01657	Magnesium	7439-95-4	6,580	10.4	1.73	1
06958	Manganese	7439-96-5	460	1.04	0.0859	1
06960	Molybdenum	7439-98-7	195	2.07	0.176	1
06961	Nickel	7440-02-0	63.7	2.07	0.135	1
10145	Phosphorus	7723-14-0	642	10.4	2.99	1
01662	Potassium	7440-09-7	4,250	104	8.63	1
01667	Sodium	7440-23-5	1,170	104	17.3	1
06969	Tin	7440-31-5	360	10.4	0.228	1
06970	Titanium	7440-32-6	1,410	2.07	0.352	2
06971	Vanadium	7440-62-2	118	1.04	0.135	1
06972	Zinc	7440-66-6	118	4.14	0.207	1
10146	Zirconium	7440-67-7	107	5.18	0.869	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.54	0.414	0.104	2
06142	Silver	7440-22-4	11.8	0.207	0.0269	2
06144	Strontium	7440-24-6	104	1.04	0.176	5
06145	Thallium	7440-28-0	0.785	0.207	0.0311	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.182	0.0166	0.0099	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	6.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLC026	10/01/2013 11:57	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLC026	09/30/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13270A31A	09/27/2013 19:37	Laura M Krieger	26.71

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208984
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326732497	09/24/2013 16:21	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326732497	09/24/2013 16:22	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132680018A	09/27/2013 05:28	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132730002A	10/02/2013 11:06	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 19:03	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132730002A	09/30/2013 14:00	Wanda F Oswald	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132680018A	09/26/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132690027A	09/27/2013 21:31	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132690027A	09/27/2013 09:30	David S Schrum	1
01643	Aluminum	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132740637001	10/04/2013 00:58	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132740637001	10/04/2013 00:58	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132740637001	10/04/2013 09:08	Eric L Eby	2
06971	Vanadium	SW-846 6010C	1	132740637001	10/04/2013 00:58	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132740637001	10/03/2013 14:37	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132740637001	10/04/2013 00:58	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132740637001B	10/03/2013 06:23	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637001A	10/03/2013 06:23	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637001A	10/03/2013 07:15	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132740637001A	10/03/2013 06:23	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638001	10/03/2013 04:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637001	10/02/2013 09:39	Denise K Conners	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208984
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638001	10/02/2013 12:35	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401B	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208985
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,100		42.2	7.61	1
06944	Antimony	7440-36-0	4.22	U	4.22	0.781	1
06935	Arsenic	7440-38-2	3.50	J	4.22	0.739	1
06946	Barium	7440-39-3	94.5		1.06	0.0348	1
06947	Beryllium	7440-41-7	0.439	J	1.06	0.0707	1
07914	Boron	7440-42-8	7.43	J	10.6	0.887	1
06949	Cadmium	7440-43-9	0.471	J	1.06	0.0802	1
01650	Calcium	7440-70-2	45,600		21.1	3.53	1
06951	Chromium	7440-47-3	29.7		3.17	0.169	1
06952	Cobalt	7440-48-4	6.29		1.06	0.104	1
06953	Copper	7440-50-8	14.0		2.11	0.306	1
01654	Iron	7439-89-6	18,600		42.2	3.82	1
06955	Lead	7439-92-1	7.31		3.17	0.528	1
01656	Lithium	7439-93-2	19.6		4.2	0.36	1
01657	Magnesium	7439-95-4	5,460		10.6	1.76	1
06958	Manganese	7439-96-5	378		1.06	0.0876	1
06960	Molybdenum	7439-98-7	0.414	J	2.11	0.179	1
06961	Nickel	7440-02-0	15.8		2.11	0.137	1
10145	Phosphorus	7723-14-0	537		10.6	3.05	1
01662	Potassium	7440-09-7	2,630		106	8.80	1
01667	Sodium	7440-23-5	156		106	17.6	1
06969	Tin	7440-31-5	2.72	J	10.6	0.232	1
06970	Titanium	7440-32-6	696		1.06	0.179	1
06971	Vanadium	7440-62-2	44.5		1.06	0.137	1
06972	Zinc	7440-66-6	58.3		4.22	0.211	1
10146	Zirconium	7440-67-7	6.01		5.28	0.887	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.254	J	0.422	0.106	2
06142	Silver	7440-22-4	0.0382	J	0.211	0.0274	2
06144	Strontium	7440-24-6	90.1		1.06	0.179	5
06145	Thallium	7440-28-0	0.267		0.211	0.0317	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0119	J	0.0176	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.03		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	6.2		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	6.3		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA5D-SB-2.5-3.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208985
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:00 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56825 SDG#: PH112-03DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132740637001	10/04/2013 00:50	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132740637001	10/04/2013 00:50	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132740637001	10/03/2013 14:28	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132740637001	10/04/2013 00:50	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132740637001B	10/03/2013 06:16	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637001A	10/03/2013 06:16	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637001A	10/03/2013 07:10	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132740637001A	10/03/2013 06:16	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638001	10/03/2013 04:35	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637001	10/02/2013 09:39	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638001	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13267039401A	09/24/2013 20:30	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401B	09/25/2013 21:27	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401B	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208986
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:10 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86825 SDG#: PH112-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.82	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	0.98	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.4	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.2	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	7.5	J	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.1	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.4	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	J	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.86	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.4	J	1.7	0.68	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	25.05
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	91	U	91	45	1
10401	2,4-DB	94-82-6	17	U	17	6.3	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	24	U	24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.1	1
10401	MCPA	94-74-6	2,500	U	2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	2,500	U	2,500	760	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.83	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.76	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208986
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:10 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86825 SDG#: PH112-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	17	U	17	4.0	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.33	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.35	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.45	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	12		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	45		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,100		39.8	7.18	1
06944	Antimony	7440-36-0	3.98	U	3.98	0.737	1
06935	Arsenic	7440-38-2	4.83		3.98	0.697	1
06946	Barium	7440-39-3	91.9		0.995	0.0328	1
06947	Beryllium	7440-41-7	0.534	J	0.995	0.0667	1
07914	Boron	7440-42-8	8.73	J	9.95	0.836	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208986
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:10 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86825 SDG#: PH112-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.390	J	0.995	0.0756	1
01650	Calcium	7440-70-2	43,500		19.9	3.32	1
06951	Chromium	7440-47-3	32.7		2.99	0.159	1
06952	Cobalt	7440-48-4	7.63		0.995	0.0985	1
06953	Copper	7440-50-8	15.8		1.99	0.289	1
01654	Iron	7439-89-6	23,800		39.8	3.60	1
06955	Lead	7439-92-1	6.79		2.99	0.498	1
01656	Lithium	7439-93-2	28.5		4.0	0.34	1
01657	Magnesium	7439-95-4	6,710		9.95	1.66	1
06958	Manganese	7439-96-5	307		0.995	0.0826	1
06960	Molybdenum	7439-98-7	1.99	U	1.99	0.169	1
06961	Nickel	7440-02-0	16.6		1.99	0.129	1
10145	Phosphorus	7723-14-0	487		9.95	2.88	1
01662	Potassium	7440-09-7	3,020		99.5	8.30	1
01667	Sodium	7440-23-5	176		99.5	16.6	1
06969	Tin	7440-31-5	2.66	J	9.95	0.219	1
06970	Titanium	7440-32-6	891		0.995	0.169	1
06971	Vanadium	7440-62-2	53.7		0.995	0.129	1
06972	Zinc	7440-66-6	66.1		3.98	0.199	1
10146	Zirconium	7440-67-7	3.82	J	4.98	0.836	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.168	J	0.398	0.0995	2
06142	Silver	7440-22-4	0.0294	J	0.199	0.0259	2
06144	Strontium	7440-24-6	97.0		0.995	0.169	5
06145	Thallium	7440-28-0	0.269		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0158	U	0.0158	0.0095	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.14		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208986
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:10 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86825 SDG#: PH112-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLC026	10/01/2013 03:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLC026	09/30/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13270A31A	09/27/2013 17:48	Laura M Krieger	25.05
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326732497	09/24/2013 16:24	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326732497	09/24/2013 16:25	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132680018A	09/27/2013 05:54	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132730002A	10/02/2013 11:22	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 19:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132730002A	09/30/2013 14:00	Wanda F Oswald	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132680018A	09/26/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132690027A	09/27/2013 22:14	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132690027A	09/27/2013 09:30	David S Schrum	1
01643	Aluminum	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132740637001	10/04/2013 01:09	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132740637001	10/04/2013 01:09	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132740637001	10/03/2013 14:50	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132740637001B	10/03/2013 06:31	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637001A	10/03/2013 06:31	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637001A	10/03/2013 09:44	Choon Y Tian	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5D-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208986
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 08:10 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86825 SDG#: PH112-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132740637001A	10/03/2013 06:31	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638001	10/03/2013 04:41	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637001	10/02/2013 09:39	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638001	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13267039401A	09/24/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401B	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208987
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 10:25 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH112-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	57		19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	0.79	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	93	U	93	46	1
10401	2,4-DB	94-82-6	18	U	18	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.2	U	5.2	2.2	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208987
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 10:25 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH112-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.34	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.36	1
10590	Delta BHC	319-86-8	0.85	U	0.85	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.23	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.62	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.85	U	0.85	0.17	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	12	J	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	12		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	13		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,900		40.6	7.31	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.750	1
06935	Arsenic	7440-38-2	4.25		4.06	0.710	1
06946	Barium	7440-39-3	83.0		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.611	J	1.01	0.0679	1
07914	Boron	7440-42-8	6.99	J	10.1	0.852	1
06949	Cadmium	7440-43-9	0.251	J	1.01	0.0771	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208987
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 10:25 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH112-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	11,500		20.3	3.39	1
06951	Chromium	7440-47-3	33.0		3.04	0.162	1
06952	Cobalt	7440-48-4	7.78		1.01	0.100	1
06953	Copper	7440-50-8	13.7		2.03	0.294	1
01654	Iron	7439-89-6	35,500		81.1	7.34	2
06955	Lead	7439-92-1	7.81		3.04	0.507	1
01656	Lithium	7439-93-2	38.6		4.1	0.34	1
01657	Magnesium	7439-95-4	8,190		10.1	1.69	1
06958	Manganese	7439-96-5	270		1.01	0.0841	1
06960	Molybdenum	7439-98-7	2.03	U	2.03	0.172	1
06961	Nickel	7440-02-0	14.7		2.03	0.132	1
10145	Phosphorus	7723-14-0	515		10.1	2.93	1
01662	Potassium	7440-09-7	4,370		101	8.46	1
01667	Sodium	7440-23-5	116		101	16.9	1
06969	Tin	7440-31-5	2.83	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,090		2.03	0.345	2
06971	Vanadium	7440-62-2	58.0		1.01	0.132	1
06972	Zinc	7440-66-6	76.7		4.06	0.203	1
10146	Zirconium	7440-67-7	2.62	J	5.07	0.852	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.178	J	0.406	0.101	2
06142	Silver	7440-22-4	0.203	U	0.203	0.0264	2
06144	Strontium	7440-24-6	27.0		0.406	0.0689	2
06145	Thallium	7440-28-0	0.393		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0160	J	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.90		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208987
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 10:25 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH112-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01 U	1.01	0.0590	1
11031	12378-PeCDD	40321-76-4	0.0867 JBQ	5.04	0.0329	1
11031	123478-HxCDD	39227-28-6	0.0351 JBQ	5.04	0.0205	1
11031	123678-HxCDD	57653-85-7	0.0837 JBQ	5.04	0.0216	1
11031	123789-HxCDD	19408-74-3	0.0616 JBQ	5.04	0.0212	1
11031	1234678-HpCDD	35822-46-9	0.275 JB	5.04	0.0353	1
11031	OCDD	3268-87-9	1.19 JB	10.1	0.0512	1
11031	2378-TCDF	51207-31-9	1.01 U	1.01	0.0445	1
11031	12378-PeCDF	57117-41-6	0.138 JBQ	5.04	0.0176	1
11031	23478-PeCDF	57117-31-4	0.0575 JBQ	5.04	0.0186	1
11031	123478-HxCDF	70648-26-9	0.0551 JBQ	5.04	0.0235	1
11031	123678-HxCDF	57117-44-9	0.0686 JB	5.04	0.0203	1
11031	123789-HxCDF	72918-21-9	0.111 JB	5.04	0.0251	1
11031	234678-HxCDF	60851-34-5	0.0734 JBQ	5.04	0.0221	1
11031	1234678-HpCDF	67562-39-4	0.0964 JB	5.04	0.0111	1
11031	1234789-HpCDF	55673-89-7	0.0500 JBQ	5.04	0.0185	1
11031	OCDF	39001-02-0	0.305 JBQ	10.1	0.0540	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0220			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208987
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 10:25 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH112-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208987
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 10:25 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH112-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLC026	10/01/2013 04:15	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLC026	09/30/2013 09:00	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132680018A	09/27/2013 07:15	Elizabeth J Marin	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132740016A	10/02/2013 17:12	Richard A Shober	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132730002A	10/02/2013 11:37	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 19:40	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132730002A	09/30/2013 14:00	Wanda F Oswald	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132680018A	09/26/2013 09:00	David S Schrum	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132740016A	10/02/2013 06:30	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132690027A	09/27/2013 20:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132690027A	09/27/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/02/2013 17:19	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132740637001	10/04/2013 09:13	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208987
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 10:25 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH112-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132740637001	10/04/2013 09:13	Eric L Eby	2
06971	Vanadium	SW-846 6010C	1	132740637001	10/04/2013 01:21	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132740637001	10/03/2013 15:02	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132740637001B	10/03/2013 06:38	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637001A	10/03/2013 06:38	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637001A	10/03/2013 06:38	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132740637001A	10/03/2013 06:38	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638001	10/03/2013 04:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637001	10/02/2013 09:39	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638001	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13267039401A	09/24/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401B	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208988
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 09:45 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57200 SDG#: PH112-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	91	U	91	45	1
10401	2,4-DB	94-82-6	17	U	17	7.4	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	24	U	24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.1	1
10401	MCPA	94-74-6	2,500	U	2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	2,500	U	2,500	760	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.83	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.76	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.83	U	0.83	0.17	1
10590	Alpha BHC	319-84-6	0.83	U	0.83	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.96	1
10590	Gamma BHC - Lindane	58-89-9	0.24	J	0.83	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.0	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	0.60	J	1.7	0.33	1
10590	p,p-DDT	50-29-3	1.4	J	1.7	0.35	1
10590	Delta BHC	319-86-8	0.83	U	0.83	0.45	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.83	U	0.83	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.60	1
10590	Heptachlor	76-44-8	0.83	U	0.83	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.83	U	0.83	0.17	1
10590	Methoxychlor	72-43-5	6.7	U	6.7	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208988
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 09:45 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57200 SDG#: PH112-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.111	JQ	0.975	0.0538	1
11031	12378-PeCDD	40321-76-4	0.322	JBQ	4.88	0.0377	1
11031	123478-HxCDD	39227-28-6	0.152	JB	4.88	0.0311	1
11031	123678-HxCDD	57653-85-7	0.539	JB	4.88	0.0340	1
11031	123789-HxCDD	19408-74-3	0.659	JB	4.88	0.0308	1
11031	1234678-HpCDD	35822-46-9	3.11	JB	4.88	0.0343	1
11031	OCDD	3268-87-9	24.8	B	9.75	0.0302	1
11031	2378-TCDF	51207-31-9	0.288	JQ	0.975	0.0709	1
11031	12378-PeCDF	57117-41-6	0.511	JB	4.88	0.0307	1
11031	23478-PeCDF	57117-31-4	0.460	JBQ	4.88	0.0311	1
11031	123478-HxCDF	70648-26-9	0.249	JBQ	4.88	0.0286	1
11031	123678-HxCDF	57117-44-9	0.274	JB	4.88	0.0253	1
11031	123789-HxCDF	72918-21-9	0.534	JB	4.88	0.0303	1
11031	234678-HxCDF	60851-34-5	0.207	JB	4.88	0.0274	1
11031	1234678-HpCDF	67562-39-4	0.744	JB	4.88	0.0148	1
11031	1234789-HpCDF	55673-89-7	0.143	JBQ	4.88	0.0234	1
11031	OCDF	39001-02-0	1.52	JB	9.75	0.0376	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.298				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208988
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 09:45 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57200 SDG#: PH112-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208988
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 09:45 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57200 SDG#: PH112-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132680018A	09/27/2013 07:42	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132730002A	10/02/2013 11:52	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132730002A	09/30/2013 14:00	Wanda F Oswald	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132680018A	09/26/2013 09:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/02/2013 18:16	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401B	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208989
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 09:20 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57400 SDG#: PH112-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.0	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	0.69	J	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.67	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	36	U	36	12	1
10401	Dalapon	75-99-0	91	U	91	44	1
10401	2,4-DB	94-82-6	17	U	17	6.3	1
10401	Dicamba	1918-00-9	12	U	12	4.0	1
10401	Dinoseb	88-85-7	24	U	24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.1	1
10401	MCPA	94-74-6	2,500	U	2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	2,500	U	2,500	760	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.83	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.76	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.0	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.33	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.35	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208989
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 09:20 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57400 SDG#: PH112-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	0.84	U	0.84	0.45	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.60	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.7	U	6.7	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.0		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208989
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 09:20 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57400 SDG#: PH112-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0625 JQ	1.00	0.0572	1
11031	12378-PeCDD	40321-76-4	0.127 JBQ	5.00	0.0338	1
11031	123478-HxCDD	39227-28-6	0.0708 JBQ	5.00	0.0254	1
11031	123678-HxCDD	57653-85-7	0.138 JB	5.00	0.0269	1
11031	123789-HxCDD	19408-74-3	0.150 JB	5.00	0.0261	1
11031	1234678-HpCDD	35822-46-9	0.175 JB	5.00	0.0260	1
11031	OCDD	3268-87-9	0.428 JB	10.0	0.0306	1
11031	2378-TCDF	51207-31-9	0.0615 JQ	1.00	0.0431	1
11031	12378-PeCDF	57117-41-6	0.163 JBQ	5.00	0.0193	1
11031	23478-PeCDF	57117-31-4	0.146 JB	5.00	0.0192	1
11031	123478-HxCDF	70648-26-9	0.144 JBQ	5.00	0.0232	1
11031	123678-HxCDF	57117-44-9	0.110 JBQ	5.00	0.0210	1
11031	123789-HxCDF	72918-21-9	0.138 JB	5.00	0.0257	1
11031	234678-HxCDF	60851-34-5	0.0790 JBQ	5.00	0.0223	1
11031	1234678-HpCDF	67562-39-4	0.0910 JBQ	5.00	0.0121	1
11031	1234789-HpCDF	55673-89-7	0.0767 JBQ	5.00	0.0188	1
11031	OCDF	39001-02-0	0.246 JBQ	10.0	0.0495	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0882			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208989
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 09:20 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57400 SDG#: PH112-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208989
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 09:20 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57400 SDG#: PH112-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLC026	10/01/2013 04:48	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLC026	09/30/2013 09:00	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132680018A	09/27/2013 08:09	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132730002A	10/02/2013 12:07	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132730002A	09/30/2013 14:00	Wanda F Oswald	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132680018A	09/26/2013 09:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/02/2013 19:12	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162401B	09/25/2013 21:27	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208990
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 12:40 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58300 SDG#: PH112-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.95	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.0	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	3.0		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.2	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	0.84	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	26		19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	2.6		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	19	6.2	1
12969	Fluoranthene	206-44-0	2.1		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.89	J	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	0.92	J	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.5	J	1.7	0.69	1
12969	Naphthalene	91-20-3	3.7		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	2.0		1.7	0.69	1
12969	Pyrene	129-00-0	2.2		1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	37		18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	3.6	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	17		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	43		10	4.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208990
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 12:40 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58300 SDG#: PH112-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,600		41.6	7.50	1
06944	Antimony	7440-36-0	4.16	U	4.16	0.770	1
06935	Arsenic	7440-38-2	4.37		4.16	0.728	1
06946	Barium	7440-39-3	105		1.04	0.0343	1
06947	Beryllium	7440-41-7	0.758	J	1.04	0.0697	1
07914	Boron	7440-42-8	10.8		10.4	0.874	1
06949	Cadmium	7440-43-9	0.341	J	1.04	0.0791	1
01650	Calcium	7440-70-2	8,160		20.8	3.48	1
06951	Chromium	7440-47-3	34.8		3.12	0.166	1
06952	Cobalt	7440-48-4	8.40		1.04	0.103	1
06953	Copper	7440-50-8	18.3		2.08	0.302	1
01654	Iron	7439-89-6	31,200		83.2	7.53	2
06955	Lead	7439-92-1	15.0		3.12	0.520	1
01656	Lithium	7439-93-2	25.4		4.2	0.35	1
01657	Magnesium	7439-95-4	7,570		10.4	1.74	1
06958	Manganese	7439-96-5	408		1.04	0.0864	1
06960	Molybdenum	7439-98-7	2.08	U	2.08	0.177	1
06961	Nickel	7440-02-0	16.4		2.08	0.135	1
10145	Phosphorus	7723-14-0	712		10.4	3.01	1
01662	Potassium	7440-09-7	7,160		104	8.68	1
01667	Sodium	7440-23-5	84.7	J	104	17.4	1
06969	Tin	7440-31-5	3.21	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,010		2.08	0.354	2
06971	Vanadium	7440-62-2	61.0		1.04	0.135	1
06972	Zinc	7440-66-6	80.0		4.16	0.208	1
10146	Zirconium	7440-67-7	5.17	J	5.20	0.874	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.332	J	0.416	0.104	2
06142	Silver	7440-22-4	0.0487	J	0.208	0.0271	2
06144	Strontium	7440-24-6	37.0		0.416	0.0708	2
06145	Thallium	7440-28-0	0.408		0.208	0.0312	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0237		0.0164	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.67		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208990
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 12:40 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58300 SDG#: PH112-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208990
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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

58300 SDG#: PH112-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0878	JQ	1.04	0.0682	1
11031	12378-PeCDD	40321-76-4	5.18	U	5.18	0.0642	1
11031	123478-HxCDD	39227-28-6	0.300	JBQ	5.18	0.0699	1
11031	123678-HxCDD	57653-85-7	0.470	JB	5.18	0.0744	1
11031	123789-HxCDD	19408-74-3	0.588	JB	5.18	0.0737	1
11031	1234678-HpCDD	35822-46-9	4.83	JB	5.18	0.0754	1
11031	OCDD	3268-87-9	58.0	B	10.4	0.180	1
11031	2378-TCDF	51207-31-9	0.582	JQ	1.04	0.119	1
11031	12378-PeCDF	57117-41-6	5.59	B	5.18	0.0581	1
11031	23478-PeCDF	57117-31-4	0.614	JBQ	5.18	0.0580	1
11031	123478-HxCDF	70648-26-9	0.693	JB	5.18	0.0656	1
11031	123678-HxCDF	57117-44-9	0.491	JB	5.18	0.0588	1
11031	123789-HxCDF	72918-21-9	0.615	JB	5.18	0.0892	1
11031	234678-HxCDF	60851-34-5	0.303	JBQ	5.18	0.0599	1
11031	1234678-HpCDF	67562-39-4	1.07	JB	5.18	0.0541	1
11031	1234789-HpCDF	55673-89-7	0.285	JBQ	5.18	0.0966	1
11031	OCDF	39001-02-0	2.79	JBQ	10.4	0.222	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.530				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	44	25 - 164
13C12-12378-PeCDD	43	25 - 181
13C12-123478-HxCDD	49	32 - 141
13C12-123678-HxCDD	48	28 - 130
13C12-123789-HxCDD	43	28 - 130
13C12-1234678-HpCDD	43	23 - 140
13C12-OCDD	34	17 - 157
13C12-2378-TCDF	42	24 - 169
13C12-12378-PeCDF	43	24 - 185
13C12-23478-PeCDF	41	21 - 178
13C12-123478-HxCDF	44	26 - 152
13C12-123678-HxCDF	47	26 - 123
13C12-234678-HxCDF	44	28 - 136
13C12-123789-HxCDF	31	29 - 147
13C12-1234678-HpCDF	52	28 - 143
13C12-1234789-HpCDF	32	26 - 138
13C12-OCDF	25	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208990
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 12:40 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58300 SDG#: PH112-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208990
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 12:40 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58300 SDG#: PH112-08*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLC026	10/01/2013 05:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLC026	09/30/2013 09:00	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132690019A	10/02/2013 19:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132690019A	09/27/2013 05:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132690027A	09/27/2013 20:28	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132690027A	09/27/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/02/2013 23:06	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132740637001	10/04/2013 01:28	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132740637001	10/04/2013 01:28	John W Yanzuk II	2
06971	Vanadium	SW-846 6010C	1	132740637001	10/04/2013 01:24	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132740637001	10/03/2013 15:06	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132740637001B	10/03/2013 06:40	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637001A	10/03/2013 06:40	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637001A	10/03/2013 06:40	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132740637001A	10/03/2013 06:40	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7208990
LL Group # 1420976
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/23/2013 12:40 by VC

Submitted: 09/24/2013 09:35
Reported: 10/04/2013 10:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58300 SDG#: PH112-08*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132740638001	10/03/2013 04:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637001	10/02/2013 09:39	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638001	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13267039401A	09/24/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13268162402B	09/25/2013 21:03	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420976
Reported: 10/04/13 at 10:44 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13271SLC026	Sample number(s): 7208981-7208984,7208986-7208987,7208989-7208990									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	105		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	100		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	103		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	103		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	106		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	102		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	101		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	107		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	103		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	103		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	99		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	108		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	107		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	100		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	111		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	107		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	100		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	104		79-112		
Batch number: 13268A94A	Sample number(s): 7208980									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	101	105	75-135	3	30
Batch number: 13270A31A	Sample number(s): 7208982-7208984,7208986									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	81		67-119		
Batch number: 132680018A	Sample number(s): 7208981-7208984,7208986-7208989									
2,4-D	36	U	36.	12	ug/kg	108		59-122		
Dalapon	90	U	90.	44	ug/kg	87		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	101		54-131		
Dicamba	12	U	12.	4.0	ug/kg	87		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	10		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	122		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	93		56-133		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	86		54-134		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420976
Reported: 10/04/13 at 10:44 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	103		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	100		63-130		
Batch number: 132740016A	Sample number(s): 7208987									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	89		85-115		
Batch number: 132690019A	Sample number(s): 7208981-7208984,7208986-7208987,7208990									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	96*	94*	62-87	2	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	105		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	118		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132730002A	Sample number(s): 7208981-7208984,7208986-7208989									
Aldrin	0.83	U	0.83	0.17	ug/kg	93		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	100		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	93		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	92		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	95		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	95		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	97		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	93		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	99		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	84		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	95		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	105		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	94		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	99		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	99		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	91		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	94		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	93		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132690027A	Sample number(s): 7208981-7208984,7208986-7208987,7208990									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	91		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	96		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	93		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	69		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	75		49-107		
Batch number: 132740637001	Sample number(s): 7208981-7208987,7208990									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	102		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420976
Reported: 10/04/13 at 10:44 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	103		80-120		
Calcium	9.48	J	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	105		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	105		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	107		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	100		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	104		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	103		80-120		
Potassium	100 U		100.	8.34	mg/kg	99		80-120		
Sodium	100 U		100.	16.7	mg/kg	99		80-120		
Tin	1.46	J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	101		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	103		80-120		
Zinc	0.850	J	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	101		80-120		
Batch number: 132740637001A	Sample number(s): 7208981-7208987,7208990									
Silver	0.200	U	0.200	0.0260	mg/kg	95		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	96		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	96		80-120		
Batch number: 132740637001B	Sample number(s): 7208981-7208987,7208990									
Selenium	0.400	U	0.400	0.100	mg/kg	101		80-120		
Batch number: 132740638001	Sample number(s): 7208981-7208987,7208990									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	109		85-120		
Batch number: 13267039401A	Sample number(s): 7208981-7208982,7208985-7208987,7208990									
15a pH by 9045D						100		95-105		
Batch number: 13268162401B	Sample number(s): 7208981-7208989									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
Batch number: 13268162402B	Sample number(s): 7208990									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13273002	Sample number(s): 7208981,7208987-7208990									
2378-TCDD	1.00	U	1.00	0.0390	ng/kg	100		67-158		
12378-PeCDD	0.0738	J	5.00	0.0254	ng/kg	102		70-142		
123478-HxCDD	0.0334	J	5.00	0.0169	ng/kg	101		70-164		
123678-HxCDD	0.0256	J	5.00	0.0182	ng/kg	101		76-134		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420976
Reported: 10/04/13 at 10:44 AM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123789-HxCDD	0.0369 J	5.00	0.0172	ng/kg	99		64-162		
1234678-HpCDD	0.0965 J	5.00	0.0155	ng/kg	98		70-140		
OCDD	0.249 J	10.0	0.0199	ng/kg	97		78-144		
2378-TCDF	1.00 U	1.00	0.0244	ng/kg	103		75-158		
12378-PeCDF	0.0876 J	5.00	0.0133	ng/kg	99		80-134		
23478-PeCDF	0.0646 J	5.00	0.0127	ng/kg	101		68-160		
123478-HxCDF	0.0515 J	5.00	0.0108	ng/kg	100		72-134		
123678-HxCDF	0.0453 J	5.00	0.0101	ng/kg	102		84-130		
123789-HxCDF	0.0754 J	5.00	0.0107	ng/kg	102		78-130		
234678-HxCDF	0.0332 J	5.00	0.0106	ng/kg	101		70-156		
1234678-HpCDF	0.0595 J	5.00	0.00690	ng/kg	99		82-122		
1234789-HpCDF	0.0657 J	5.00	0.00960	ng/kg	101		78-138		
OCDF	0.137 J	10.0	0.0215	ng/kg	100		63-170		
TEQ WHO 2005 - EDLx0.0	0.00400			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13271SLC026	Sample number(s): 7208981-7208984,7208986-7208987,7208989-7208990 UNSPK: 7208982								
Acenaphthene	67	72	48-127	8	30				
Acenaphthylene	72	76	49-121	6	30				
Anthracene	70	75	52-126	8	30				
Benzo(a)anthracene	76	77	44-143	2	30				
Benzo(a)pyrene	71	74	44-140	5	30				
Benzo(b)fluoranthene	78	90	26-142	14	30				
Benzo(e)pyrene	77	80	70-130	3	30				
Benzo(g,h,i)perylene	35	34	33-141	3	30				
Benzo(k)fluoranthene	91	93	54-142	3	30				
Butylbenzylphthalate	126	112	49-151	11	30				
Di-n-butylphthalate	77	84	52-147	9	30				
Chrysene	77	76	29-148	1	30				
Dibenz(a,h)anthracene	44	43	20-137	2	30				
Diethylphthalate	73	79	43-145	9	30				
Dimethylphthalate	72	76	58-129	6	30				
Bis(2-Ethylhexyl)phthalate	87	113	39-167	26	30				
Fluoranthene	74	76	40-148	3	30				
Fluorene	71	75	51-137	6	30				
Indeno(1,2,3-cd)pyrene	43	42	17-136	1	30				
1-Methylnaphthalene	76	79	50-131	5	30				
2-Methylnaphthalene	75	77	35-152	5	30				
Naphthalene	75	74	31-148	1	30				
N-Nitrosodimethylamine	78	78	48-113	1	30				
Di-n-octylphthalate	123	159	52-162	26	30				
Phenanthrene	68	72	29-142	5	30				
Pyrene	76	82	26-143	8	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420976
Reported: 10/04/13 at 10:44 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13270A31A	Sample number(s): 7208982-7208984,7208986 UNSPK: 7208982								
11a TPH by EPA 8015B GRO	92	81	69-123	1	30				
Batch number: 132680018A	Sample number(s): 7208981-7208984,7208986-7208989 UNSPK: 7208982								
2,4-D	90	110	42-143	21	35				
Dalapon	57	65	16-98	12	50				
2,4-DB	96	104	10-179	8	50				
Dicamba	68	77	55-133	12	50				
Dinoseb	21	18	10-52	16	35				
2,4-DP (Dichlorprop)	105	113	32-171	7	50				
MCPA	78	85	23-169	8	50				
MCPP (Mecoprop)	72	81	24-164	12	50				
2,4,5-T	84	104	12-172	21	35				
2,4,5-TP	88	97	10-142	10	35				
Batch number: 132740016A	Sample number(s): 7208987 UNSPK: 7208987								
6a Perchlorate (Method 6850)	101	101	80-120	0	20				
Batch number: 132690019A	Sample number(s): 7208981-7208984,7208986-7208987,7208990 UNSPK: 7208982								
PCB-1016	102	108	41-135	5	50				
PCB-1260	113	123	40-134	9	50				
Batch number: 132730002A	Sample number(s): 7208981-7208984,7208986-7208989 UNSPK: 7208982								
Aldrin	81	73	16-126	10	50				
Alpha BHC	73	65	14-140	12	50				
Beta BHC	76	70	42-133	7	50				
Gamma BHC - Lindane	72	60	30-137	18	50				
p,p-DDD	76	69	43-149	10	50				
p,p-DDE	81	72	35-152	12	50				
p,p-DDT	82	73	12-193	11	50				
Delta BHC	67	41	13-153	47	50				
Dieldrin	81	74	41-153	9	50				
Endosulfan I	61	50	26-146	21	50				
Endosulfan II	66	53	34-141	22	50				
Endosulfan Sulfate	75	66	10-181	13	50				
Endrin	75	68	30-152	11	50				
Endrin Aldehyde	70	65	23-138	8	50				
Endrin Ketone	73	65	30-148	12	50				
Heptachlor	79	72	16-152	9	50				
Heptachlor Epoxide	81	73	33-144	9	50				
Methoxychlor	78	70	41-161	11	50				
Batch number: 132690027A	Sample number(s): 7208981-7208984,7208986-7208987,7208990 UNSPK: 7208982								
EFH (C12-C14)	91	86	49-123	5	20				
EFH (C15-C20)	104	119	49-123	14	20				
EFH (C21-C30)	29*	193*	49-123	59*	20				
EFH (C30-C40)	144*	526*	49-123	76*	20				
EFH (C8-C11)	75	74	49-123	1	20				
Batch number: 132740637001	Sample number(s): 7208981-7208987,7208990 UNSPK: 7208982 BKG: 7208982								
Aluminum	-136	-131	75-125	0	20	20,500	13,200	43*	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420976
Reported: 10/04/13 at 10:44 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
	(2)	(2)							
Antimony	44*	42*	75-125	6	20	4.00 U	3.96 U	0 (1)	20
Arsenic	97	104	75-125	4	20	4.06	3.28 J	21* (1)	20
Barium	94	92	75-125	3	20	95.6	88.7	8	20
Beryllium	97	98	75-125	0	20	0.565 J	0.412 J	31* (1)	20
Boron	97	100	75-125	1	20	9.44 J	6.97 J	30* (1)	20
Cadmium	94	97	75-125	2	20	0.321 J	0.442 J	32* (1)	20
Calcium	1949	2450	75-125	4	20	37,100	42,800	14	20
	(2)	(2)							
Chromium	123	109	75-125	6	20	31.3	27.9	12	20
Cobalt	89	90	75-125	0	20	7.96	5.90	30*	20
Copper	97	98	75-125	0	20	16.0	13.1	20	20
Iron	-5142	-6500	75-125	6	20	26,000	17,500	39*	20
	(2)	(2)							
Lead	88	91	75-125	1	20	7.08	6.86	3 (1)	20
Lithium	91	92	75-125	0	20	32.9	18.4	56* (1)	20
Magnesium	-455	-524	75-125	2	20	7,180	5,120	33*	20
	(2)	(2)							
Manganese	230 (2)	342 (2)	75-125	13	20	266	355	29*	20
Molybdenum	93	94	75-125	1	20	2.00 U	0.388 J	200* (1)	20
Nickel	89	87	75-125	3	20	17.4	14.8	16	20
Phosphorus	173 (2)	168 (2)	75-125	1	20	439	503	14	20
Potassium	48*	64*	75-125	4	20	3,370	2,470	31*	20
Sodium	94	94	75-125	2	20	187	146	25* (1)	20
Tin	84	86	75-125	1	20	3.09 J	2.55 J	19 (1)	20
Titanium	177 (2)	236 (2)	75-125	4	20	1,100	652	51*	20
Vanadium	103	111	75-125	3	20	56.4	41.7	30*	20
Zinc	57*	66*	75-125	4	20	78.2	54.7	35*	20
Zirconium	95	99	75-125	2	20	4.25 J	5.63	28* (1)	20
Batch number: 132740637001A	Sample number(s): 7208981-7208987,7208990 UNSPK: 7208982 BKG: 7208982								
Silver	111	114	75-125	0	20	0.0327 J	0.0359 J	9 (1)	20
Strontium	145 (2)	98 (2)	75-125	4	20	89.7	84.5	6	20
Thallium	123	117	75-125	4	20	0.283	0.251	12 (1)	20
Batch number: 132740637001B	Sample number(s): 7208981-7208987,7208990 UNSPK: 7208982 BKG: 7208982								
Selenium	106	113	75-125	4	20	0.183 J	0.238 J	26* (1)	20
Batch number: 132740638001	Sample number(s): 7208981-7208987,7208990 UNSPK: 7208982 BKG: 7208982								
3a Mercury 7471A	115	103	65-135	11	20	0.0115 J	0.0111 J	4 (1)	20
Batch number: 13267039401A	Sample number(s): 7208981-7208982,7208985-7208987,7208990 BKG: 7208982								
15a pH by 9045D						7.99	8.03	0	3
Batch number: 13268162401B	Sample number(s): 7208981-7208989 BKG: 7208982								
14a Moisture Content by 160.3						6.2	6.3	3	20
14a Moisture Content by 160.3						6.2	6.3	3	20
14a Moisture Content by 160.3						6.2	6.3	3	20
Batch number: 13268162402B	Sample number(s): 7208990 BKG: P204677								
14a Moisture Content by 160.3						1.7	1.6	4	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420976
Reported: 10/04/13 at 10:44 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13273002	Sample number(s): 7208981,7208987-7208990 UNSPK: P211497								
2378-TCDD	97	102	40-135	4	20				
12378-PeCDD	102	103	40-135	0	20				
123478-HxCDD	99	100	40-135	1	20				
123678-HxCDD	104	102	40-135	3	20				
123789-HxCDD	97	100	40-135	2	20				
1234678-HpCDD	99	100	40-135	0	20				
OCDD	97	100	40-135	2	20				
2378-TCDF	103	105	40-135	0	20				
12378-PeCDF	101	100	40-135	2	20				
23478-PeCDF	100	103	40-135	2	20				
123478-HxCDF	100	103	40-135	2	20				
123678-HxCDF	103	104	40-135	1	20				
123789-HxCDF	101	104	40-135	1	20				
234678-HxCDF	101	102	40-135	0	20				
1234678-HpCDF	99	101	40-135	1	20				
1234789-HpCDF	102	102	40-135	1	20				
OCDF	100	103	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13271SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7208981	90	87	94
7208982	77	83	87
7208983	67	69	79
7208984	76	79	86
7208986	62	68	73
7208987	86	93	99
7208989	87	94	102
7208990	82	85	95
Blank	86	94	104
LCS	90	96	106
MS	67	69	79
MSD	76	79	86
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13268A94A

	Trifluorotoluene-F
7208980	75

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420976
Reported: 10/04/13 at 10:44 AM

Surrogate Quality Control

Blank	74
LCS	77
LCSD	79
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13270A31A

	Trifluorotoluene-F
7208982	91
7208983	86
7208984	81
7208986	78
Blank	92
LCS	86
MS	86
MSD	81
Limits:	50-142

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132680018A

	2,4-Dichlorophenylacetic acid
7208981	67
7208982	63
7208983	54
7208984	63
7208986	59
7208987	59
7208988	65
7208989	63
Blank	69
LCS	69
MS	54
MSD	63
Limits:	50-150

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132690019A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7208981	103	98
7208982	145*	138*
7208983	117	118
7208984	123*	123*
7208986	121*	130*
7208987	132*	137*
7208990	105	119
Blank	114	117
LCS	120	135*
LCSD	132*	139*
MS	117	118

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420976
Reported: 10/04/13 at 10:44 AM

Surrogate Quality Control

MSD = 123* 123*

Limits: 45-120 45-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132730002A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7208981	71	98
7208982	70	75
7208983	84	84
7208984	76	74
7208986	81	78
7208987	80	87
7208988	79	88
7208989	84	94
Blank	94	109
LCS	95	108
MS	84	84
MSD	76	74
Limits:	50-130	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132690027A

	Chlorobenzene	Orthoterphenyl
7208981	100	86
7208982	98	74
7208983	106	93
7208984	97	86
7208986	101	80
7208987	97	84
7208990	86	77
Blank	104	89
LCS	103	87
MS	106	93
MSD	97	86
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13273002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7208981	75	74	75	74	76	79
7208987	66	68	62	71	65	62
7208988	72	75	73	80	71	72
7208989	66	70	62	68	64	64
7208990	44	41	44	47	44	31
Blank	69	71	70	73	71	74
MS	67	68	69	75	71	68
MSD	69	69	69	76	70	71
OPR	65	69	68	75	72	68
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1420976
Reported: 10/04/13 at 10:44 AM

Surrogate Quality Control

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7208981	79	79	78	76	78	77
7208987	88	59	54	74	74	74
7208988	89	67	64	77	76	75
7208989	78	57	49	75	70	69
7208990	52	32	25	43	49	48
Blank	89	73	73	74	77	77
MS	90	68	66	72	77	76
MSD	94	67	64	73	79	76
OPR	93	70	68	75	80	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7208981	78	81	79	74	72
7208987	73	74	72	60	73
7208988	75	77	78	68	78
7208989	69	67	63	63	72
7208990	43	43	34	42	43
Blank	77	81	85	65	72
MS	77	79	80	63	72
MSD	76	81	80	64	74
OPR	81	84	83	59	73
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1420976 7208980-90

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/23/2013
CarrierName: FedEx
AirbillNo: 796749895361

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130923-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-092313	9/23/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-568-SA5D-SB-0.0-0.5	9/23/13 07:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X	X				X										
SL-568-SA5D-SB-0.0-0.5	9/23/13 07:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-568-SA5D-SB-2.5-3.5MS	9/23/13 08:00	SO	None	6 - SS-Sleeve	10 day	X	X					X			X						X	X				X										MS/MSD
SL-568-SA5D-SB-2.5-3.5MS	9/23/13 08:00	SO	None	1 - 8 oz glass	10 day													X																		MS/MSD
SL-568-SA5D-SB-2.5-3.5MS	9/23/13 08:00	SO	None	6 - Encore	10 day																			X												MS/MSD
SL-868-SA5D-SB-2.5-3.5	9/23/13 08:10	SO	None	2 - SS-Sleeve	10 day	X	X					X			X						X	X				X										
SL-868-SA5D-SB-2.5-3.5	9/23/13 08:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-868-SA5D-SB-2.5-3.5	9/23/13 08:10	SO	None	2 - Encore	10 day																			X												
SL-571-SA5D-SB-0.0-0.5	9/23/13 10:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X		X				X	X				X										
SL-571-SA5D-SB-0.0-0.5	9/23/13 10:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-572-SA5D-SB-0.0-0.5	9/23/13 09:45	SO	None	1 - SS-Sleeve	10 day									X							X	X														
SL-574-SA5D-SB-0.0-0.5	9/23/13 09:20	SO	None	1 - SS-Sleeve	10 day							X		X							X	X														
SL-583-SA5D-SB-0.0-0.5	9/23/13 12:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-583-SA5D-SB-0.0-0.5	9/23/13 12:40	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Myers	09/23/2013	1600									
										9-24-13	0935

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1420976

Client/Project: CDM Smith

Date of Receipt: 9-24-13

Time of Receipt: 0935

Source Code: 5o

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.3	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 52xx **Date/Time:** 9-24-13 1015

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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SAMPLE DELIVERY GROUP

PH113

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 09, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/25/2013
Group Number: 1421324
SDG: PH113
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-092413 Water	7211494
SL-558-SA5D-SB-0.0-0.5 Soil	7211495
SL-558-SA5D-SB-4.0-5.0 Soil	7211496
SL-565-SA5D-SB-0.0-0.5 Soil	7211497
SL-565-SA5D-SB-0.0-0.5MS Soil	7211498
SL-565-SA5D-SB-0.0-0.5MSD Soil	7211499
SL-565-SA5D-SB-0.0-0.5DUP Soil	7211500
SL-865-SA5D-SB-0.0-0.5 Soil	7211501
SL-557-SA5D-SB-0.0-0.5 Soil	7211502
SL-566-SA5D-SB-0.0-0.5 Soil	7211503
SL-566-SA5D-SB-4.0-5.0 Soil	7211504

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-092413 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7211494
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:00

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58-TB SDG#: PH113-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13269B94A	09/27/2013 15:07	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13269B94A	09/27/2013 15:07	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211495
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

558-0 SDG#: PH113-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	J	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.86	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	0.79	J	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	10	J	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.1	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.4	J	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.2	J	1.8	0.70	1
12969	Naphthalene	91-20-3	1.6	J	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.2	J	1.8	0.70	1
12969	Pyrene	129-00-0	1.3	J	1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.6		5.3	2.1	1
12952	EFH (C21-C30)	n.a.	34		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	72		11	4.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211495
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

558-0 SDG#: PH113-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,600		41.7	7.52	1
06944	Antimony	7440-36-0	4.17	U	4.17	0.772	1
06935	Arsenic	7440-38-2	3.27	J	4.17	0.730	1
06946	Barium	7440-39-3	88.7		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.686	J	1.04	0.0699	1
07914	Boron	7440-42-8	22.1		10.4	0.876	1
06949	Cadmium	7440-43-9	1.09		1.04	0.0793	1
01650	Calcium	7440-70-2	38,500		20.9	3.48	1
06951	Chromium	7440-47-3	32.3		3.13	0.167	1
06952	Cobalt	7440-48-4	8.29		1.04	0.103	1
06953	Copper	7440-50-8	18.1		2.09	0.303	1
01654	Iron	7439-89-6	29,300		83.5	7.55	2
06955	Lead	7439-92-1	10.4		3.13	0.522	1
01656	Lithium	7439-93-2	20.9		4.2	0.35	1
01657	Magnesium	7439-95-4	7,280		10.4	1.74	1
06958	Manganese	7439-96-5	411		1.04	0.0866	1
06960	Molybdenum	7439-98-7	0.198	J	2.09	0.177	1
06961	Nickel	7440-02-0	17.7		2.09	0.136	1
10145	Phosphorus	7723-14-0	800		10.4	3.02	1
01662	Potassium	7440-09-7	6,280		104	8.70	1
01667	Sodium	7440-23-5	92.0	J	104	17.4	1
06969	Tin	7440-31-5	2.34	J	10.4	0.230	1
06970	Titanium	7440-32-6	1,050		2.09	0.355	2
06971	Vanadium	7440-62-2	57.9		1.04	0.136	1
06972	Zinc	7440-66-6	75.2		4.17	0.209	1
10146	Zirconium	7440-67-7	5.19	J	5.22	0.876	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.354	J	0.417	0.104	2
06142	Silver	7440-22-4	0.0392	J	0.209	0.0271	2
06144	Strontium	7440-24-6	75.9		0.417	0.0709	2
06145	Thallium	7440-28-0	0.313		0.209	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0222		0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.53		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211495
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

558-0 SDG#: PH113-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211495
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

558-0 SDG#: PH113-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0701	JQ	1.04	0.0554	1
11031	12378-PeCDD	40321-76-4	0.248	JBQ	5.20	0.0381	1
11031	123478-HxCDD	39227-28-6	0.267	JBQ	5.20	0.0483	1
11031	123678-HxCDD	57653-85-7	0.555	JB	5.20	0.0501	1
11031	123789-HxCDD	19408-74-3	0.324	JB	5.20	0.0470	1
11031	1234678-HpCDD	35822-46-9	14.1	B	5.20	0.0525	1
11031	OCDD	3268-87-9	123	B	10.4	0.0634	1
11031	2378-TCDF	51207-31-9	0.197	JQ	1.04	0.0501	1
11031	12378-PeCDF	57117-41-6	0.320	JB	5.20	0.0290	1
11031	23478-PeCDF	57117-31-4	0.224	JBQ	5.20	0.0274	1
11031	123478-HxCDF	70648-26-9	0.261	JBQ	5.20	0.0352	1
11031	123678-HxCDF	57117-44-9	0.195	JBQ	5.20	0.0333	1
11031	123789-HxCDF	72918-21-9	0.178	JB	5.20	0.0376	1
11031	234678-HxCDF	60851-34-5	0.250	JB	5.20	0.0334	1
11031	1234678-HpCDF	67562-39-4	2.62	JB	5.20	0.0235	1
11031	1234789-HpCDF	55673-89-7	0.239	JBQ	5.20	0.0341	1
11031	OCDF	39001-02-0	10.7	B	10.4	0.0659	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.348				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211495
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

558-0 SDG#: PH113-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211495
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

558-0 SDG#: PH113-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLD026	10/01/2013 07:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLD026	09/30/2013 09:05	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750010A	10/04/2013 01:07	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750010A	10/02/2013 18:10	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132710006A	09/30/2013 21:13	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132710006A	09/29/2013 22:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/03/2013 00:03	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132680637001	10/01/2013 10:32	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132680637001	10/01/2013 10:32	Eric L Eby	2
06971	Vanadium	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132680637001	09/27/2013 19:02	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132680637001B	09/26/2013 23:40	David K Beck	2
06142	Silver	SW-846 6020A	1	132680637001A	09/26/2013 23:40	David K Beck	2
06144	Strontium	SW-846 6020A	1	132680637001A	09/26/2013 23:40	David K Beck	2
06145	Thallium	SW-846 6020A	1	132680637001A	09/26/2013 23:40	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211495
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

558-0 SDG#: PH113-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132680638001	09/27/2013 04:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132680637001	09/26/2013 09:53	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132680638001	09/26/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13268039401A	09/25/2013 17:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401A	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211496
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:45 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

558-4 SDG#: PH113-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.6
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211496
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:45 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

558-4 SDG#: PH113-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,000		42.7	7.69	1
06944	Antimony	7440-36-0	4.27	U	4.27	0.790	1
06935	Arsenic	7440-38-2	1.72	J	4.27	0.747	1
06946	Barium	7440-39-3	64.5		1.07	0.0352	1
06947	Beryllium	7440-41-7	0.476	J	1.07	0.0715	1
07914	Boron	7440-42-8	17.6		10.7	0.896	1
06949	Cadmium	7440-43-9	0.847	J	1.07	0.0811	1
01650	Calcium	7440-70-2	106,000		107	17.8	5
06951	Chromium	7440-47-3	25.1		3.20	0.171	1
06952	Cobalt	7440-48-4	4.95		1.07	0.106	1
06953	Copper	7440-50-8	10.6		2.13	0.309	1
01654	Iron	7439-89-6	24,400		42.7	3.86	1
06955	Lead	7439-92-1	5.72		3.20	0.534	1
01656	Lithium	7439-93-2	18.8		4.3	0.36	1
01657	Magnesium	7439-95-4	5,310		10.7	1.78	1
06958	Manganese	7439-96-5	287		1.07	0.0886	1
06960	Molybdenum	7439-98-7	2.13	U	2.13	0.181	1
06961	Nickel	7440-02-0	10.7		2.13	0.139	1
10145	Phosphorus	7723-14-0	442		10.7	3.08	1
01662	Potassium	7440-09-7	2,740		107	8.90	1
01667	Sodium	7440-23-5	102	J	107	17.8	1
06969	Tin	7440-31-5	2.08	J	10.7	0.235	1
06970	Titanium	7440-32-6	787		1.07	0.181	1
06971	Vanadium	7440-62-2	46.3		1.07	0.139	1
06972	Zinc	7440-66-6	49.6		4.27	0.213	1
10146	Zirconium	7440-67-7	4.44	J	5.34	0.896	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.251	J	0.427	0.107	2
06142	Silver	7440-22-4	0.213	U	0.213	0.0277	2
06144	Strontium	7440-24-6	98.5		1.07	0.181	5
06145	Thallium	7440-28-0	0.183	J	0.213	0.0320	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0174	U	0.0174	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.11		0.0100	0.0100	1
	The pH was measured in water at 22 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211496
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:45 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

558-4 SDG#: PH113-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	6.3	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLD026	10/01/2013 08:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLD026	09/30/2013 09:05	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13274A31A	10/01/2013 18:17	Laura M Krieger	26.6
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326832507	09/25/2013 12:41	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326832507	09/25/2013 12:42	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750010A	10/04/2013 01:25	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750010A	10/02/2013 18:10	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132710006A	09/30/2013 19:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132710006A	09/29/2013 22:30	Karen L Beyer	1
01643	Aluminum	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132680637001	10/01/2013 10:39	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211496
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 08:45 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

558-4 SDG#: PH113-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132680637001	10/01/2013 10:35	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132680637001	09/27/2013 19:14	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132680637001B	09/26/2013 23:47	David K Beck	2
06142	Silver	SW-846 6020A	1	132680637001A	09/26/2013 23:47	David K Beck	2
06144	Strontium	SW-846 6020A	1	132680637001A	10/02/2013 12:13	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132680637001A	09/26/2013 23:47	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132680638001	09/27/2013 04:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132680637001	09/26/2013 09:53	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132680638001	09/26/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13268039401A	09/25/2013 17:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401A	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211497
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	4.3	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	13		11	4.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211497
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,700		42.1	7.59	1
06944	Antimony	7440-36-0	4.21	U	4.21	0.779	1
06935	Arsenic	7440-38-2	4.92		4.21	0.737	1
06946	Barium	7440-39-3	149		1.05	0.0347	1
06947	Beryllium	7440-41-7	0.858	J	1.05	0.0705	1
07914	Boron	7440-42-8	3.09	J	10.5	0.884	1
06949	Cadmium	7440-43-9	0.840	J	1.05	0.0800	1
01650	Calcium	7440-70-2	52,200		21.0	3.51	1
06951	Chromium	7440-47-3	30.9		3.16	0.168	1
06952	Cobalt	7440-48-4	9.18		1.05	0.104	1
06953	Copper	7440-50-8	30.5		2.10	0.305	1
01654	Iron	7439-89-6	55,000		210	19.0	5
06955	Lead	7439-92-1	11.2		3.16	0.526	1
01656	Lithium	7439-93-2	25.5		4.2	0.36	1
01657	Magnesium	7439-95-4	8,530		10.5	1.76	1
06958	Manganese	7439-96-5	275		1.05	0.0873	1
06960	Molybdenum	7439-98-7	2.10	U	2.10	0.179	1
06961	Nickel	7440-02-0	22.2		2.10	0.137	1
10145	Phosphorus	7723-14-0	427		10.5	3.04	1
01662	Potassium	7440-09-7	4,120		105	8.78	1
01667	Sodium	7440-23-5	134		105	17.6	1
06969	Tin	7440-31-5	2.63	J	10.5	0.231	1
06970	Titanium	7440-32-6	924		5.26	0.894	5
06971	Vanadium	7440-62-2	65.0		1.05	0.137	1
06972	Zinc	7440-66-6	85.3		4.21	0.210	1
10146	Zirconium	7440-67-7	6.59		5.26	0.884	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.166	J	0.421	0.105	2
06142	Silver	7440-22-4	0.210	U	0.210	0.0274	2
06144	Strontium	7440-24-6	114		1.05	0.179	5
06145	Thallium	7440-28-0	0.341		0.210	0.0316	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0140	J	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.54		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211497
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211497
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0976	J	1.05	0.0523	1
11031	12378-PeCDD	40321-76-4	0.254	JBQ	5.25	0.0335	1
11031	123478-HxCDD	39227-28-6	0.136	JBQ	5.25	0.0264	1
11031	123678-HxCDD	57653-85-7	0.114	JB	5.25	0.0277	1
11031	123789-HxCDD	19408-74-3	0.134	JBQ	5.25	0.0255	1
11031	1234678-HpCDD	35822-46-9	0.477	JBQ	5.25	0.0292	1
11031	OCDD	3268-87-9	2.22	JB	10.5	0.0373	1
11031	2378-TCDF	51207-31-9	0.0682	JQ	1.05	0.0439	1
11031	12378-PeCDF	57117-41-6	0.379	JBQ	5.25	0.0202	1
11031	23478-PeCDF	57117-31-4	0.223	JB	5.25	0.0200	1
11031	123478-HxCDF	70648-26-9	0.212	JB	5.25	0.0226	1
11031	123678-HxCDF	57117-44-9	0.206	JB	5.25	0.0203	1
11031	123789-HxCDF	72918-21-9	0.153	JBQ	5.25	0.0243	1
11031	234678-HxCDF	60851-34-5	0.155	JBQ	5.25	0.0200	1
11031	1234678-HpCDF	67562-39-4	0.219	JBQ	5.25	0.0136	1
11031	1234789-HpCDF	55673-89-7	0.124	JBQ	5.25	0.0236	1
11031	OCDF	39001-02-0	0.385	JB	10.5	0.0465	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.218				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211497
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211497
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLD026	10/01/2013 05:53	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLD026	09/30/2013 09:05	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750010A	10/04/2013 01:44	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750010A	10/02/2013 18:10	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132710006A	09/30/2013 19:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132710006A	09/29/2013 22:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/03/2013 01:00	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132680637001	10/01/2013 09:54	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132680637001	10/01/2013 09:54	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132680637001	09/27/2013 18:34	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132680637001B	09/26/2013 23:23	David K Beck	2
06142	Silver	SW-846 6020A	1	132680637001A	09/26/2013 23:23	David K Beck	2
06144	Strontium	SW-846 6020A	1	132680637001A	10/02/2013 12:02	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132680637001A	09/26/2013 23:23	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211497
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132680638001	09/27/2013 04:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132680637001	09/26/2013 09:53	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132680638001	09/26/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13268039401A	09/25/2013 17:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401A	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211498
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	33		1.8	0.70	1
12969	Acenaphthylene	208-96-8	35		1.8	0.35	1
12969	Anthracene	120-12-7	34		1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	34		1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	34		1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	32		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	31		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	28		1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	38		1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	39		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	38		19	6.3	1
12969	Chrysene	218-01-9	33		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	32		1.8	0.70	1
12969	Diethylphthalate	84-66-2	35		19	6.3	1
12969	Dimethylphthalate	131-11-3	34		19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	37		19	6.3	1
12969	Fluoranthene	206-44-0	34		1.8	0.70	1
12969	Fluorene	86-73-7	33		1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	32		1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	36		1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	35		1.8	0.70	1
12969	Naphthalene	91-20-3	34		1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	41		19	6.3	1
12969	Phenanthrene	85-01-8	33		1.8	0.70	1
12969	Pyrene	129-00-0	32		1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	150		18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	190		18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	3.7	J	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	4.0	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.7		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	6.3	J	11	4.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211498
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	3.2	J	5.3	2.1	1
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident during the sample preparation.						
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,500		41.3	7.44	1
06944	Antimony	7440-36-0	13.5		4.13	0.763	1
06935	Arsenic	7440-38-2	19.0		4.13	0.722	1
06946	Barium	7440-39-3	339		1.03	0.0340	1
06947	Beryllium	7440-41-7	5.74		1.03	0.0691	1
07914	Boron	7440-42-8	209		10.3	0.867	1
06949	Cadmium	7440-43-9	5.50		1.03	0.0784	1
01650	Calcium	7440-70-2	76,000		41.3	6.89	2
06951	Chromium	7440-47-3	55.6		3.10	0.165	1
06952	Cobalt	7440-48-4	54.2		1.03	0.102	1
06953	Copper	7440-50-8	53.5		2.06	0.299	1
01654	Iron	7439-89-6	34,100		82.5	7.47	2
06955	Lead	7439-92-1	24.6		3.10	0.516	1
01656	Lithium	7439-93-2	126		4.1	0.35	1
01657	Magnesium	7439-95-4	9,080		10.3	1.72	1
06958	Manganese	7439-96-5	353		1.03	0.0856	1
06960	Molybdenum	7439-98-7	179		2.06	0.175	1
06961	Nickel	7440-02-0	63.1		2.06	0.134	1
10145	Phosphorus	7723-14-0	597		10.3	2.98	1
01662	Potassium	7440-09-7	6,260		103	8.60	1
01667	Sodium	7440-23-5	1,100		103	17.2	1
06969	Tin	7440-31-5	315		10.3	0.227	1
06970	Titanium	7440-32-6	1,740		2.06	0.351	2
06971	Vanadium	7440-62-2	129		1.03	0.134	1
06972	Zinc	7440-66-6	128		4.13	0.206	1
10146	Zirconium	7440-67-7	98.7		5.16	0.867	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.23		0.413	0.103	2
06142	Silver	7440-22-4	10.6		0.206	0.0268	2
06144	Strontium	7440-24-6	198		1.03	0.175	5
06145	Thallium	7440-28-0	0.700		0.206	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.222		0.0176	0.0106	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	5.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211498
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.3		1.04	0.0531	1
11031	12378-PeCDD	40321-76-4	107	B	5.22	0.0377	1
11031	123478-HxCDD	39227-28-6	104	B	5.22	0.0336	1
11031	123678-HxCDD	57653-85-7	108	B	5.22	0.0356	1
11031	123789-HxCDD	19408-74-3	101	B	5.22	0.0340	1
11031	1234678-HpCDD	35822-46-9	104	B	5.22	0.0425	1
11031	OCDD	3268-87-9	204	B	10.4	0.0344	1
11031	2378-TCDF	51207-31-9	21.6		1.04	0.0424	1
11031	12378-PeCDF	57117-41-6	105	B	5.22	0.0230	1
11031	23478-PeCDF	57117-31-4	105	B	5.22	0.0233	1
11031	123478-HxCDF	70648-26-9	105	B	5.22	0.0258	1
11031	123678-HxCDF	57117-44-9	108	B	5.22	0.0237	1
11031	123789-HxCDF	72918-21-9	106	B	5.22	0.0287	1
11031	234678-HxCDF	60851-34-5	106	B	5.22	0.0248	1
11031	1234678-HpCDF	67562-39-4	103	B	5.22	0.0224	1
11031	1234789-HpCDF	55673-89-7	107	B	5.22	0.0334	1
11031	OCDF	39001-02-0	209	B	10.4	0.0395	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211498
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLD026	10/01/2013 06:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLD026	09/30/2013 09:05	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750010A	10/04/2013 02:02	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750010A	10/02/2013 18:10	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132710006A	09/30/2013 20:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132710006A	09/29/2013 22:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/03/2013 01:56	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132680637001	10/01/2013 10:12	Eric L Eby	2
06951	Chromium	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132680637001	10/01/2013 10:12	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132680637001	10/01/2013 10:12	Eric L Eby	2
06971	Vanadium	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132680637001	09/27/2013 18:47	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132680637001B	09/26/2013 23:30	David K Beck	2
06142	Silver	SW-846 6020A	1	132680637001A	09/26/2013 23:30	David K Beck	2
06144	Strontium	SW-846 6020A	1	132680637001A	10/02/2013 12:07	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132680637001A	09/26/2013 23:30	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211498
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132680638001	09/27/2013 04:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132680637001	09/26/2013 09:53	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132680638001	09/26/2013 12:40	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401A	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211499
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	33		1.7	0.70	1
12969	Acenaphthylene	208-96-8	34		1.7	0.35	1
12969	Anthracene	120-12-7	36		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	34		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	34		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	36		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	31		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	23		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	34		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	40		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	38		19	6.3	1
12969	Chrysene	218-01-9	33		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	29		1.7	0.70	1
12969	Diethylphthalate	84-66-2	35		19	6.3	1
12969	Dimethylphthalate	131-11-3	34		19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	38		19	6.3	1
12969	Fluoranthene	206-44-0	35		1.7	0.70	1
12969	Fluorene	86-73-7	34		1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	28		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	35		1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	34		1.7	0.70	1
12969	Naphthalene	91-20-3	34		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	31		1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	42		19	6.3	1
12969	Phenanthrene	85-01-8	34		1.7	0.70	1
12969	Pyrene	129-00-0	32		1.7	0.70	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	160		18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	200		18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	4.9	J	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	9.9		5.3	2.1	1
12952	EFH (C21-C30)	n.a.	27		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	69		11	4.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211499
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	4.3	J	5.3	2.1	1
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident during the sample preparation.						
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,700		42.5	7.66	1
06944	Antimony	7440-36-0	15.1		4.25	0.786	1
06935	Arsenic	7440-38-2	20.2		4.25	0.744	1
06946	Barium	7440-39-3	332		1.06	0.0351	1
06947	Beryllium	7440-41-7	5.71		1.06	0.0712	1
07914	Boron	7440-42-8	208		10.6	0.893	1
06949	Cadmium	7440-43-9	5.54		1.06	0.0808	1
01650	Calcium	7440-70-2	62,500		42.5	7.10	2
06951	Chromium	7440-47-3	56.9		3.19	0.170	1
06952	Cobalt	7440-48-4	52.2		1.06	0.105	1
06953	Copper	7440-50-8	55.3		2.13	0.308	1
01654	Iron	7439-89-6	32,500		85.0	7.69	2
06955	Lead	7439-92-1	25.6		3.19	0.531	1
01656	Lithium	7439-93-2	129		4.3	0.36	1
01657	Magnesium	7439-95-4	9,190		10.6	1.77	1
06958	Manganese	7439-96-5	311		1.06	0.0882	1
06960	Molybdenum	7439-98-7	182		2.13	0.181	1
06961	Nickel	7440-02-0	62.6		2.13	0.138	1
10145	Phosphorus	7723-14-0	611		10.6	3.07	1
01662	Potassium	7440-09-7	6,170		106	8.86	1
01667	Sodium	7440-23-5	1,120		106	17.7	1
06969	Tin	7440-31-5	321		10.6	0.234	1
06970	Titanium	7440-32-6	1,720		2.13	0.361	2
06971	Vanadium	7440-62-2	130		1.06	0.138	1
06972	Zinc	7440-66-6	131		4.25	0.213	1
10146	Zirconium	7440-67-7	101		5.31	0.893	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.40		0.425	0.106	2
06142	Silver	7440-22-4	10.2		0.213	0.0276	2
06144	Strontium	7440-24-6	168		1.06	0.181	5
06145	Thallium	7440-28-0	0.745		0.213	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.215		0.0175	0.0105	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	5.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211499
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.1		1.03	0.0546	1
11031	12378-PeCDD	40321-76-4	106	B	5.16	0.0379	1
11031	123478-HxCDD	39227-28-6	103	B	5.16	0.0313	1
11031	123678-HxCDD	57653-85-7	105	B	5.16	0.0336	1
11031	123789-HxCDD	19408-74-3	103	B	5.16	0.0310	1
11031	1234678-HpCDD	35822-46-9	104	B	5.16	0.0434	1
11031	OCDD	3268-87-9	209	B	10.3	0.0339	1
11031	2378-TCDF	51207-31-9	21.7		1.03	0.0504	1
11031	12378-PeCDF	57117-41-6	104	B	5.16	0.0248	1
11031	23478-PeCDF	57117-31-4	106	B	5.16	0.0242	1
11031	123478-HxCDF	70648-26-9	107	B	5.16	0.0319	1
11031	123678-HxCDF	57117-44-9	107	B	5.16	0.0293	1
11031	123789-HxCDF	72918-21-9	107	B	5.16	0.0327	1
11031	234678-HxCDF	60851-34-5	106	B	5.16	0.0285	1
11031	1234678-HpCDF	67562-39-4	104	B	5.16	0.0232	1
11031	1234789-HpCDF	55673-89-7	106	B	5.16	0.0385	1
11031	OCDF	39001-02-0	213	B	10.3	0.0389	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211499
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLD026	10/01/2013 06:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLD026	09/30/2013 09:05	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750010A	10/04/2013 02:21	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750010A	10/02/2013 18:10	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132710006A	09/30/2013 20:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132710006A	09/29/2013 22:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/03/2013 02:53	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132680637001	10/01/2013 10:16	Eric L Eby	2
06951	Chromium	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132680637001	10/01/2013 10:16	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132680637001	10/01/2013 10:16	Eric L Eby	2
06971	Vanadium	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132680637001	09/27/2013 18:51	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132680637001B	09/26/2013 23:32	David K Beck	2
06142	Silver	SW-846 6020A	1	132680637001A	09/26/2013 23:32	David K Beck	2
06144	Strontium	SW-846 6020A	1	132680637001A	10/02/2013 12:09	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132680637001A	09/26/2013 23:32	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211499
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132680638001	09/27/2013 04:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132680637001	09/26/2013 09:53	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132680638001	09/26/2013 12:40	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401A	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211500
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,900		41.3	7.44	1
06944	Antimony	7440-36-0	4.13	U	4.13	0.763	1
06935	Arsenic	7440-38-2	3.79	J	4.13	0.722	1
06946	Barium	7440-39-3	157		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.821	J	1.03	0.0691	1
07914	Boron	7440-42-8	11.7		10.3	0.867	1
06949	Cadmium	7440-43-9	0.977	J	1.03	0.0784	1
01650	Calcium	7440-70-2	52,800		20.6	3.45	1
06951	Chromium	7440-47-3	31.6		3.10	0.165	1
06952	Cobalt	7440-48-4	11.5		1.03	0.102	1
06953	Copper	7440-50-8	28.5		2.06	0.299	1
01654	Iron	7439-89-6	45,300		206	18.7	5
06955	Lead	7439-92-1	10.4		3.10	0.516	1
01656	Lithium	7439-93-2	25.7		4.1	0.35	1
01657	Magnesium	7439-95-4	8,710		10.3	1.72	1
06958	Manganese	7439-96-5	327		1.03	0.0856	1
06960	Molybdenum	7439-98-7	2.06	U	2.06	0.175	1
06961	Nickel	7440-02-0	23.6		2.06	0.134	1
10145	Phosphorus	7723-14-0	431		10.3	2.98	1
01662	Potassium	7440-09-7	4,220		103	8.60	1
01667	Sodium	7440-23-5	135		103	17.2	1
06969	Tin	7440-31-5	2.67	J	10.3	0.227	1
06970	Titanium	7440-32-6	948		5.16	0.877	5
06971	Vanadium	7440-62-2	65.5		1.03	0.134	1
06972	Zinc	7440-66-6	82.1		4.13	0.206	1
10146	Zirconium	7440-67-7	6.57		5.16	0.867	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.128	J	0.413	0.103	2
06142	Silver	7440-22-4	0.206	U	0.206	0.0268	2
06144	Strontium	7440-24-6	142		1.03	0.175	5
06145	Thallium	7440-28-0	0.363		0.206	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0170	J	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.54		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	5.9		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	5.5		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA5D-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211500
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:40 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

565-0 SDG#: PH113-04DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132680637001	10/01/2013 10:08	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132680637001	10/01/2013 10:08	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132680637001	09/27/2013 18:42	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132680637001B	09/26/2013 23:27	David K Beck	2
06142	Silver	SW-846 6020A	1	132680637001A	09/26/2013 23:27	David K Beck	2
06144	Strontium	SW-846 6020A	1	132680637001A	10/02/2013 12:06	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132680637001A	09/26/2013 23:27	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132680638001	09/27/2013 04:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132680637001	09/26/2013 09:53	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132680638001	09/26/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13268039401A	09/25/2013 17:30	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401A	10/02/2013 22:11	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401A	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211501
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:50 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

865-0 SDG#: PH113-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	0.71	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	8.7		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	29		10	4.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211501
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:50 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

865-0 SDG#: PH113-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,400		41.8	7.53	1
06944	Antimony	7440-36-0	4.18	U	4.18	0.773	1
06935	Arsenic	7440-38-2	4.16	J	4.18	0.731	1
06946	Barium	7440-39-3	151		1.04	0.0345	1
06947	Beryllium	7440-41-7	0.692	J	1.04	0.0700	1
07914	Boron	7440-42-8	23.9		10.4	0.877	1
06949	Cadmium	7440-43-9	1.19		1.04	0.0794	1
01650	Calcium	7440-70-2	61,000		104	17.4	5
06951	Chromium	7440-47-3	29.6		3.13	0.167	1
06952	Cobalt	7440-48-4	7.91		1.04	0.103	1
06953	Copper	7440-50-8	25.7		2.09	0.303	1
01654	Iron	7439-89-6	32,700		209	18.9	5
06955	Lead	7439-92-1	16.3		3.13	0.522	1
01656	Lithium	7439-93-2	22.5		4.2	0.36	1
01657	Magnesium	7439-95-4	7,520		10.4	1.74	1
06958	Manganese	7439-96-5	263		1.04	0.0867	1
06960	Molybdenum	7439-98-7	2.09	U	2.09	0.178	1
06961	Nickel	7440-02-0	18.8		2.09	0.136	1
10145	Phosphorus	7723-14-0	533		10.4	3.02	1
01662	Potassium	7440-09-7	4,490		104	8.71	1
01667	Sodium	7440-23-5	131		104	17.4	1
06969	Tin	7440-31-5	2.63	J	10.4	0.230	1
06970	Titanium	7440-32-6	914		1.04	0.178	1
06971	Vanadium	7440-62-2	59.1		1.04	0.136	1
06972	Zinc	7440-66-6	83.0		4.18	0.209	1
10146	Zirconium	7440-67-7	6.15		5.22	0.877	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.266	J	0.418	0.104	2
06142	Silver	7440-22-4	0.209	U	0.209	0.0272	2
06144	Strontium	7440-24-6	169		1.04	0.178	5
06145	Thallium	7440-28-0	0.319		0.209	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0292		0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.72		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211501
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:50 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

865-0 SDG#: PH113-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211501
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:50 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

865-0 SDG#: PH113-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.105	JQ	1.01	0.0633	1
11031	12378-PeCDD	40321-76-4	0.157	JBQ	5.03	0.0371	1
11031	123478-HxCDD	39227-28-6	0.0869	JBQ	5.03	0.0280	1
11031	123678-HxCDD	57653-85-7	0.144	JBQ	5.03	0.0304	1
11031	123789-HxCDD	19408-74-3	0.146	JBQ	5.03	0.0284	1
11031	1234678-HpCDD	35822-46-9	0.722	JB	5.03	0.0295	1
11031	OCDD	3268-87-9	4.69	JB	10.1	0.0276	1
11031	2378-TCDF	51207-31-9	0.0816	JQ	1.01	0.0522	1
11031	12378-PeCDF	57117-41-6	0.275	JBQ	5.03	0.0235	1
11031	23478-PeCDF	57117-31-4	0.241	JB	5.03	0.0229	1
11031	123478-HxCDF	70648-26-9	0.146	JB	5.03	0.0237	1
11031	123678-HxCDF	57117-44-9	0.143	JB	5.03	0.0223	1
11031	123789-HxCDF	72918-21-9	0.175	JB	5.03	0.0235	1
11031	234678-HxCDF	60851-34-5	0.159	JB	5.03	0.0237	1
11031	1234678-HpCDF	67562-39-4	0.267	JB	5.03	0.0137	1
11031	1234789-HpCDF	55673-89-7	0.147	JB	5.03	0.0197	1
11031	OCDF	39001-02-0	0.582	JBQ	10.1	0.0391	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.147				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211501
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:50 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

865-0 SDG#: PH113-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211501
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:50 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

865-0 SDG#: PH113-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLD026	10/01/2013 08:37	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLD026	09/30/2013 09:05	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750010A	10/04/2013 02:39	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750010A	10/02/2013 18:10	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132710006A	09/30/2013 20:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132710006A	09/29/2013 22:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/03/2013 03:49	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132680637001	10/01/2013 10:54	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132680637001	10/01/2013 10:54	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132680637001	10/01/2013 10:43	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132680637001	09/27/2013 19:19	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132680637001B	09/26/2013 23:49	David K Beck	2
06142	Silver	SW-846 6020A	1	132680637001A	09/26/2013 23:49	David K Beck	2
06144	Strontium	SW-846 6020A	1	132680637001A	10/02/2013 12:14	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132680637001A	09/26/2013 23:49	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211501
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 07:50 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

865-0 SDG#: PH113-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132680638001	09/27/2013 05:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132680637001	09/26/2013 09:53	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132680638001	09/26/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13268039401A	09/25/2013 17:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401A	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-557-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211502
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 09:35 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

557-0 SDG#: PH113-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.8		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	22		19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.5	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.3	J	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	0.73	J	1.7	0.69	1
12969	Naphthalene	91-20-3	1.1	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.1	J	1.7	0.69	1
12969	Pyrene	129-00-0	1.3	J	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	26	U	26	10	5
12952	EFH (C15-C20)	n.a.	26	U	26	10	5
12952	EFH (C21-C30)	n.a.	39		26	10	5
12952	EFH (C30-C40)	n.a.	170		52	21	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-557-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211502
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 09:35 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

557-0 SDG#: PH113-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	26	U	26	10	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,500		41.7	7.51	1
06944	Antimony	7440-36-0	4.17	U	4.17	0.771	1
06935	Arsenic	7440-38-2	2.79	J	4.17	0.729	1
06946	Barium	7440-39-3	106		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.843	J	1.04	0.0698	1
07914	Boron	7440-42-8	17.2		10.4	0.875	1
06949	Cadmium	7440-43-9	0.965	J	1.04	0.0792	1
01650	Calcium	7440-70-2	6,060		20.8	3.48	1
06951	Chromium	7440-47-3	39.0		3.13	0.167	1
06952	Cobalt	7440-48-4	10.3		1.04	0.103	1
06953	Copper	7440-50-8	20.7		2.08	0.302	1
01654	Iron	7439-89-6	39,200		83.3	7.54	2
06955	Lead	7439-92-1	15.2		3.13	0.521	1
01656	Lithium	7439-93-2	34.8		4.2	0.35	1
01657	Magnesium	7439-95-4	9,110		10.4	1.74	1
06958	Manganese	7439-96-5	331		1.04	0.0865	1
06960	Molybdenum	7439-98-7	2.08	U	2.08	0.177	1
06961	Nickel	7440-02-0	19.3		2.08	0.135	1
10145	Phosphorus	7723-14-0	490		10.4	3.01	1
01662	Potassium	7440-09-7	4,870		104	8.69	1
01667	Sodium	7440-23-5	124		104	17.4	1
06969	Tin	7440-31-5	2.91	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,490		2.08	0.354	2
06971	Vanadium	7440-62-2	79.7		1.04	0.135	1
06972	Zinc	7440-66-6	90.5		4.17	0.208	1
10146	Zirconium	7440-67-7	7.51		5.21	0.875	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.261	J	0.417	0.104	2
06142	Silver	7440-22-4	0.0358	J	0.208	0.0271	2
06144	Strontium	7440-24-6	40.8		0.417	0.0708	2
06145	Thallium	7440-28-0	0.431		0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0216		0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.78		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-557-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211502
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 09:35 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

557-0 SDG#: PH113-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-557-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211502
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 09:35 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

557-0 SDG#: PH113-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0526	1
11031	12378-PeCDD	40321-76-4	0.166	JBQ	5.11	0.0408	1
11031	123478-HxCDD	39227-28-6	0.155	JB	5.11	0.0377	1
11031	123678-HxCDD	57653-85-7	0.464	JBQ	5.11	0.0396	1
11031	123789-HxCDD	19408-74-3	0.505	JBQ	5.11	0.0356	1
11031	1234678-HpCDD	35822-46-9	7.31	B	5.11	0.0397	1
11031	OCDD	3268-87-9	114	B	10.2	0.0299	1
11031	2378-TCDF	51207-31-9	0.442	J	1.02	0.0831	1
11031	12378-PeCDF	57117-41-6	0.413	JB	5.11	0.0352	1
11031	23478-PeCDF	57117-31-4	0.461	JBQ	5.11	0.0365	1
11031	123478-HxCDF	70648-26-9	0.180	JBQ	5.11	0.0345	1
11031	123678-HxCDF	57117-44-9	0.192	JB	5.11	0.0327	1
11031	123789-HxCDF	72918-21-9	0.345	JB	5.11	0.0392	1
11031	234678-HxCDF	60851-34-5	0.181	JB	5.11	0.0333	1
11031	1234678-HpCDF	67562-39-4	0.844	JB	5.11	0.0142	1
11031	1234789-HpCDF	55673-89-7	0.120	JBQ	5.11	0.0227	1
11031	OCDF	39001-02-0	1.86	JB	10.2	0.0413	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.260				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-557-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211502
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 09:35 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

557-0 SDG#: PH113-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-557-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211502
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 09:35 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

557-0 SDG#: PH113-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLD026	10/01/2013 09:11	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLD026	09/30/2013 09:05	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750010A	10/04/2013 02:58	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750010A	10/02/2013 18:10	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132710006A	10/01/2013 17:19	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	132710006A	09/29/2013 22:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/03/2013 04:46	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132680637001	10/01/2013 11:02	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132680637001	10/01/2013 11:02	Eric L Eby	2
06971	Vanadium	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132680637001	09/27/2013 19:23	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132680637001B	09/26/2013 23:51	David K Beck	2
06142	Silver	SW-846 6020A	1	132680637001A	09/26/2013 23:51	David K Beck	2
06144	Strontium	SW-846 6020A	1	132680637001A	09/26/2013 23:51	David K Beck	2
06145	Thallium	SW-846 6020A	1	132680637001A	09/26/2013 23:51	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-557-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211502
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 09:35 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

557-0 SDG#: PH113-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132680638001	09/27/2013 05:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132680637001	09/26/2013 09:53	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132680638001	09/26/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13268039401A	09/25/2013 17:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401A	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211503
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 12:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

566-0 SDG#: PH113-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	0.45	J	1.7	0.34	1
12969	Anthracene	120-12-7	0.70	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	10	J	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.1	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.1	J	18	6.1	1
12969	Fluoranthene	206-44-0	1.1	J	1.7	0.68	1
12969	Fluorene	86-73-7	0.70	J	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.1	J	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.5	J	1.7	0.68	1
12969	Naphthalene	91-20-3	3.0		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.2	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.1	J	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	4.9	J	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	22		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	60		10	4.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211503
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 12:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

566-0 SDG#: PH113-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,100		40.8	7.35	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.755	1
06935	Arsenic	7440-38-2	2.79	J	4.08	0.714	1
06946	Barium	7440-39-3	125		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.913	J	1.02	0.0683	1
07914	Boron	7440-42-8	20.0		10.2	0.857	1
06949	Cadmium	7440-43-9	1.20		1.02	0.0775	1
01650	Calcium	7440-70-2	6,390		20.4	3.41	1
06951	Chromium	7440-47-3	39.1		3.06	0.163	1
06952	Cobalt	7440-48-4	10.5		1.02	0.101	1
06953	Copper	7440-50-8	21.8		2.04	0.296	1
01654	Iron	7439-89-6	40,100		81.6	7.38	2
06955	Lead	7439-92-1	13.3		3.06	0.510	1
01656	Lithium	7439-93-2	34.6		4.1	0.35	1
01657	Magnesium	7439-95-4	8,300		10.2	1.70	1
06958	Manganese	7439-96-5	353		1.02	0.0846	1
06960	Molybdenum	7439-98-7	2.04	U	2.04	0.173	1
06961	Nickel	7440-02-0	19.7		2.04	0.133	1
10145	Phosphorus	7723-14-0	424		10.2	2.95	1
01662	Potassium	7440-09-7	4,780		102	8.50	1
01667	Sodium	7440-23-5	113		102	17.0	1
06969	Tin	7440-31-5	2.88	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,180		2.04	0.347	2
06971	Vanadium	7440-62-2	79.3		1.02	0.133	1
06972	Zinc	7440-66-6	90.0		4.08	0.204	1
10146	Zirconium	7440-67-7	7.46		5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.386	J	0.408	0.102	2
06142	Silver	7440-22-4	0.0384	J	0.204	0.0265	2
06144	Strontium	7440-24-6	38.9		0.408	0.0693	2
06145	Thallium	7440-28-0	0.437		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0195		0.0164	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.19		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211503
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 12:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

566-0 SDG#: PH113-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211503
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 12:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

566-0 SDG#: PH113-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.0326	1
11031	12378-PeCDD	40321-76-4	0.0695	JBQ	5.06	0.0303	1
11031	123478-HxCDD	39227-28-6	0.0826	JBQ	5.06	0.0260	1
11031	123678-HxCDD	57653-85-7	0.276	JBQ	5.06	0.0277	1
11031	123789-HxCDD	19408-74-3	0.306	JB	5.06	0.0271	1
11031	1234678-HpCDD	35822-46-9	2.02	JB	5.06	0.0236	1
11031	OCDD	3268-87-9	16.9	B	10.1	0.0230	1
11031	2378-TCDF	51207-31-9	0.116	JQ	1.01	0.0417	1
11031	12378-PeCDF	57117-41-6	0.256	JB	5.06	0.0185	1
11031	23478-PeCDF	57117-31-4	0.218	JBQ	5.06	0.0183	1
11031	123478-HxCDF	70648-26-9	0.128	JB	5.06	0.0220	1
11031	123678-HxCDF	57117-44-9	0.100	JBQ	5.06	0.0187	1
11031	123789-HxCDF	72918-21-9	0.356	JB	5.06	0.0252	1
11031	234678-HxCDF	60851-34-5	0.135	JBQ	5.06	0.0214	1
11031	1234678-HpCDF	67562-39-4	0.360	JBQ	5.06	0.0117	1
11031	1234789-HpCDF	55673-89-7	0.102	JBQ	5.06	0.0240	1
11031	OCDF	39001-02-0	0.857	JB	10.1	0.0367	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.112				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	56	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211503
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 12:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

566-0 SDG#: PH113-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211503
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 12:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

566-0 SDG#: PH113-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13271SLD026	10/01/2013 09:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13271SLD026	09/30/2013 09:05	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750010A	10/04/2013 03:16	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750010A	10/02/2013 18:10	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132710006A	09/30/2013 21:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132710006A	09/29/2013 22:30	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/03/2013 05:42	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132680637001	10/01/2013 11:09	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132680637001	10/01/2013 11:09	Eric L Eby	2
06971	Vanadium	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132680637001	09/27/2013 19:27	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132680637001B	09/26/2013 23:54	David K Beck	2
06142	Silver	SW-846 6020A	1	132680637001A	09/26/2013 23:54	David K Beck	2
06144	Strontium	SW-846 6020A	1	132680637001A	09/26/2013 23:54	David K Beck	2
06145	Thallium	SW-846 6020A	1	132680637001A	09/26/2013 23:54	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211503
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 12:30 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

566-0 SDG#: PH113-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132680638001	09/27/2013 05:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132680637001	09/26/2013 09:53	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132680638001	09/26/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13268039401A	09/25/2013 17:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401A	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211504
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 13:15 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

566-4 SDG#: PH113-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	0.91	J	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	27.41
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211504
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 13:15 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

566-4 SDG#: PH113-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,700		42.1	7.59	1
06944	Antimony	7440-36-0	4.21	U	4.21	0.779	1
06935	Arsenic	7440-38-2	3.14	J	4.21	0.737	1
06946	Barium	7440-39-3	90.5		1.05	0.0348	1
06947	Beryllium	7440-41-7	0.642	J	1.05	0.0706	1
07914	Boron	7440-42-8	18.0		10.5	0.885	1
06949	Cadmium	7440-43-9	0.947	J	1.05	0.0800	1
01650	Calcium	7440-70-2	6,890		21.1	3.52	1
06951	Chromium	7440-47-3	39.4		3.16	0.168	1
06952	Cobalt	7440-48-4	8.80		1.05	0.104	1
06953	Copper	7440-50-8	15.9		2.11	0.305	1
01654	Iron	7439-89-6	31,300		84.2	7.62	2
06955	Lead	7439-92-1	7.78		3.16	0.527	1
01656	Lithium	7439-93-2	36.5		4.2	0.36	1
01657	Magnesium	7439-95-4	7,880		10.5	1.76	1
06958	Manganese	7439-96-5	484		1.05	0.0874	1
06960	Molybdenum	7439-98-7	2.11	U	2.11	0.179	1
06961	Nickel	7440-02-0	18.1		2.11	0.137	1
10145	Phosphorus	7723-14-0	718		10.5	3.04	1
01662	Potassium	7440-09-7	4,610		105	8.78	1
01667	Sodium	7440-23-5	167		105	17.6	1
06969	Tin	7440-31-5	3.07	J	10.5	0.232	1
06970	Titanium	7440-32-6	1,130		2.11	0.358	2
06971	Vanadium	7440-62-2	71.7		1.05	0.137	1
06972	Zinc	7440-66-6	82.5		4.21	0.211	1
10146	Zirconium	7440-67-7	7.99		5.27	0.885	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.116	J	0.421	0.105	2
06142	Silver	7440-22-4	0.0311	J	0.211	0.0274	2
06144	Strontium	7440-24-6	30.0		0.421	0.0716	2
06145	Thallium	7440-28-0	0.386		0.211	0.0316	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0132	J	0.0174	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.68		0.0100	0.0100	1

The pH was measured in water at 21.6 C.

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211504
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 13:15 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

566-4 SDG#: PH113-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	6.9	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/05/2013 02:38	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13274A31A	10/01/2013 18:53	Laura M Krieger	27.41
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326832507	09/25/2013 12:42	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326832507	09/25/2013 12:43	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750010A	10/04/2013 03:34	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750010A	10/02/2013 18:10	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132760019A	10/04/2013 16:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132760019A	10/04/2013 06:00	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132680637001	10/01/2013 11:17	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7211504
LL Group # 1421324
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/24/2013 13:15 by VC

Submitted: 09/25/2013 09:10
Reported: 10/09/2013 12:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

566-4 SDG#: PH113-08*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132680637001	10/01/2013 11:17	Eric L Eby	2
06971	Vanadium	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132680637001	09/27/2013 19:31	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132680637001B	09/26/2013 23:56	David K Beck	2
06142	Silver	SW-846 6020A	1	132680637001A	09/26/2013 23:56	David K Beck	2
06144	Strontium	SW-846 6020A	1	132680637001A	09/26/2013 23:56	David K Beck	2
06145	Thallium	SW-846 6020A	1	132680637001A	09/26/2013 23:56	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132680638001	09/27/2013 05:07	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132680637001	09/26/2013 09:53	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132680638001	09/26/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13268039401A	09/25/2013 17:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401A	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421324
Reported: 10/09/13 at 12:50 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13271SLD026	Sample number(s): 7211495-7211499,7211501-7211503									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	99		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	101		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	104		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	103		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	105		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	96		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	107		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	107		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	105		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	109		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	105		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	103		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	104		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	109		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	107		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	114		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	108		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	100		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	105		79-112		
Batch number: 13276SLA026	Sample number(s): 7211504									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	94		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	97		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	112		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	109		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	97		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	106		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		85-122		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421324
Reported: 10/09/13 at 12:50 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	104		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	98		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	102		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	106		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	119		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		79-112		
Batch number: 13269B94A	Sample number(s): 7211494									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	106	102	75-135	4	30
Batch number: 13274A31A	Sample number(s): 7211496,7211504									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	91		67-119		
Batch number: 132750010A	Sample number(s): 7211495-7211499,7211501-7211504									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	86	83	62-87	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	95		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	112		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132710006A	Sample number(s): 7211495-7211499,7211501-7211503									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	96		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	106		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	100		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	87		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	76		49-107		
Batch number: 132760019A	Sample number(s): 7211504									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	94		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	99		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	95		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	68		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	76		49-107		
Batch number: 132680637001	Sample number(s): 7211495-7211504									
Aluminum	40.0	U	40.0	7.21	mg/kg	96		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	98		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	97		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	94		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	93		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	89		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	97		80-120		
Calcium	7.61	J	20.0	3.34	mg/kg	98		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	100		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421324
Reported: 10/09/13 at 12:50 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Cobalt	1.00	U	1.00	0.0990	mg/kg	99		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	99		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	97		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	102		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	97		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	96		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	94		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	97		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	101		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	101		80-120		
Potassium	100 U		100.	8.34	mg/kg	95		80-120		
Sodium	100 U		100.	16.7	mg/kg	96		80-120		
Tin	1.45	J	10.0	0.220	mg/kg	96		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	96		80-120		
Zinc	0.570	J	4.00	0.200	mg/kg	99		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	99		80-120		
Batch number: 132680637001A	Sample number(s): 7211495-7211504									
Silver	0.200	U	0.200	0.0260	mg/kg	104		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	104		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	107		80-120		
Batch number: 132680637001B	Sample number(s): 7211495-7211504									
Selenium	0.400	U	0.400	0.100	mg/kg	99		80-120		
Batch number: 132680638001	Sample number(s): 7211495-7211504									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	97		85-120		
Batch number: 13268039401A	Sample number(s): 7211495-7211497,7211500-7211504									
15a pH by 9045D						99		95-105		
Batch number: 13275162401A	Sample number(s): 7211495-7211504									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13273002	Sample number(s): 7211495,7211497-7211499,7211501-7211503									
2378-TCDD	1.00	U	1.00	0.0390	ng/kg	100		67-158		
12378-PeCDD	0.0738	J	5.00	0.0254	ng/kg	102		70-142		
123478-HxCDD	0.0334	J	5.00	0.0169	ng/kg	101		70-164		
123678-HxCDD	0.0256	J	5.00	0.0182	ng/kg	101		76-134		
123789-HxCDD	0.0369	J	5.00	0.0172	ng/kg	99		64-162		
1234678-HpCDD	0.0965	J	5.00	0.0155	ng/kg	98		70-140		
OCDD	0.249	J	10.0	0.0199	ng/kg	97		78-144		
2378-TCDF	1.00	U	1.00	0.0244	ng/kg	103		75-158		
12378-PeCDF	0.0876	J	5.00	0.0133	ng/kg	99		80-134		
23478-PeCDF	0.0646	J	5.00	0.0127	ng/kg	101		68-160		
123478-HxCDF	0.0515	J	5.00	0.0108	ng/kg	100		72-134		
123678-HxCDF	0.0453	J	5.00	0.0101	ng/kg	102		84-130		

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421324
Reported: 10/09/13 at 12:50 PM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123789-HxCDF	0.0754 J	5.00	0.0107	ng/kg	102		78-130		
234678-HxCDF	0.0332 J	5.00	0.0106	ng/kg	101		70-156		
1234678-HpCDF	0.0595 J	5.00	0.00690	ng/kg	99		82-122		
1234789-HpCDF	0.0657 J	5.00	0.00960	ng/kg	101		78-138		
OCDF	0.137 J	10.0	0.0215	ng/kg	100		63-170		
TEQ WHO 2005 - EDLx0.0	0.00400			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13271SLD026	Sample number(s): 7211495-7211499,7211501-7211503 UNSPK: 7211497								
Acenaphthene	92	93	48-127	0	30				
Acenaphthylene	100	98	49-121	2	30				
Anthracene	96	102	52-126	6	30				
Benzo(a)anthracene	98	98	44-143	1	30				
Benzo(a)pyrene	96	97	44-140	0	30				
Benzo(b)fluoranthene	90	104	26-142	13	30				
Benzo(e)pyrene	89	88	70-130	2	30				
Benzo(g,h,i)perylene	79	66	33-141	18	30				
Benzo(k)fluoranthene	108	98	54-142	10	30				
Butylbenzylphthalate	112	114	49-151	1	30				
Di-n-butylphthalate	108	108	52-147	1	30				
Chrysene	94	94	29-148	0	30				
Dibenz(a,h)anthracene	92	84	20-137	10	30				
Diethylphthalate	100	100	43-145	1	30				
Dimethylphthalate	97	97	58-129	0	30				
Bis(2-Ethylhexyl)phthalate	104	110	39-167	5	30				
Fluoranthene	96	99	40-148	2	30				
Fluorene	95	97	51-137	1	30				
Indeno(1,2,3-cd)pyrene	90	80	17-136	12	30				
1-Methylnaphthalene	102	100	50-131	2	30				
2-Methylnaphthalene	100	98	35-152	2	30				
Naphthalene	98	96	31-148	2	30				
N-Nitrosodimethylamine	95	90	48-113	6	30				
Di-n-octylphthalate	115	121	52-162	4	30				
Phenanthrene	92	98	29-142	6	30				
Pyrene	92	92	26-143	1	30				
Batch number: 13276SLA026	Sample number(s): 7211504 UNSPK: P218895								
Acenaphthene	96	100	48-127	4	30				
Acenaphthylene	102	105	49-121	3	30				
Anthracene	90	93	52-126	4	30				
Benzo(a)anthracene	100	101	44-143	2	30				
Benzo(a)pyrene	96	98	44-140	3	30				
Benzo(b)fluoranthene	99	99	26-142	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421324
Reported: 10/09/13 at 12:50 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(e)pyrene	90	91	70-130	2	30				
Benzo(g,h,i)perylene	98	100	33-141	2	30				
Benzo(k)fluoranthene	98	102	54-142	5	30				
Butylbenzylphthalate	116	115	49-151	0	30				
Di-n-butylphthalate	103	106	52-147	3	30				
Chrysene	97	97	29-148	1	30				
Dibenz(a,h)anthracene	100	102	20-137	3	30				
Diethylphthalate	104	107	43-145	3	30				
Dimethylphthalate	100	104	58-129	4	30				
Bis(2-Ethylhexyl)phthalate	111	108	39-167	3	30				
Fluoranthene	94	97	40-148	3	30				
Fluorene	95	100	51-137	6	30				
Indeno(1,2,3-cd)pyrene	100	102	17-136	3	30				
1-Methylnaphthalene	99	102	50-131	3	30				
2-Methylnaphthalene	94	97	35-152	3	30				
Naphthalene	103	103	31-148	0	30				
N-Nitrosodimethylamine	108	106	48-113	1	30				
Di-n-octylphthalate	121	118	52-162	2	30				
Phenanthrene	98	102	29-142	5	30				
Pyrene	98	99	26-143	2	30				
Batch number: 13274A31A	Sample number(s): 7211496,7211504 UNSPK: P213412								
11a TPH by EPA 8015B GRO	92	86	69-123	2	30				
Batch number: 132750010A	Sample number(s): 7211495-7211499,7211501-7211504 UNSPK: 7211497								
PCB-1016	87	92	41-135	6	50				
PCB-1260	105	111	40-134	5	50				
Batch number: 132710006A	Sample number(s): 7211495-7211499,7211501-7211503 UNSPK: 7211497								
EFH (C12-C14)	69	93	49-123	30*	20				
EFH (C15-C20)	50	124*	49-123	86*	20				
EFH (C21-C30)	11*	170*	49-123	130*	20				
EFH (C30-C40)	-39*	354*	49-123	167*	20				
EFH (C8-C11)	60	81	49-123	32*	20				
Batch number: 132760019A	Sample number(s): 7211504 UNSPK: P218895								
EFH (C12-C14)	93	93	49-123	0	20				
EFH (C15-C20)	102	101	49-123	1	20				
EFH (C21-C30)	95	96	49-123	1	20				
EFH (C30-C40)	84	81	49-123	3	20				
EFH (C8-C11)	76	77	49-123	0	20				
Batch number: 132680637001	Sample number(s): 7211495-7211504 UNSPK: 7211497 BKG: 7211497								
Aluminum	3790 (2)	4255 (2)	75-125	4	20	21,400	21,600	1	20
Antimony	26*	28*	75-125	11	20	3.96 U	3.88 U	0 (1)	20
Arsenic	91	96	75-125	6	20	4.63	3.56 J	26* (1)	20
Barium	92	86	75-125	2	20	140	148	5	20
Beryllium	95	91	75-125	0	20	0.807 J	0.773 J	4 (1)	20
Boron	100	96	75-125	1	20	2.91 J	11.0	116* (1)	20
Cadmium	90	88	75-125	1	20	0.790 J	0.919 J	15 (1)	20
Calcium	5761	2417	75-125	20	20	49,100	49,700	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421324
Reported: 10/09/13 at 12:50 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
	(2)	(2)							
Chromium	120	122	75-125	2	20	29.1	29.7	2	20
Cobalt	87	81	75-125	4	20	8.63	10.8	23*	20
Copper	89	93	75-125	3	20	28.7	26.8	7	20
Iron	-20245 (2)	-21138 (2)	75-125	5	20	51,700	42,600	19	20
Lead	87	91	75-125	4	20	10.5	9.77	7 (1)	20
Lithium	98	98	75-125	2	20	24.0	24.2	1	20
Magnesium	266 (2)	312 (2)	75-125	1	20	8,020	8,190	2	20
Manganese	150 (2)	68 (2)	75-125	12	20	259	308	17	20
Molybdenum	87	86	75-125	2	20	1.98 U	1.94 U	0 (1)	20
Nickel	79	76	75-125	1	20	20.9	22.2	6	20
Phosphorus	165 (2)	173 (2)	75-125	2	20	402	406	1	20
Potassium	207*	193*	75-125	1	20	3,880	3,970	2	20
Sodium	94	93	75-125	2	20	126	127	1 (1)	20
Tin	76	75	75-125	2	20	2.48 J	2.51 J	1 (1)	20
Titanium	790 (2)	747 (2)	75-125	1	20	869	892	3	20
Vanadium	123	122	75-125	1	20	61.2	61.6	1	20
Zinc	82	86	75-125	3	20	80.2	77.2	4	20
Zirconium	89	88	75-125	2	20	6.20	6.18	0 (1)	20
Batch number: 132680637001A	Sample number(s): 7211495-7211504 UNSPK: 7211497 BKG: 7211497								
Silver	103	96	75-125	4	20	0.198 U	0.194 U	0 (1)	20
Strontium	1026 (2)	638 (2)	75-125	17	20	107	134	23*	20
Thallium	87	95	75-125	6	20	0.321	0.341	6 (1)	20
Batch number: 132680637001B	Sample number(s): 7211495-7211504 UNSPK: 7211497 BKG: 7211497								
Selenium	100	105	75-125	8	20	0.157 J	0.120 J	26* (1)	20
Batch number: 132680638001	Sample number(s): 7211495-7211504 UNSPK: 7211497 BKG: 7211497								
3a Mercury 7471A	118	115	65-135	3	20	0.0131 J	0.0160 J	20 (1)	20
Batch number: 13268039401A	Sample number(s): 7211495-7211497,7211500-7211504 BKG: 7211497								
15a pH by 9045D						7.54	7.54	0	3
Batch number: 13275162401A	Sample number(s): 7211495-7211504 BKG: 7211497								
14a Moisture Content by 160.3						5.9	5.5	6	20
14a Moisture Content by 160.3						5.9	5.5	6	20
14a Moisture Content by 160.3						5.9	5.5	6	20
Batch number: 13273002	Sample number(s): 7211495,7211497-7211499,7211501-7211503 UNSPK: 7211497								
2378-TCDD	97	102	40-135	4	20				
12378-PeCDD	102	103	40-135	0	20				
123478-HxCDD	99	100	40-135	1	20				
123678-HxCDD	104	102	40-135	3	20				
123789-HxCDD	97	100	40-135	2	20				
1234678-HpCDD	99	100	40-135	0	20				
OCDD	97	100	40-135	2	20				
2378-TCDF	103	105	40-135	0	20				
12378-PeCDF	101	100	40-135	2	20				
23478-PeCDF	100	103	40-135	2	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421324
Reported: 10/09/13 at 12:50 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
123478-HxCDF	100	103	40-135	2	20				
123678-HxCDF	103	104	40-135	1	20				
123789-HxCDF	101	104	40-135	1	20				
234678-HxCDF	101	102	40-135	0	20				
1234678-HpCDF	99	101	40-135	1	20				
1234789-HpCDF	102	102	40-135	1	20				
OCDF	100	103	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13271SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7211495	81	88	97
7211496	76	83	86
7211497	82	87	97
7211498	84	90	98
7211499	85	92	97
7211501	85	93	99
7211502	83	89	97
7211503	85	93	103
Blank	81	88	99
LCS	89	97	106
MS	84	90	98
MSD	85	92	97
Limits:	54-129	59-125	61-125

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13276SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7211504	87	97	102
Blank	89	96	100
LCS	92	99	105
MS	85	94	100
MSD	87	96	100
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13269B94A

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421324
Reported: 10/09/13 at 12:50 PM

Surrogate Quality Control

	Trifluorotoluene-F
7211494	73
Blank	72
LCS	78
LCSD	77
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13274A31A

	Trifluorotoluene-F
7211496	81
7211504	87
Blank	92
LCS	95
MS	70
MSD	77
Limits:	50-142

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132750010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7211495	102	111
7211496	109	115
7211497	106	107
7211498	105	112
7211499	111	122*
7211501	114	119
7211502	101	108
7211503	109	114
7211504	99	106
Blank	113	121*
LCS	113	120
LCSD	113	122*
MS	105	112
MSD	111	122*
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132710006A

	Chlorobenzene	Orthoterphenyl
7211495	97	67
7211496	86	83
7211497	122	81
7211498	112	52*
7211499	107	63*
7211501	101	79
7211502	86	75
7211503	100	84
Blank	111	96

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421324
Reported: 10/09/13 at 12:50 PM

Surrogate Quality Control

LCS	109	79
MS	112	52*
MSD	107	63*
Limits:	37-125	66-123

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132760019A

	Chlorobenzene	Orthoterphenyl
7211504	106	91
Blank	109	90
LCS	105	90
MS	110	86
MSD	108	90
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13273002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7211495	67	63	68	72	69	65
7211497	67	70	63	72	67	61
7211498	67	68	69	75	71	68
7211499	69	69	69	76	70	71
7211501	62	66	65	69	66	70
7211502	70	70	70	74	71	70
7211503	73	63	70	79	68	67
Blank	69	71	70	73	71	74
MS	67	68	69	75	71	68
MSD	69	69	69	76	70	71
OPR	65	69	68	75	72	68
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7211495	84	65	60	65	73	75
7211497	90	61	57	76	76	74
7211498	90	68	66	72	77	76
7211499	94	67	64	73	79	76
7211501	83	66	63	67	70	69
7211502	90	66	62	73	75	74
7211503	98	56	50	67	78	76
Blank	89	73	73	74	77	77
MS	90	68	66	72	77	76
MSD	94	67	64	73	79	76
OPR	93	70	68	75	80	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7211495	73	76	71	65	65
7211497	74	76	73	62	75

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421324
Reported: 10/09/13 at 12:50 PM

Surrogate Quality Control

7211498	77	79	80	63	72
7211499	76	81	80	64	74
7211501	71	73	73	60	68
7211502	75	78	76	67	73
7211503	74	74	73	64	69
Blank	77	81	85	65	72
MS	77	79	80	63	72
MSD	76	81	80	64	74
OPR	81	84	83	59	73
Limits:	28-130	23-140	17-157	24-169	24-185

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acct# 13013 Cap# 1421324 Sample# 7211494-504

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/24/2013

CarrierName: FedEx

AirbillNo: 796760201311

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20130924-01

Cooler #: 1

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-092413	9/24/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-558-SA5D-SB-0.0-0.5	9/24/13 08:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-558-SA5D-SB-0.0-0.5	9/24/13 08:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-558-SA5D-SB-4.0-5.0	9/24/13 08:45	SO	None	2 - SS-Sleeve	10 day	X	X					X			X											X										
SL-558-SA5D-SB-4.0-5.0	9/24/13 08:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-558-SA5D-SB-4.0-5.0	9/24/13 08:45	SO	None	2 - Encore	10 day																			X												
SL-565-SA5D-SB-0.0-0.5MS	9/24/13 07:40	SO	None	6 - SS-Sleeve	10 day	X	X					X		X	X											X										MS/MSD
SL-565-SA5D-SB-0.0-0.5MS	9/24/13 07:40	SO	None	1 - 8 oz glass	10 day													X																		MS/MSD
SL-865-SA5D-SB-0.0-0.5	9/24/13 07:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-865-SA5D-SB-0.0-0.5	9/24/13 07:50	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shay Myers	9/24/2013	1600									
									Bump	9-25-13	910

COC Rev 2

COC_20130924-01_Page 1 of 1

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 13013 Group# 142324 Sample # 7211494-504

COC # 213659

Please print. Instructions on reverse side correspond with circled numbers.

(1) Client: DOE Acct. #:

Project Name/#: SSFL PWSID #:

Project Manager: John Wondolleck P.O.#:

Sampler: Y. Cortes Quote #:

Name of state where samples were collected: CA

For Lab Use Only

FSC:

SCR#:

Preservation Codes

H=HCl T=Thiosulfate

N=HNO_3 B=NaOH

S=H_2SO_4 O=Other

Cooler #: 1

Airbill #: 796760201311

(2) Sample Identification	Date Collected	Time Collected	(3) Grab	Composite	(4) Matrix: Soil	Water	Other	Total # of Containers	(5) Analyses Requested / Preservation Codes: Metals+Hg (EPA 1600, 6020B, 7471)	PAHs (EPA 8270 SIM)	Dioxins (EPA 1613)	PCBs/PCBs (EPA 8082)	pH (EPA 9045)	TPH-EFH (EPA 8015B)	TPH-GRO (EPA 8015B)	Remarks
SL-557-SA5D-SB-0.0-0.5	09/24/2013	0935	X		X			3	X	X	X	X	X	X		
SL-566-SA5D-SB-0.0-0.5	"	1230	X		X			3	X	X	X	X	X	X		
SL-566-SA5D-SB-4.0-5.0	"	1315	X		X			5	X	X		X	X	X	X	

(6) Temperature of samples upon receipt (if requested)

(7) **Turnaround Time Requested** (TAT) (please circle): (Normal) Rush

(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)

Date results are needed: 10day

Rush results requested by (please circle): Phone Fax E-mail

Phone #: Fax #:

E-mail address:

(8) **Data Package Options** (please circle if required)

Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

TX TRRP-13
MA MCP CT RCP

SDG Complete? Yes No

Site-specific QC (MS/MSD/Dup)? Yes No

(If yes, indicate QC sample and submit triplicate volume.)

Internal COC Required? Yes / No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
Steve Mysel	09/24/2013	1600			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: Brenely Berry	9.25.13	910

Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2300 Fax: (717) 656-6766

Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

1 of 1

2102.03

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C#1421324

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 9-25-13

Time of Receipt: 910

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DH46	1.4	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brenely Barclay 2299 **Date/Time:** 9-25-13 948

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH114

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 09, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 09/26/2013
Group Number: 1421713
SDG: PH114
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB1-092513 Water	7213403
TB-092513 Water	7213405
SL-569-SA5D-SB-0.0-0.5 Soil	7213406
SL-573-SA5D-SB-0.0-0.5 Soil	7213407
SL-573-SA5D-SB-4.0-5.0 Soil	7213408
SL-562-SA5D-SB-0.0-0.5 Soil	7213409
SL-562-SA5D-SB-4.0-5.0 Soil	7213410
SL-563-SA5D-SB-0.0-0.5 Soil	7213411
SL-563-SA5D-SB-4.0-5.0 Soil	7213412
SL-563-SA5D-SB-4.0-5.0MS Soil	7213413
SL-563-SA5D-SB-4.0-5.0MSD Soil	7213414
SL-563-SA5D-SB-4.0-5.0DUP Soil	7213415
SL-863-SA5D-SB-4.0-5.0 Soil	7213416

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: EB1-092513 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7213403
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 15:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

25EB1 SDG#: PH114-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.052	U	0.052	0.010	1
12971	Acenaphthylene	208-96-8	0.052	U	0.052	0.010	1
12971	Anthracene	120-12-7	0.052	U	0.052	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.052	U	0.052	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.052	U	0.052	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.052	U	0.052	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.052	U	0.052	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.052	U	0.052	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.052	U	0.052	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.052	1
12971	Di-n-butylphthalate	84-74-2	0.22	J	1.0	0.052	1
12971	Chrysene	218-01-9	0.052	U	0.052	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.052	U	0.052	0.010	1
12971	Diethylphthalate	84-66-2	0.83	J	1.0	0.052	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.052	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	1.0	U	1.0	0.052	1
12971	Fluoranthene	206-44-0	0.052	U	0.052	0.010	1
12971	Fluorene	86-73-7	0.052	U	0.052	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.052	U	0.052	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.052	U	0.052	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.052	U	0.052	0.010	1
12971	Naphthalene	91-20-3	0.052	U	0.052	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.052	U	0.052	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.052	1
12971	Phenanthrene	85-01-8	0.052	U	0.052	0.031	1
12971	Pyrene	129-00-0	0.052	U	0.052	0.010	1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	
10407	2,4-D	94-75-7	0.48	U	0.48	0.15	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.95	U	0.95	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.076	1
10407	Dinoseb	88-85-7	0.48	U	0.48	0.11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.48	U	0.48	0.15	1
10407	MCPA	94-74-6	190	U	190	48	1
10407	MCPP	93-65-2	190	U	190	48	1
10407	2,4,5-T	93-76-5	0.048	U	0.048	0.014	1
10407	2,4,5-TP	93-72-1	0.048	U	0.048	0.0095	1
Perchlorate	**SW-846 6850 1/2007**		ug/l		ug/l	ug/l	
06386	6b Perchlorate (Method 6850)	14797-73-0	1.0	U	1.0	0.20	1
Pesticides/PCBs	**SW-846 8081B**		ug/l		ug/l	ug/l	
10589	Aldrin	309-00-2	0.0081	U	0.0081	0.0016	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-092513 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7213403
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 15:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

25EB1 SDG#: PH114-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Alpha BHC	319-84-6	0.0081	U	0.0081	0.0024	1
10589	Beta BHC	319-85-7	0.0081	U	0.0081	0.0028	1
10589	Gamma BHC - Lindane	58-89-9	0.0081	U	0.0081	0.0016	1
10589	Chlordane	57-74-9	0.41	U	0.41	0.13	1
10589	p,p-DDD	72-54-8	0.016	U	0.016	0.0041	1
10589	p,p-DDE	72-55-9	0.016	U	0.016	0.0041	1
10589	p,p-DDT	50-29-3	0.016	U	0.016	0.0042	1
10589	Delta BHC	319-86-8	0.0081	U	0.0081	0.0028	1
10589	Dieldrin	60-57-1	0.016	U	0.016	0.0043	1
10589	Endosulfan I	959-98-8	0.0081	U	0.0081	0.0035	1
10589	Endosulfan II	33213-65-9	0.016	U	0.016	0.012	1
10589	Endosulfan Sulfate	1031-07-8	0.016	U	0.016	0.0047	1
10589	Endrin	72-20-8	0.016	U	0.016	0.0066	1
10589	Endrin Aldehyde	7421-93-4	0.081	U	0.081	0.016	1
10589	Endrin Ketone	53494-70-5	0.016	U	0.016	0.0041	1
10589	Heptachlor	76-44-8	0.0081	U	0.0081	0.0016	1
10589	Heptachlor Epoxide	1024-57-3	0.0081	U	0.0081	0.0019	1
10589	Methoxychlor	72-43-5	0.081	U	0.081	0.024	1
10589	Mirex	2385-85-5	0.041	U	0.041	0.0081	1
10589	Toxaphene	8001-35-2	2.4	U	2.4	0.81	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.41	U	0.41	0.081	1
13092	Aroclor 5442	12642-23-8	0.41	U	0.41	0.081	1
13092	Aroclor 5460	11126-42-4	0.41	U	0.41	0.089	1
13092	PCB-1016	12674-11-2	0.41	U	0.41	0.081	1
13092	PCB-1221	11104-28-2	0.41	U	0.41	0.081	1
13092	PCB-1232	11141-16-5	0.41	U	0.41	0.16	1
13092	PCB-1242	53469-21-9	0.41	U	0.41	0.081	1
13092	PCB-1248	12672-29-6	0.41	U	0.41	0.081	1
13092	PCB-1254	11097-69-1	0.41	U	0.41	0.081	1
13092	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
13092	PCB-1262	37324-23-5	0.41	U	0.41	0.16	1
13092	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C15-C20)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C21-C30)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.097	1
10365	EFH (C8-C11)	n.a.	0.097	U	0.097	0.049	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

*=This limit was used in the evaluation of the final result

Sample Description: EB1-092513 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7213403
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 15:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

25EB1 SDG#: PH114-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
Metals		**SW-846 6010C**	**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.0498 J	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
		SW-846 6020A	**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
		SW-846 7470A	**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry		**EPA 300.0**	**mg/l**	**mg/l**	**mg/l**	
01504	1b Anions by 300.0 - Fluoride	16984-48-8	0.10 U	0.10	0.080	1
		SW-846 9040C	**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.4	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-092513 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7213403
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 15:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

25EB1 SDG#: PH114-01EB

CAT No.	Analysis Name		CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**			pg/l		pg/l	pg/l	
10915	2378-TCDD		1746-01-6	1.96	U	1.96	0.267	1
10915	12378-PeCDD		40321-76-4	0.293	JBQ	9.78	0.194	1
10915	123478-HxCDD		39227-28-6	0.202	JB	9.78	0.139	1
10915	123678-HxCDD		57653-85-7	0.353	JBQ	9.78	0.148	1
10915	123789-HxCDD		19408-74-3	0.256	JBQ	9.78	0.141	1
10915	1234678-HpCDD		35822-46-9	0.426	JBQ	9.78	0.151	1
10915	OCDD		3268-87-9	2.39	JB	19.6	0.200	1
10915	2378-TCDF		51207-31-9	1.96	U	1.96	0.165	1
10915	12378-PeCDF		57117-41-6	0.638	JBQ	9.78	0.0873	1
10915	23478-PeCDF		57117-31-4	0.274	JBQ	9.78	0.0782	1
10915	123478-HxCDF		70648-26-9	0.196	JB	9.78	0.0719	1
10915	123678-HxCDF		57117-44-9	9.78	U	9.78	0.0723	1
10915	123789-HxCDF		72918-21-9	0.217	JBQ	9.78	0.0732	1
10915	234678-HxCDF		60851-34-5	0.174	JBQ	9.78	0.0691	1
10915	1234678-HpCDF		67562-39-4	0.207	JB	9.78	0.0772	1
10915	1234789-HpCDF		55673-89-7	0.276	JB	9.78	0.0916	1
10915	OCDF		39001-02-0	1.30	JBQ	19.6	0.188	1
Toxic Equivalents	**EPA 1613B**			pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0		n.a.	0.0454				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB1-092513 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7213403
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 15:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

25EB1 SDG#: PH114-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB1-092513 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7213403
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 15:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

25EB1 SDG#: PH114-01EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13274WAK026	10/08/2013 14:09	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13274WAK026	10/02/2013 10:20	Anna E Stager	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13269B94A	09/27/2013 13:51	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13269B94A	09/27/2013 13:51	Catherine J Schwarz	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132740011A	10/02/2013 13:58	Melissa McDermott	1
06386	6b Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132750001A	10/02/2013 15:56	Richard A Shober	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132730010A	10/01/2013 12:28	Lisa A Reinert	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132730011A	10/02/2013 23:03	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132730011A	09/30/2013 16:00	Seth A Farrier	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132730010A	09/30/2013 16:00	Seth A Farrier	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132740011A	10/01/2013 20:00	Elaine F Stoltzfus	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132730022A	10/02/2013 08:32	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132730022A	10/01/2013 03:00	Sherry L Morrow	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13276002	10/07/2013 17:00	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13276002	10/03/2013 10:30	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07044	Antimony	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07035	Arsenic	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07046	Barium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07047	Beryllium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
08014	Boron	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07049	Cadmium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
01750	Calcium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07051	Chromium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07052	Cobalt	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07053	Copper	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
01754	Iron	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07055	Lead	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
01756	Lithium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
01757	Magnesium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07058	Manganese	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-092513 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7213403
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 15:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

25EB1 SDG#: PH114-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07060	Molybdenum	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07061	Nickel	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
10143	Phosphorus	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
01762	Potassium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
01767	Sodium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07069	Tin	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07070	Titanium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07071	Vanadium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
07072	Zinc	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
10144	Zirconium	SW-846 6010C	1	132700635002	09/30/2013 15:17	Eric L Eby	1
06041	Selenium	SW-846 6020A	1	132700639001B	09/30/2013 13:42	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	132700639001A	09/30/2013 13:42	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	132700639001A	09/30/2013 13:42	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	132700639001A	09/30/2013 13:42	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	132735713006	10/01/2013 09:07	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132700635002	09/29/2013 22:30	Annamaria Stipkovits	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132700639001	09/29/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132735713006	09/30/2013 15:30	Nelli S Markaryan	1
01504	1b Anions by 300.0 - Fluoride	EPA 300.0	1	13274347601C	10/01/2013 13:31	Sandra J Miller	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13270003102A	09/27/2013 16:07	Susan A Engle	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-092513 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7213405
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 08:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

25-TB SDG#: PH114-03TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13269B94A	09/27/2013 14:16	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13269B94A	09/27/2013 14:16	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213406
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 10:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH114-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	29		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.99	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	0.79	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	8.3		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	51		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	79		10	4.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213406
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 10:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH114-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	3.8	J	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,000		40.7	7.33	1
06944	Antimony	7440-36-0	4.07	U	4.07	0.752	1
06935	Arsenic	7440-38-2	3.80	J	4.07	0.712	1
06946	Barium	7440-39-3	61.0		1.02	0.0335	1
06947	Beryllium	7440-41-7	0.593	J	1.02	0.0681	1
07914	Boron	7440-42-8	10.7		10.2	0.854	1
06949	Cadmium	7440-43-9	0.114	J	1.02	0.0773	1
01650	Calcium	7440-70-2	5,800		20.3	3.40	1
06951	Chromium	7440-47-3	35.3		3.05	0.163	1
06952	Cobalt	7440-48-4	6.99		1.02	0.101	1
06953	Copper	7440-50-8	9.56		2.03	0.295	1
01654	Iron	7439-89-6	25,800		81.3	7.36	2
06955	Lead	7439-92-1	8.52		3.05	0.508	1
01656	Lithium	7439-93-2	33.4		4.1	0.35	1
01657	Magnesium	7439-95-4	7,310		10.2	1.70	1
06958	Manganese	7439-96-5	241		1.02	0.0844	1
06960	Molybdenum	7439-98-7	2.03	U	2.03	0.173	1
06961	Nickel	7440-02-0	13.3		2.03	0.132	1
10145	Phosphorus	7723-14-0	632		10.2	2.94	1
01662	Potassium	7440-09-7	3,830		102	8.48	1
01667	Sodium	7440-23-5	118		102	17.0	1
06969	Tin	7440-31-5	2.56	J	10.2	0.224	1
06970	Titanium	7440-32-6	895		2.03	0.346	2
06971	Vanadium	7440-62-2	63.7		1.02	0.132	1
06972	Zinc	7440-66-6	57.5		4.07	0.203	1
10146	Zirconium	7440-67-7	8.02		5.08	0.854	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.257	J	0.407	0.102	2
06142	Silver	7440-22-4	0.203	U	0.203	0.0264	2
06144	Strontium	7440-24-6	23.7		0.407	0.0691	2
06145	Thallium	7440-28-0	0.223		0.203	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0191		0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.80		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213406
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 10:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH114-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213406
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 10:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH114-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.0476	1
11031	12378-PeCDD	40321-76-4	5.05	U	5.05	0.0328	1
11031	123478-HxCDD	39227-28-6	0.0701	JBQ	5.05	0.0229	1
11031	123678-HxCDD	57653-85-7	0.128	JBQ	5.05	0.0241	1
11031	123789-HxCDD	19408-74-3	0.108	JBQ	5.05	0.0231	1
11031	1234678-HpCDD	35822-46-9	1.70	JB	5.05	0.0246	1
11031	OCDD	3268-87-9	16.1	B	10.1	0.0227	1
11031	2378-TCDF	51207-31-9	0.112	J	1.01	0.0487	1
11031	12378-PeCDF	57117-41-6	0.309	JB	5.05	0.0221	1
11031	23478-PeCDF	57117-31-4	5.05	U	5.05	0.0228	1
11031	123478-HxCDF	70648-26-9	0.104	JB	5.05	0.0234	1
11031	123678-HxCDF	57117-44-9	0.0850	JBQ	5.05	0.0216	1
11031	123789-HxCDF	72918-21-9	0.0751	JB	5.05	0.0243	1
11031	234678-HxCDF	60851-34-5	0.104	JBQ	5.05	0.0226	1
11031	1234678-HpCDF	67562-39-4	0.491	JB	5.05	0.0155	1
11031	1234789-HpCDF	55673-89-7	0.0876	JBQ	5.05	0.0240	1
11031	OCDF	39001-02-0	1.04	JB	10.1	0.0298	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0654				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213406
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 10:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH114-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213406
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 10:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH114-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13273SLE026	10/02/2013 05:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13273SLE026	10/01/2013 08:00	Kerrie A Freeburn	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750029A	10/04/2013 05:44	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750029A	10/03/2013 10:30	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132730031A	10/02/2013 15:17	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132730031A	10/01/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/03/2013 06:39	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132740637002	10/05/2013 09:18	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132740637002	10/05/2013 09:18	Katlin N Cataldi	2
06971	Vanadium	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132740637002	10/04/2013 06:41	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132740637002B	10/03/2013 09:04	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637002A	10/03/2013 09:04	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637002A	10/03/2013 09:04	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132740637002A	10/03/2013 09:04	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213406
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 10:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH114-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132740638002	10/03/2013 05:16	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637002	10/02/2013 10:00	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638002	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13269039403A	09/26/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213407
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 07:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57300 SDG#: PH114-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.69	J	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.2	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.1	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	0.77	J	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7		1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.1	J	1.7	0.67	1
12969	Pyrene	129-00-0	0.98	J	1.7	0.67	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.28	J	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.21	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.33	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.75	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.19	J	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.22	J	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1

Reporting limits were raised due to interference from the sample matrix.

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213407
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 07:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57300 SDG#: PH114-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	1.3	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/05/2013 03:12	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132730002A	10/02/2013 12:23	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132730002A	09/30/2013 14:00	Wanda F Oswald	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213408
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 08:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57345 SDG#: PH114-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.7		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132730002A	10/02/2013 12:38	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132730002A	09/30/2013 14:00	Wanda F Oswald	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213409
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:35

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56200 SDG#: PH114-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	2.1		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.95	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	33		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	2.2		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.1	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.5	J	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	J	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	0.92	J	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.6	J	1.8	0.70	1
12969	Naphthalene	91-20-3	2.9		1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.9		1.8	0.70	1
12969	Pyrene	129-00-0	1.7	J	1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	4.1	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	22		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	41		10	4.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213409
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:35

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56200 SDG#: PH114-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,300		41.5	7.47	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.767	1
06935	Arsenic	7440-38-2	2.93	J	4.15	0.725	1
06946	Barium	7440-39-3	113		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.886	J	1.04	0.0694	1
07914	Boron	7440-42-8	11.7		10.4	0.871	1
06949	Cadmium	7440-43-9	0.315	J	1.04	0.0788	1
01650	Calcium	7440-70-2	18,600		20.7	3.46	1
06951	Chromium	7440-47-3	33.6		3.11	0.166	1
06952	Cobalt	7440-48-4	10.4		1.04	0.103	1
06953	Copper	7440-50-8	19.2		2.07	0.301	1
01654	Iron	7439-89-6	32,900		82.9	7.50	2
06955	Lead	7439-92-1	12.8		3.11	0.518	1
01656	Lithium	7439-93-2	24.7		4.1	0.35	1
01657	Magnesium	7439-95-4	8,040		10.4	1.73	1
06958	Manganese	7439-96-5	417		1.04	0.0860	1
06960	Molybdenum	7439-98-7	0.184	J	2.07	0.176	1
06961	Nickel	7440-02-0	20.7		2.07	0.135	1
10145	Phosphorus	7723-14-0	661		10.4	3.00	1
01662	Potassium	7440-09-7	6,840		104	8.64	1
01667	Sodium	7440-23-5	102	J	104	17.3	1
06969	Tin	7440-31-5	2.69	J	10.4	0.228	1
06970	Titanium	7440-32-6	981		2.07	0.352	2
06971	Vanadium	7440-62-2	62.4		1.04	0.135	1
06972	Zinc	7440-66-6	83.7		4.15	0.207	1
10146	Zirconium	7440-67-7	7.42		5.18	0.871	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.296	J	0.415	0.104	2
06142	Silver	7440-22-4	0.0479	J	0.207	0.0269	2
06144	Strontium	7440-24-6	69.6		0.415	0.0705	2
06145	Thallium	7440-28-0	0.417		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0243		0.0171	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	7.86		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.4		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213409
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:35

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56200 SDG#: PH114-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213409
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:35

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56200 SDG#: PH114-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0473	1
11031	12378-PeCDD	40321-76-4	0.117	JBQ	5.08	0.0355	1
11031	123478-HxCDD	39227-28-6	0.0832	JBQ	5.08	0.0294	1
11031	123678-HxCDD	57653-85-7	0.138	JB	5.08	0.0315	1
11031	123789-HxCDD	19408-74-3	0.194	JB	5.08	0.0283	1
11031	1234678-HpCDD	35822-46-9	1.95	JB	5.08	0.0284	1
11031	OCDD	3268-87-9	14.1	B	10.2	0.0235	1
11031	2378-TCDF	51207-31-9	0.159	JQ	1.02	0.0502	1
11031	12378-PeCDF	57117-41-6	0.276	JB	5.08	0.0242	1
11031	23478-PeCDF	57117-31-4	0.259	JB	5.08	0.0238	1
11031	123478-HxCDF	70648-26-9	0.149	JBQ	5.08	0.0242	1
11031	123678-HxCDF	57117-44-9	0.130	JBQ	5.08	0.0226	1
11031	123789-HxCDF	72918-21-9	0.0658	JBQ	5.08	0.0233	1
11031	234678-HxCDF	60851-34-5	0.162	JBQ	5.08	0.0216	1
11031	1234678-HpCDF	67562-39-4	0.495	JB	5.08	0.0171	1
11031	1234789-HpCDF	55673-89-7	0.0976	JBQ	5.08	0.0245	1
11031	OCDF	39001-02-0	0.770	JB	10.2	0.0299	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.148				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213409
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:35

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56200 SDG#: PH114-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213409
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:35

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56200 SDG#: PH114-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13273SLE026	10/02/2013 06:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13273SLE026	10/01/2013 08:00	Kerrie A Freeburn	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750029A	10/04/2013 07:16	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750029A	10/03/2013 10:30	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132730031A	10/02/2013 14:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132730031A	10/01/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/03/2013 07:36	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132740637002	10/05/2013 09:30	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132740637002	10/05/2013 09:30	Katlin N Cataldi	2
06971	Vanadium	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132740637002	10/04/2013 06:44	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132740637002B	10/03/2013 09:14	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637002A	10/03/2013 09:14	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637002A	10/03/2013 09:14	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132740637002A	10/03/2013 09:14	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213409
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:35

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56200 SDG#: PH114-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132740638002	10/03/2013 05:18	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637002	10/02/2013 10:00	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638002	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13269039403A	09/26/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213410
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:50

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56245 SDG#: PH114-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	8.2		1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	32		1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.0	J	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.5	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	6.5		1.8	0.73	1
12969	Fluorene	86-73-7	16		1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	4.7		1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	9.5		1.8	0.73	1
12969	Naphthalene	91-20-3	22		1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	30		1.8	0.73	1
12969	Pyrene	129-00-0	4.7		1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	26.04
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213410
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:50

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56245 SDG#: PH114-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	2.2	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	6.9		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	14		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,500		44.6	8.05	1
06944	Antimony	7440-36-0	4.46	U	4.46	0.826	1
06935	Arsenic	7440-38-2	3.59	J	4.46	0.781	1
06946	Barium	7440-39-3	104		1.12	0.0368	1
06947	Beryllium	7440-41-7	0.955	J	1.12	0.0748	1
07914	Boron	7440-42-8	7.21	J	11.2	0.938	1
06949	Cadmium	7440-43-9	0.105	J	1.12	0.0848	1
01650	Calcium	7440-70-2	20,500		22.3	3.73	1
06951	Chromium	7440-47-3	35.9		3.35	0.179	1
06952	Cobalt	7440-48-4	10.1		1.12	0.110	1
06953	Copper	7440-50-8	13.6		2.23	0.324	1
01654	Iron	7439-89-6	34,300		89.3	8.08	2
06955	Lead	7439-92-1	10.6		3.35	0.558	1
01656	Lithium	7439-93-2	21.4		4.5	0.38	1
01657	Magnesium	7439-95-4	6,590		11.2	1.86	1
06958	Manganese	7439-96-5	435		1.12	0.0926	1
06960	Molybdenum	7439-98-7	0.213	J	2.23	0.190	1
06961	Nickel	7440-02-0	19.4		2.23	0.145	1
10145	Phosphorus	7723-14-0	160		11.2	3.23	1
01662	Potassium	7440-09-7	3,370		112	9.31	1
01667	Sodium	7440-23-5	274		112	18.6	1
06969	Tin	7440-31-5	2.84	J	11.2	0.246	1
06970	Titanium	7440-32-6	962		1.12	0.190	1
06971	Vanadium	7440-62-2	66.0		1.12	0.145	1
06972	Zinc	7440-66-6	58.3		4.46	0.223	1
10146	Zirconium	7440-67-7	7.65		5.58	0.938	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.222	J	0.446	0.112	2
06142	Silver	7440-22-4	0.0655	J	0.223	0.0290	2
06144	Strontium	7440-24-6	82.7		0.446	0.0759	2
06145	Thallium	7440-28-0	0.466		0.223	0.0335	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0159	J	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.11		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213410
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:50

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56245 SDG#: PH114-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	10.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13273SLE026	10/02/2013 07:05	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13273SLE026	10/01/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13274A31A	10/01/2013 19:29	Laura M Krieger	26.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326932523	09/26/2013 12:57	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326932523	09/26/2013 12:58	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750029A	10/04/2013 07:34	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750029A	10/03/2013 10:30	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132730031A	10/02/2013 14:13	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132730031A	10/01/2013 08:00	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132740637002	10/05/2013 09:33	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213410
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:50

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56245 SDG#: PH114-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132740637002	10/04/2013 06:55	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132740637002B	10/03/2013 09:16	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637002A	10/03/2013 09:16	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637002A	10/03/2013 09:16	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132740637002A	10/03/2013 09:16	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638002	10/03/2013 05:20	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637002	10/02/2013 10:00	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638002	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13269039403A	09/26/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213411
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:15

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56300 SDG#: PH114-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	27		19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.2	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	2.9	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	18		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	39		11	4.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213411
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:15

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56300 SDG#: PH114-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,600		41.0	7.39	1
06944	Antimony	7440-36-0	4.10	U	4.10	0.759	1
06935	Arsenic	7440-38-2	4.14		4.10	0.718	1
06946	Barium	7440-39-3	92.9		1.03	0.0338	1
06947	Beryllium	7440-41-7	0.766	J	1.03	0.0687	1
07914	Boron	7440-42-8	12.1		10.3	0.861	1
06949	Cadmium	7440-43-9	0.372	J	1.03	0.0779	1
01650	Calcium	7440-70-2	71,700		41.0	6.85	2
06951	Chromium	7440-47-3	31.2		3.08	0.164	1
06952	Cobalt	7440-48-4	9.44		1.03	0.101	1
06953	Copper	7440-50-8	16.6		2.05	0.297	1
01654	Iron	7439-89-6	29,800		82.0	7.42	2
06955	Lead	7439-92-1	10.1		3.08	0.513	1
01656	Lithium	7439-93-2	28.8		4.1	0.35	1
01657	Magnesium	7439-95-4	7,730		10.3	1.71	1
06958	Manganese	7439-96-5	390		1.03	0.0851	1
06960	Molybdenum	7439-98-7	2.05	U	2.05	0.174	1
06961	Nickel	7440-02-0	18.7		2.05	0.133	1
10145	Phosphorus	7723-14-0	550		10.3	2.96	1
01662	Potassium	7440-09-7	4,470		103	8.55	1
01667	Sodium	7440-23-5	117		103	17.1	1
06969	Tin	7440-31-5	2.44	J	10.3	0.226	1
06970	Titanium	7440-32-6	949		2.05	0.349	2
06971	Vanadium	7440-62-2	60.8		1.03	0.133	1
06972	Zinc	7440-66-6	71.8		4.10	0.205	1
10146	Zirconium	7440-67-7	6.34		5.13	0.861	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.327	J	0.410	0.103	2
06142	Silver	7440-22-4	0.0487	J	0.205	0.0267	2
06144	Strontium	7440-24-6	128		1.03	0.174	5
06145	Thallium	7440-28-0	0.378		0.205	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0201		0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.75		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213411
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:15

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56300 SDG#: PH114-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213411
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:15

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56300 SDG#: PH114-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0400	1
11031	12378-PeCDD	40321-76-4	0.140	JB	5.31	0.0265	1
11031	123478-HxCDD	39227-28-6	0.0678	JBQ	5.31	0.0187	1
11031	123678-HxCDD	57653-85-7	0.0823	JBQ	5.31	0.0203	1
11031	123789-HxCDD	19408-74-3	0.0651	JBQ	5.31	0.0181	1
11031	1234678-HpCDD	35822-46-9	0.283	JBQ	5.31	0.0216	1
11031	OCDD	3268-87-9	1.10	JB	10.6	0.0180	1
11031	2378-TCDF	51207-31-9	0.0419	JQ	1.06	0.0307	1
11031	12378-PeCDF	57117-41-6	0.173	JBQ	5.31	0.0154	1
11031	23478-PeCDF	57117-31-4	0.126	JBQ	5.31	0.0144	1
11031	123478-HxCDF	70648-26-9	0.0797	JBQ	5.31	0.0148	1
11031	123678-HxCDF	57117-44-9	0.101	JB	5.31	0.0138	1
11031	123789-HxCDF	72918-21-9	0.0760	JB	5.31	0.0155	1
11031	234678-HxCDF	60851-34-5	0.0911	JB	5.31	0.0133	1
11031	1234678-HpCDF	67562-39-4	0.0983	JB	5.31	0.00682	1
11031	1234789-HpCDF	55673-89-7	0.0571	JBQ	5.31	0.00991	1
11031	OCDF	39001-02-0	0.253	JBQ	10.6	0.0278	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.168				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213411
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:15

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56300 SDG#: PH114-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213411
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:15

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56300 SDG#: PH114-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13273SLE026	10/02/2013 07:38	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13273SLE026	10/01/2013 08:00	Kerrie A Freeburn	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750029A	10/04/2013 07:53	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750029A	10/03/2013 10:30	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132730031A	10/02/2013 14:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132730031A	10/01/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/03/2013 18:45	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132740637002	10/05/2013 09:37	Katlin N Cataldi	2
06951	Chromium	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132740637002	10/05/2013 09:37	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132740637002	10/05/2013 09:37	Katlin N Cataldi	2
06971	Vanadium	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132740637002	10/04/2013 06:59	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132740637002B	10/03/2013 09:19	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637002A	10/03/2013 09:19	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637002A	10/03/2013 09:46	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132740637002A	10/03/2013 09:19	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213411
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:15

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56300 SDG#: PH114-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132740638002	10/03/2013 05:22	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637002	10/02/2013 10:00	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638002	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13269039403A	09/26/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213412
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	5.6		1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	12		1.8	0.72	1
12969	Naphthalene	91-20-3	7.8		1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213412
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,300		41.9	7.56	1
06944	Antimony	7440-36-0	4.19	U	4.19	0.776	1
06935	Arsenic	7440-38-2	4.38		4.19	0.734	1
06946	Barium	7440-39-3	75.0		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.655	J	1.05	0.0702	1
07914	Boron	7440-42-8	10.5		10.5	0.881	1
06949	Cadmium	7440-43-9	0.439	J	1.05	0.0797	1
01650	Calcium	7440-70-2	112,000		105	17.5	5
06951	Chromium	7440-47-3	24.7		3.15	0.168	1
06952	Cobalt	7440-48-4	9.99		1.05	0.104	1
06953	Copper	7440-50-8	14.7		2.10	0.304	1
01654	Iron	7439-89-6	26,900		41.9	3.80	1
06955	Lead	7439-92-1	10.0		3.15	0.524	1
01656	Lithium	7439-93-2	26.2		4.2	0.36	1
01657	Magnesium	7439-95-4	6,980		10.5	1.75	1
06958	Manganese	7439-96-5	303		1.05	0.0870	1
06960	Molybdenum	7439-98-7	2.10	U	2.10	0.178	1
06961	Nickel	7440-02-0	15.9		2.10	0.136	1
10145	Phosphorus	7723-14-0	521		10.5	3.03	1
01662	Potassium	7440-09-7	3,280		105	8.74	1
01667	Sodium	7440-23-5	146		105	17.5	1
06969	Tin	7440-31-5	2.39	J	10.5	0.231	1
06970	Titanium	7440-32-6	873		1.05	0.178	1
06971	Vanadium	7440-62-2	45.0		1.05	0.136	1
06972	Zinc	7440-66-6	70.3		4.19	0.210	1
10146	Zirconium	7440-67-7	7.13		5.24	0.881	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.239	J	0.419	0.105	2
06142	Silver	7440-22-4	0.0378	J	0.210	0.0273	2
06144	Strontium	7440-24-6	206		2.10	0.356	10
06145	Thallium	7440-28-0	0.289		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0130	J	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.29		0.0100	0.0100	1

The pH was measured in water at 21.8 C.

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213412
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	7.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13273SLE026	10/02/2013 03:46	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13273SLE026	10/01/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13274A31A	10/02/2013 00:19	Laura M Krieger	25
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326932523	09/26/2013 13:02	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326932523	09/26/2013 13:02	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750029A	10/04/2013 08:11	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750029A	10/03/2013 10:30	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132730031A	10/02/2013 10:19	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132730031A	10/01/2013 08:00	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132740637002	10/05/2013 08:42	Katlin N Cataldi	5
06951	Chromium	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213412
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132740637002	10/04/2013 06:17	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132740637002B	10/03/2013 08:50	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637002A	10/03/2013 08:50	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637002A	10/03/2013 09:51	Choon Y Tian	10
06145	Thallium	SW-846 6020A	1	132740637002A	10/03/2013 08:50	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638002	10/03/2013 05:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637002	10/02/2013 10:00	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638002	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13269039403A	09/26/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213413
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	30		1.8	0.72	1
12969	Acenaphthylene	208-96-8	32		1.8	0.36	1
12969	Anthracene	120-12-7	30		1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	30		1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	29		1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	31		1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	27		18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	30		1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	29		1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	35		19	6.4	1
12969	Di-n-butylphthalate	84-74-2	34		19	6.4	1
12969	Chrysene	218-01-9	30		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	32		1.8	0.72	1
12969	Diethylphthalate	84-66-2	32		19	6.4	1
12969	Dimethylphthalate	131-11-3	28		19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	34		19	6.4	1
12969	Fluoranthene	206-44-0	30		1.8	0.72	1
12969	Fluorene	86-73-7	31		1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	32		1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	33		1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	33		1.8	0.72	1
12969	Naphthalene	91-20-3	32		1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	35		19	6.4	1
12969	Phenanthrene	85-01-8	30		1.8	0.72	1
12969	Pyrene	129-00-0	31		1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	10		1.0	0.2	23.76
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	150		18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	170		18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213413
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.9	J	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	7.9		5.4	2.2	1
12952	EFH (C21-C30)	n.a.	12		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	14		11	4.3	1
12952	EFH (C8-C11)	n.a.	3.9	J	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,400		42.3	7.63	1
06944	Antimony	7440-36-0	25.1		4.23	0.783	1
06935	Arsenic	7440-38-2	19.6		4.23	0.741	1
06946	Barium	7440-39-3	296		1.06	0.0349	1
06947	Beryllium	7440-41-7	5.84		1.06	0.0709	1
07914	Boron	7440-42-8	219		10.6	0.889	1
06949	Cadmium	7440-43-9	5.14		1.06	0.0805	1
01650	Calcium	7440-70-2	107,000		42.3	7.07	2
06951	Chromium	7440-47-3	49.7		3.18	0.169	1
06952	Cobalt	7440-48-4	56.7		1.06	0.105	1
06953	Copper	7440-50-8	43.0		2.12	0.307	1
01654	Iron	7439-89-6	29,800		84.7	7.67	2
06955	Lead	7439-92-1	24.6		3.18	0.529	1
01656	Lithium	7439-93-2	138		4.2	0.36	1
01657	Magnesium	7439-95-4	8,510		10.6	1.77	1
06958	Manganese	7439-96-5	333		1.06	0.0879	1
06960	Molybdenum	7439-98-7	199		2.12	0.180	1
06961	Nickel	7440-02-0	65.0		2.12	0.138	1
10145	Phosphorus	7723-14-0	643		10.6	3.06	1
01662	Potassium	7440-09-7	5,320		106	8.83	1
01667	Sodium	7440-23-5	1,190		106	17.7	1
06969	Tin	7440-31-5	378		10.6	0.233	1
06970	Titanium	7440-32-6	1,560		2.12	0.360	2
06971	Vanadium	7440-62-2	112		1.06	0.138	1
06972	Zinc	7440-66-6	125		4.23	0.212	1
10146	Zirconium	7440-67-7	109		5.29	0.889	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.78		0.423	0.106	2
06142	Silver	7440-22-4	15.4		0.212	0.0275	2
06144	Strontium	7440-24-6	232		2.12	0.360	10
06145	Thallium	7440-28-0	1.03		0.212	0.0318	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.201		0.0171	0.0102	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	7.4		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213413
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13273SLE026	10/02/2013 04:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13273SLE026	10/01/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13274A31A	10/02/2013 00:55	Laura M Krieger	23.76
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326932523	09/26/2013 13:01	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326932523	09/26/2013 13:01	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750029A	10/04/2013 08:30	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750029A	10/03/2013 10:30	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132730031A	10/02/2013 10:40	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132730031A	10/01/2013 08:00	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132740637002	10/05/2013 08:53	Katlin N Cataldi	2
06951	Chromium	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132740637002	10/05/2013 08:53	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132740637002	10/05/2013 08:53	Katlin N Cataldi	2
06971	Vanadium	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132740637002	10/04/2013 06:29	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132740637002B	10/03/2013 08:57	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637002A	10/03/2013 08:57	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637002A	10/03/2013 09:58	Choon Y Tian	10
06145	Thallium	SW-846 6020A	1	132740637002A	10/03/2013 08:57	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638002	10/03/2013 05:30	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213413
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637002	10/02/2013 10:00	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638002	10/02/2013 12:35	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213414
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	30		1.8	0.72	1
12969	Acenaphthylene	208-96-8	32		1.8	0.36	1
12969	Anthracene	120-12-7	31		1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	32		1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	31		1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	32		1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	29		18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	32		1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	31		1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	39		19	6.5	1
12969	Di-n-butylphthalate	84-74-2	35		19	6.5	1
12969	Chrysene	218-01-9	31		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	35		1.8	0.72	1
12969	Diethylphthalate	84-66-2	33		19	6.5	1
12969	Dimethylphthalate	131-11-3	32		19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	36		19	6.5	1
12969	Fluoranthene	206-44-0	32		1.8	0.72	1
12969	Fluorene	86-73-7	31		1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	34		1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	33		1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	33		1.8	0.72	1
12969	Naphthalene	91-20-3	32		1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	37		19	6.5	1
12969	Phenanthrene	85-01-8	30		1.8	0.72	1
12969	Pyrene	129-00-0	31		1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	10		1.1	0.2	24.85
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	160		18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	190		18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213414
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.5	J	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	7.4		5.4	2.1	1
12952	EFH (C21-C30)	n.a.	12		5.4	2.1	1
12952	EFH (C30-C40)	n.a.	15		11	4.3	1
12952	EFH (C8-C11)	n.a.	3.8	J	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,900		43.2	7.79	1
06944	Antimony	7440-36-0	25.9		4.32	0.799	1
06935	Arsenic	7440-38-2	21.8		4.32	0.756	1
06946	Barium	7440-39-3	284		1.08	0.0356	1
06947	Beryllium	7440-41-7	5.72		1.08	0.0724	1
07914	Boron	7440-42-8	226		10.8	0.907	1
06949	Cadmium	7440-43-9	5.31		1.08	0.0821	1
01650	Calcium	7440-70-2	167,000		108	18.0	5
06951	Chromium	7440-47-3	49.9		3.24	0.173	1
06952	Cobalt	7440-48-4	56.5		1.08	0.107	1
06953	Copper	7440-50-8	37.0		2.16	0.313	1
01654	Iron	7439-89-6	20,200		43.2	3.91	1
06955	Lead	7439-92-1	22.5		3.24	0.540	1
01656	Lithium	7439-93-2	134		4.3	0.37	1
01657	Magnesium	7439-95-4	6,780		10.8	1.80	1
06958	Manganese	7439-96-5	421		1.08	0.0896	1
06960	Molybdenum	7439-98-7	208		2.16	0.184	1
06961	Nickel	7440-02-0	61.6		2.16	0.140	1
10145	Phosphorus	7723-14-0	837		10.8	3.12	1
01662	Potassium	7440-09-7	4,660		108	9.01	1
01667	Sodium	7440-23-5	1,250		108	18.0	1
06969	Tin	7440-31-5	393		10.8	0.238	1
06970	Titanium	7440-32-6	1,320		2.16	0.367	2
06971	Vanadium	7440-62-2	107		1.08	0.140	1
06972	Zinc	7440-66-6	107		4.32	0.216	1
10146	Zirconium	7440-67-7	112		5.40	0.907	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.39		0.432	0.108	2
06142	Silver	7440-22-4	11.7		0.216	0.0281	2
06144	Strontium	7440-24-6	288		2.16	0.367	10
06145	Thallium	7440-28-0	0.740		0.216	0.0324	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.192		0.0170	0.0102	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	7.4		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213414
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13273SLE026	10/02/2013 04:52	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13273SLE026	10/01/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13274A31A	10/02/2013 01:31	Laura M Krieger	24.85
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326932523	09/26/2013 13:00	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326932523	09/26/2013 13:01	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750029A	10/04/2013 08:48	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750029A	10/03/2013 10:30	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132730031A	10/02/2013 11:01	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132730031A	10/01/2013 08:00	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132740637002	10/05/2013 09:10	Katlin N Cataldi	5
06951	Chromium	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132740637002	10/05/2013 08:58	Katlin N Cataldi	2
06971	Vanadium	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132740637002	10/04/2013 06:33	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132740637002B	10/03/2013 08:59	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637002A	10/03/2013 08:59	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637002A	10/03/2013 10:01	Choon Y Tian	10
06145	Thallium	SW-846 6020A	1	132740637002A	10/03/2013 08:59	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638002	10/03/2013 06:54	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213414
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637002	10/02/2013 10:00	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638002	10/02/2013 12:35	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213415
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,700		41.9	7.56	1
06944	Antimony	7440-36-0	4.19	U	4.19	0.776	1
06935	Arsenic	7440-38-2	4.03	J	4.19	0.734	1
06946	Barium	7440-39-3	74.3		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.675	J	1.05	0.0702	1
07914	Boron	7440-42-8	11.3		10.5	0.881	1
06949	Cadmium	7440-43-9	0.427	J	1.05	0.0797	1
01650	Calcium	7440-70-2	115,000		105	17.5	5
06951	Chromium	7440-47-3	25.8		3.15	0.168	1
06952	Cobalt	7440-48-4	8.83		1.05	0.104	1
06953	Copper	7440-50-8	14.9		2.10	0.304	1
01654	Iron	7439-89-6	28,100		83.9	7.59	2
06955	Lead	7439-92-1	10.1		3.15	0.524	1
01656	Lithium	7439-93-2	26.9		4.2	0.36	1
01657	Magnesium	7439-95-4	7,150		10.5	1.75	1
06958	Manganese	7439-96-5	297		1.05	0.0870	1
06960	Molybdenum	7439-98-7	2.10	U	2.10	0.178	1
06961	Nickel	7440-02-0	16.3		2.10	0.136	1
10145	Phosphorus	7723-14-0	520		10.5	3.03	1
01662	Potassium	7440-09-7	3,390		105	8.74	1
01667	Sodium	7440-23-5	150		105	17.5	1
06969	Tin	7440-31-5	2.52	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,050		2.10	0.356	2
06971	Vanadium	7440-62-2	48.7		1.05	0.136	1
06972	Zinc	7440-66-6	71.0		4.19	0.210	1
10146	Zirconium	7440-67-7	7.48		5.24	0.881	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.361	J	0.419	0.105	2
06142	Silver	7440-22-4	0.0504	J	0.210	0.0273	2
06144	Strontium	7440-24-6	218		2.10	0.356	10
06145	Thallium	7440-28-0	0.395		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0112	J	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.31		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	7.4		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	7.6		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213415
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 12:45

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56345 SDG#: PH114-10DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132740637002	10/05/2013 09:02	Katlin N Cataldi	5
06951	Chromium	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132740637002	10/05/2013 08:49	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132740637002	10/05/2013 08:49	Katlin N Cataldi	2
06971	Vanadium	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132740637002	10/04/2013 06:25	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132740637002B	10/03/2013 08:55	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637002A	10/03/2013 08:55	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637002A	10/03/2013 09:56	Choon Y Tian	10
06145	Thallium	SW-846 6020A	1	132740637002A	10/03/2013 08:55	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638002	10/03/2013 05:28	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637002	10/02/2013 10:00	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638002	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13269039403A	09/26/2013 21:30	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213416
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86345 SDG#: PH114-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.99
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213416
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86345 SDG#: PH114-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.0	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	8.5	J	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,800		42.4	7.63	1
06944	Antimony	7440-36-0	4.24	U	4.24	0.784	1
06935	Arsenic	7440-38-2	4.49		4.24	0.741	1
06946	Barium	7440-39-3	67.1		1.06	0.0349	1
06947	Beryllium	7440-41-7	0.560	J	1.06	0.0709	1
07914	Boron	7440-42-8	8.83	J	10.6	0.890	1
06949	Cadmium	7440-43-9	0.402	J	1.06	0.0805	1
01650	Calcium	7440-70-2	127,000		106	17.7	5
06951	Chromium	7440-47-3	23.0		3.18	0.169	1
06952	Cobalt	7440-48-4	7.40		1.06	0.105	1
06953	Copper	7440-50-8	12.6		2.12	0.307	1
01654	Iron	7439-89-6	25,000		42.4	3.83	1
06955	Lead	7439-92-1	8.55		3.18	0.529	1
01656	Lithium	7439-93-2	24.0		4.2	0.36	1
01657	Magnesium	7439-95-4	6,440		10.6	1.77	1
06958	Manganese	7439-96-5	296		1.06	0.0879	1
06960	Molybdenum	7439-98-7	2.12	U	2.12	0.180	1
06961	Nickel	7440-02-0	14.5		2.12	0.138	1
10145	Phosphorus	7723-14-0	505		10.6	3.06	1
01662	Potassium	7440-09-7	2,860		106	8.83	1
01667	Sodium	7440-23-5	144		106	17.7	1
06969	Tin	7440-31-5	2.35	J	10.6	0.233	1
06970	Titanium	7440-32-6	734		1.06	0.180	1
06971	Vanadium	7440-62-2	40.1		1.06	0.138	1
06972	Zinc	7440-66-6	63.0		4.24	0.212	1
10146	Zirconium	7440-67-7	6.31		5.29	0.890	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.207	J	0.424	0.106	2
06142	Silver	7440-22-4	0.0392	J	0.212	0.0275	2
06144	Strontium	7440-24-6	235		2.12	0.360	10
06145	Thallium	7440-28-0	0.332		0.212	0.0318	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0126	J	0.0176	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.35		0.0100	0.0100	1

The pH was measured in water at 21.8 C.

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213416
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86345 SDG#: PH114-11*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	6.5	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13273SLE026	10/02/2013 08:11	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13273SLE026	10/01/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13274A31A	10/01/2013 20:06	Laura M Krieger	23.99
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201326932523	09/26/2013 12:59	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201326932523	09/26/2013 12:59	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750029A	10/04/2013 09:06	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750029A	10/03/2013 10:30	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132730031A	10/02/2013 13:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132730031A	10/01/2013 08:00	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132740637002	10/05/2013 09:41	Katlin N Cataldi	5
06951	Chromium	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7213416
LL Group # 1421713
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/25/2013 13:00

Submitted: 09/26/2013 09:05
Reported: 10/09/2013 15:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86345 SDG#: PH114-11*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132740637002	10/04/2013 07:03	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132740637002B	10/03/2013 09:21	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637002A	10/03/2013 09:21	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637002A	10/03/2013 09:49	Choon Y Tian	10
06145	Thallium	SW-846 6020A	1	132740637002A	10/03/2013 09:21	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638002	10/03/2013 05:34	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637002	10/02/2013 10:00	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638002	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13269039403A	09/26/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13275162401B	10/02/2013 22:11	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13273SLE026	Sample number(s): 7213406,7213409-7213414,7213416									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	99		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	105		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	97		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	100		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	98		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	103		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	109		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	109		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	100		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	105		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	103		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	101		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	108		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	105		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	111		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	114		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	97		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	103		79-112		
Batch number: 13274WAK026	Sample number(s): 7213403									
Acenaphthene	0.050	U	0.050	0.010	ug/l	103	100	77-118	2	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	102	101	80-123	1	30
Anthracene	0.050	U	0.050	0.010	ug/l	105	103	78-123	2	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	107	106	73-127	1	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	106	105	72-120	1	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	136	133	79-136	2	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	110	109	70-130	1	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	119	118	64-130	1	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	115	115	73-131	0	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	114	115	40-138	0	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	92	91	64-141	1	30
Chrysene	0.050	U	0.050	0.010	ug/l	109	109	76-125	0	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	120	119	58-131	1	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	100	100	64-128	1	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	85	86	23-139	1	30

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	1.0	U	1.0	0.050	ug/l	185*	73	70-143	87*	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	107	107	79-124	0	30
Fluorene	0.050	U	0.050	0.010	ug/l	102	101	74-115	2	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	119	119	62-130	0	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	110	107	80-126	3	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	108	104	81-124	4	30
Naphthalene	0.050	U	0.050	0.030	ug/l	102	99	75-120	2	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	72	67	36-120	8	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	121	110	57-145	9	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	103	102	75-120	1	30
Pyrene	0.050	U	0.050	0.010	ug/l	115	115	71-130	0	30
Batch number: 13276SLA026	Sample number(s): 7213407									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	94		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	97		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	112		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	109		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	97		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	106		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	104		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	98		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	102		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	106		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	119		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		79-112		
Batch number: 13269B94A	Sample number(s): 7213403,7213405									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	106	102	75-135	4	30
Batch number: 13274A31A	Sample number(s): 7213410,7213412-7213414,7213416									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	91		67-119		
Batch number: 132740011A	Sample number(s): 7213403									
2,4-D	0.50	U	0.50	0.16	ug/l	122	123	68-155	2	30
Dalapon	1.3	U	1.3	0.25	ug/l	59	76	25-119	25	30
2,4-DB	1.0	U	1.0	0.30	ug/l	121	120	50-163	1	30
Dicamba	0.30	U	0.30	0.080	ug/l	108	111	64-163	3	30
Dinoseb	0.50	U	0.50	0.12	ug/l	159	153	16-163	4	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	134	133	89-162	1	30
MCPA	200	U	200.	50	ug/l	98	101	68-154	2	30
MCPP	200		200.	50	ug/l	108	110	46-173	2	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	0.050	U	0.050	0.015	ug/l	122	119	71-174	2	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	123	122	58-155	1	30
Batch number: 132750001A	Sample number(s): 7213403									
6b Perchlorate (Method 6850)	1.0	U	1.0	0.20	ug/l	91		85-115		
Batch number: 132730002A	Sample number(s): 7213407-7213408									
Aldrin	0.83	U	0.83	0.17	ug/kg	93		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	100		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	93		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	92		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	95		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	95		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	97		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	93		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	99		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	84		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	95		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	105		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	94		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	99		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	99		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	91		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	94		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	93		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132730010A	Sample number(s): 7213403									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	77	77	45-125	0	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	97	94	51-139	3	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	87	85	57-127	2	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	89	86	57-133	3	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	88	86	55-145	3	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	88	85	58-130	2	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	87	88	45-140	0	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	89	88	52-133	2	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	90	89	60-135	1	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	82	80	56-128	2	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	90	88	53-123	3	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	97	95	51-130	2	30
Endrin	0.016	U	0.016	0.0065	ug/l	24*	80	43-139	107*	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	109	92	50-122	17	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	136*	92	51-133	38*	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	82	81	48-130	2	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	87	87	65-128	0	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	87	86	40-150	2	30
Mirex	0.040	U	0.040	0.0080	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132730011A	Sample number(s): 7213403									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	69	83	35-84	19	30

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	89	89	67-117	0	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	110	111	67-128	0	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132750029A	Sample number(s): 7213406,7213409-7213414,7213416									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	86	80	62-87	7	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	97		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	118		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132730022A	Sample number(s): 7213403									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	90	85	70-130	6	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	97	92	70-130	6	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	94	88	70-130	6	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	67*	69*	70-130	3	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	64*	61*	70-130	6	30
Batch number: 132730031A	Sample number(s): 7213406,7213409-7213414,7213416									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	94		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	99		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	95		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	76		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	78		49-107		
Batch number: 132700635002	Sample number(s): 7213403									
Aluminum	0.400	U	0.400	0.0828	mg/l	104	104	80-120	0	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	104	102	80-120	2	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	103	102	80-120	1	20
Barium	0.0100	U	0.0100	0.00033	mg/l	101	100	80-120	1	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	97	96	80-120	1	20
Boron	0.100	U	0.100	0.0084	mg/l	96	94	80-120	2	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	105	103	80-120	2	20
Calcium	0.0618	J	0.400	0.0334	mg/l	103	101	80-120	2	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	102	101	80-120	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	105	104	80-120	1	20
Copper	0.0200	U	0.0200	0.0027	mg/l	102	102	80-120	1	20
Iron	0.400	U	0.400	0.0430	mg/l	101	99	80-120	2	20
Lead	0.0300	U	0.0300	0.0047	mg/l	109	107	80-120	2	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	105	103	80-120	2	20
Magnesium	0.200	U	0.200	0.0167	mg/l	102	100	80-120	2	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	102	101	80-120	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Molybdenum	0.0200 U	0.0200	0.0017	mg/l	103	102	80-120	1	20
Nickel	0.0200 U	0.0200	0.0015	mg/l	106	105	80-120	1	20
Phosphorus	0.200 U	0.200	0.0418	mg/l	103	102	80-120	1	20
Potassium	1.00 U	1.00	0.0980	mg/l	103	101	80-120	2	20
Sodium	2.00 U	2.00	0.167	mg/l	102	100	80-120	2	20
Tin	0.0400 U	0.0400	0.0029	mg/l	101	100	80-120	1	20
Titanium	0.0200 U	0.0200	0.0017	mg/l	104	102	80-120	2	20
Vanadium	0.0100 U	0.0100	0.0020	mg/l	103	102	80-120	1	20
Zinc	0.0400 U	0.0400	0.0020	mg/l	102	101	80-120	1	20
Zirconium	0.100 U	0.100	0.0084	mg/l	105	103	80-120	2	20
Batch number: 132700639001A	Sample number(s): 7213403								
Silver	0.0010 U	0.0010	0.00011	mg/l	103	101	90-115	2	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	103	102	80-120	1	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	100	102	80-120	2	20
Batch number: 132700639001B	Sample number(s): 7213403								
Selenium	0.0040 U	0.0040	0.00050	mg/l	105	102	80-120	3	20
Batch number: 132735713006	Sample number(s): 7213403								
3b Mercury 7470A	0.00020 U	0.00020	0.00006 0	mg/l	94	95	90-115	1	20
Batch number: 132740637002	Sample number(s): 7213406,7213409-7213416								
Aluminum	40.0 U	40.0	7.21	mg/kg	98		80-120		
Antimony	4.00 U	4.00	0.740	mg/kg	103		80-120		
Arsenic	4.00 U	4.00	0.700	mg/kg	94		80-120		
Barium	1.00 U	1.00	0.0330	mg/kg	95		80-120		
Beryllium	1.00 U	1.00	0.0670	mg/kg	96		80-120		
Boron	10.0 U	10.0	0.840	mg/kg	94		80-120		
Cadmium	1.00 U	1.00	0.0760	mg/kg	95		80-120		
Calcium	8.09 J	20.0	3.34	mg/kg	100		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	97		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	97		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	96		80-120		
Iron	40.0 U	40.0	3.62	mg/kg	97		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	91		80-120		
Lithium	0.37 J	4.0	0.34	mg/kg	99		80-120		
Magnesium	10.0 U	10.0	1.67	mg/kg	98		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	97		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	99		80-120		
Nickel	2.00 U	2.00	0.130	mg/kg	98		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	100		80-120		
Potassium	100 U	100.	8.34	mg/kg	98		80-120		
Sodium	100 U	100.	16.7	mg/kg	98		80-120		
Tin	1.38 J	10.0	0.220	mg/kg	98		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	99		80-120		
Vanadium	1.00 U	1.00	0.130	mg/kg	99		80-120		
Zinc	0.535 J	4.00	0.200	mg/kg	98		80-120		
Zirconium	5.00 U	5.00	0.840	mg/kg	100		80-120		
Batch number: 132740637002A	Sample number(s): 7213406,7213409-7213416								
Silver	0.200 U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400 U	0.400	0.0680	mg/kg	105		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Thallium	0.200	U	0.200	0.0300	mg/kg	101		80-120		
Batch number: 132740637002B	Sample number(s): 7213406,7213409-7213416									
Selenium	0.400	U	0.400	0.100	mg/kg	100		80-120		
Batch number: 132740638002	Sample number(s): 7213406,7213409-7213416									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	111		85-120		
Batch number: 13274347601C	Sample number(s): 7213403									
1b Anions by 300.0 - Fluoride	0.10	U	0.10	0.080	mg/l	102	101	90-110	1	20
Batch number: 13269039403A	Sample number(s): 7213406,7213409-7213412,7213415-7213416									
15a pH by 9045D						99		95-105		
Batch number: 13270003102A	Sample number(s): 7213403									
28b pH (9040B and 9040C)						99		99-103		
Batch number: 13275162401B	Sample number(s): 7213406-7213416									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13273002	Sample number(s): 7213406,7213409,7213411									
2378-TCDD	1.00	U	1.00	0.0390	ng/kg	100		67-158		
12378-PeCDD	0.0738	J	5.00	0.0254	ng/kg	102		70-142		
123478-HxCDD	0.0334	J	5.00	0.0169	ng/kg	101		70-164		
123678-HxCDD	0.0256	J	5.00	0.0182	ng/kg	101		76-134		
123789-HxCDD	0.0369	J	5.00	0.0172	ng/kg	99		64-162		
1234678-HpCDD	0.0965	J	5.00	0.0155	ng/kg	98		70-140		
OCDD	0.249	J	10.0	0.0199	ng/kg	97		78-144		
2378-TCDF	1.00	U	1.00	0.0244	ng/kg	103		75-158		
12378-PeCDF	0.0876	J	5.00	0.0133	ng/kg	99		80-134		
23478-PeCDF	0.0646	J	5.00	0.0127	ng/kg	101		68-160		
123478-HxCDF	0.0515	J	5.00	0.0108	ng/kg	100		72-134		
123678-HxCDF	0.0453	J	5.00	0.0101	ng/kg	102		84-130		
123789-HxCDF	0.0754	J	5.00	0.0107	ng/kg	102		78-130		
234678-HxCDF	0.0332	J	5.00	0.0106	ng/kg	101		70-156		
1234678-HpCDF	0.0595	J	5.00	0.00690	ng/kg	99		82-122		
1234789-HpCDF	0.0657	J	5.00	0.00960	ng/kg	101		78-138		
OCDF	0.137	J	10.0	0.0215	ng/kg	100		63-170		
Batch number: 13276002	Sample number(s): 7213403									
2378-TCDD	0.346	J	2.00	0.273	pg/l	98		60-150		
12378-PeCDD	0.345	J	10.0	0.163	pg/l	101		60-150		
123478-HxCDD	0.207	J	10.0	0.125	pg/l	98		60-150		
123678-HxCDD	0.126	J	10.0	0.126	pg/l	101		60-150		
123789-HxCDD	0.369	J	10.0	0.109	pg/l	99		60-150		
1234678-HpCDD	0.518	J	10.0	0.114	pg/l	98		60-150		
OCDD	2.28	J	20.0	0.138	pg/l	96		60-150		
2378-TCDF	2.00	U	2.00	0.148	pg/l	98		60-150		
12378-PeCDF	0.494	J	10.0	0.0867	pg/l	100		60-150		
23478-PeCDF	0.155	J	10.0	0.0784	pg/l	100		60-150		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123478-HxCDF	0.225	J	10.0	0.0574	pg/l	100		60-150		
123678-HxCDF	0.268	J	10.0	0.0566	pg/l	101		60-150		
123789-HxCDF	0.383	J	10.0	0.0504	pg/l	101		60-150		
234678-HxCDF	0.369	J	10.0	0.0536	pg/l	101		60-150		
1234678-HpCDF	0.528	J	10.0	0.0451	pg/l	99		60-150		
1234789-HpCDF	0.306	J	10.0	0.0521	pg/l	100		60-150		
OCDF	0.989	J	20.0	0.138	pg/l	99		60-150		
Batch number: 13273002	Sample number(s): 7213406,7213409,7213411									
TEQ WHO 2005 - EDLx0.0	0.00400				ng/kg					
Batch number: 13276002	Sample number(s): 7213403									
TEQ WHO 2005 - EDLx0.0	0.00310				pg/l					

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13273SLE026	Sample number(s): 7213406,7213409-7213414,7213416 UNSPK: 7213412								
Acenaphthene	85	84	48-127	1	30				
Acenaphthylene	90	90	49-121	0	30				
Anthracene	84	88	52-126	4	30				
Benzo(a)anthracene	84	90	44-143	6	30				
Benzo(a)pyrene	81	86	44-140	6	30				
Benzo(b)fluoranthene	86	89	26-142	4	30				
Benzo(e)pyrene	76	80	70-130	5	30				
Benzo(g,h,i)perylene	84	90	33-141	7	30				
Benzo(k)fluoranthene	81	86	54-142	7	30				
Butylbenzylphthalate	97	107	49-151	10	30				
Di-n-butylphthalate	94	97	52-147	3	30				
Chrysene	83	87	29-148	5	30				
Dibenz(a,h)anthracene	90	97	20-137	7	30				
Diethylphthalate	91	91	43-145	0	30				
Dimethylphthalate	80	89	58-129	11	30				
Bis(2-Ethylhexyl)phthalate	94	100	39-167	7	30				
Fluoranthene	84	88	40-148	5	30				
Fluorene	85	86	51-137	1	30				
Indeno(1,2,3-cd)pyrene	88	95	17-136	8	30				
1-Methylnaphthalene	78	77	50-131	1	30				
2-Methylnaphthalene	57	57	35-152	0	30				
Naphthalene	68	67	31-148	1	30				
N-Nitrosodimethylamine	93	93	48-113	1	30				
Di-n-octylphthalate	97	102	52-162	5	30				
Phenanthrene	83	85	29-142	2	30				
Pyrene	86	87	26-143	1	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13276SLA026	Sample number(s): 7213407 UNSPK: P218895								
Acenaphthene	96	100	48-127	4	30				
Acenaphthylene	102	105	49-121	3	30				
Anthracene	90	93	52-126	4	30				
Benzo(a)anthracene	100	101	44-143	2	30				
Benzo(a)pyrene	96	98	44-140	3	30				
Benzo(b)fluoranthene	99	99	26-142	0	30				
Benzo(e)pyrene	90	91	70-130	2	30				
Benzo(g,h,i)perylene	98	100	33-141	2	30				
Benzo(k)fluoranthene	98	102	54-142	5	30				
Butylbenzylphthalate	116	115	49-151	0	30				
Di-n-butylphthalate	103	106	52-147	3	30				
Chrysene	97	97	29-148	1	30				
Dibenz(a,h)anthracene	100	102	20-137	3	30				
Diethylphthalate	104	107	43-145	3	30				
Dimethylphthalate	100	104	58-129	4	30				
Bis(2-Ethylhexyl)phthalate	111	108	39-167	3	30				
Fluoranthene	94	97	40-148	3	30				
Fluorene	95	100	51-137	6	30				
Indeno(1,2,3-cd)pyrene	100	102	17-136	3	30				
1-Methylnaphthalene	99	102	50-131	3	30				
2-Methylnaphthalene	94	97	35-152	3	30				
Naphthalene	103	103	31-148	0	30				
N-Nitrosodimethylamine	108	106	48-113	1	30				
Di-n-octylphthalate	121	118	52-162	2	30				
Phenanthrene	98	102	29-142	5	30				
Pyrene	98	99	26-143	2	30				
Batch number: 13274A31A	Sample number(s): 7213410,7213412-7213414,7213416 UNSPK: 7213412								
11a TPH by EPA 8015B GRO	92	86	69-123	2	30				
Batch number: 132750001A	Sample number(s): 7213403 UNSPK: 7213403								
6b Perchlorate (Method 6850)	82	94	80-120	15	20				
Batch number: 132730002A	Sample number(s): 7213407-7213408 UNSPK: P208982								
Aldrin	81	73	16-126	10	50				
Alpha BHC	73	65	14-140	12	50				
Beta BHC	76	70	42-133	7	50				
Gamma BHC - Lindane	72	60	30-137	18	50				
p,p-DDD	76	69	43-149	10	50				
p,p-DDE	81	72	35-152	12	50				
p,p-DDT	82	73	12-193	11	50				
Delta BHC	67	41	13-153	47	50				
Dieldrin	81	74	41-153	9	50				
Endosulfan I	61	50	26-146	21	50				
Endosulfan II	66	53	34-141	22	50				
Endosulfan Sulfate	75	66	10-181	13	50				
Endrin	75	68	30-152	11	50				
Endrin Aldehyde	70	65	23-138	8	50				
Endrin Ketone	73	65	30-148	12	50				
Heptachlor	79	72	16-152	9	50				
Heptachlor Epoxide	81	73	33-144	9	50				

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Quality Control Summary

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Reported: 10/09/13 at 03:04 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Methoxychlor	78	70	41-161	11	50				
Batch number: 132750029A	Sample number(s): 7213406,7213409-7213414,7213416 UNSPK: 7213412								
PCB-1016	83	89	41-135	7	50				
PCB-1260	94	107	40-134	13	50				
Batch number: 132730031A	Sample number(s): 7213406,7213409-7213414,7213416 UNSPK: 7213412								
EFH (C12-C14)	90	84	49-123	8	20				
EFH (C15-C20)	98	92	49-123	7	20				
EFH (C21-C30)	91	87	49-123	6	20				
EFH (C30-C40)	90	93	49-123	3	20				
EFH (C8-C11)	73	71	49-123	2	20				
Batch number: 132740637002	Sample number(s): 7213406,7213409-7213416 UNSPK: 7213412 BKG: 7213412								
Aluminum	4770 (2)	2132 (2)	75-125	21*	20	17,900	19,100	7	20
Antimony	47*	48*	75-125	3	20	3.88 U	3.88 U	0 (1)	20
Arsenic	96	108	75-125	11	20	4.06	3.73 J	8 (1)	20
Barium	104	97	75-125	4	20	69.5	68.8	1	20
Beryllium	98	94	75-125	2	20	0.607 J	0.625 J	3 (1)	20
Boron	98	100	75-125	3	20	9.71	10.5	8 (1)	20
Cadmium	89	90	75-125	3	20	0.407 J	0.395 J	3 (1)	20
Calcium	-1269 (2)	12670 (2)	75-125	44*	20	104,000	106,000	2	20
Chromium	118	117	75-125	1	20	22.9	23.9	5	20
Cobalt	88	86	75-125	0	20	9.25	8.18	12	20
Copper	107	83	75-125	15	20	13.6	13.8	2	20
Iron	2744 (2)	-6195 (2)	75-125	38*	20	24,900	26,100	5	20
Lead	92	77	75-125	9	20	9.26	9.32	1 (1)	20
Lithium	105	100	75-125	3	20	24.3	24.9	3	20
Magnesium	726 (2)	-89 (2)	75-125	23*	20	6,460	6,620	2	20
Manganese	56 (2)	219 (2)	75-125	24*	20	280	275	2	20
Molybdenum	94	96	75-125	4	20	1.94 U	1.94 U	0 (1)	20
Nickel	93	85	75-125	5	20	14.7	15.1	2	20
Phosphorus	115 (2)	293 (2)	75-125	26*	20	483	482	0	20
Potassium	192*	128*	75-125	13	20	3,040	3,140	3	20
Sodium	99	102	75-125	5	20	136	139	2 (1)	20
Tin	89	90	75-125	4	20	2.22 J	2.33 J	5 (1)	20
Titanium	652 (2)	412 (2)	75-125	17	20	809	970	18	20
Vanadium	127*	115	75-125	4	20	41.7	45.1	8	20
Zinc	103	69*	75-125	15	20	65.1	65.8	1	20
Zirconium	96	97	75-125	2	20	6.60	6.93	5 (1)	20
Batch number: 132740637002A	Sample number(s): 7213406,7213409-7213416 UNSPK: 7213412 BKG: 7213412								
Silver	145*	108	75-125	27*	20	0.0350 J	0.0466 J	28* (1)	20
Strontium	318 (2)	950 (2)	75-125	21*	20	190	202	6	20
Thallium	174*	104	75-125	33*	20	0.268	0.366	31* (1)	20
Batch number: 132740637002B	Sample number(s): 7213406,7213409-7213416 UNSPK: 7213412 BKG: 7213412								
Selenium	120	100	75-125	15	20	0.221 J	0.334 J	41* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132740638002	Sample number(s): 7213406,7213409-7213416 UNSPK: 7213412 BKG: 7213412								
3a Mercury 7471A	110	105	65-135	4	20	0.0120 J	0.0104 J	14 (1)	20
Batch number: 13269039403A	Sample number(s): 7213406,7213409-7213412,7213415-7213416 BKG: 7213412								
15a pH by 9045D						8.29	8.31	0	3
Batch number: 13270003102A	Sample number(s): 7213403 BKG: P214407								
28b pH (9040B and 9040C)						7.1	7.1	1	3
Batch number: 13275162401B	Sample number(s): 7213406-7213416 BKG: 7213412								
14a Moisture Content by 160.3						7.4	7.6	1	20
14a Moisture Content by 160.3						7.4	7.6	1	20
14a Moisture Content by 160.3						7.4	7.6	1	20
Batch number: 13273002	Sample number(s): 7213406,7213409,7213411 UNSPK: P211497								
2378-TCDD	97	102	40-135	4	20				
12378-PeCDD	102	103	40-135	0	20				
123478-HxCDD	99	100	40-135	1	20				
123678-HxCDD	104	102	40-135	3	20				
123789-HxCDD	97	100	40-135	2	20				
1234678-HpCDD	99	100	40-135	0	20				
OCDD	97	100	40-135	2	20				
2378-TCDF	103	105	40-135	0	20				
12378-PeCDF	101	100	40-135	2	20				
23478-PeCDF	100	103	40-135	2	20				
123478-HxCDF	100	103	40-135	2	20				
123678-HxCDF	103	104	40-135	1	20				
123789-HxCDF	101	104	40-135	1	20				
234678-HxCDF	101	102	40-135	0	20				
1234678-HpCDF	99	101	40-135	1	20				
1234789-HpCDF	102	102	40-135	1	20				
OCDF	100	103	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13273SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7213406	84	90	100
7213409	81	86	97
7213410	88	92	104
7213411	63	69	74
7213412	89	94	106
7213413	78	83	97

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Surrogate Quality Control

7213414	82	86	95
7213416	91	97	106
Blank	89	96	108
LCS	92	100	110
MS	78	83	97
MSD	82	86	95
Limits:	54-129	59-125	61-125

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13274WAK026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7213403	89	96	95
Blank	93	98	102
LCS	97	108	105
LCSD	97	106	102
Limits:	44-137	62-141	51-136

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13276SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7213407	81	85	97
Blank	89	96	100
LCS	92	99	105
MS	85	94	100
MSD	87	96	100
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13269B94A

	Trifluorotoluene-F
7213403	73
7213405	73
Blank	72
LCS	78
LCSD	77
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13274A31A

	Trifluorotoluene-F
7213410	80
7213412	86
7213413	70
7213414	77
7213416	76
Blank	92

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Surrogate Quality Control

LCS	95	
MS	70	
MSD	77	
Limits:	50-142	

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132730002A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7213407	83	92
7213408	84	90
Blank	94	109
LCS	95	108
MS	84	84
MSD	76	74
Limits:	50-130	20-120

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132730010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7213403	85	71
Blank	95	106
LCS	91	96
LCSD	88	97
Limits:	60-140	20-120

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132730011A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7213403	95	73
Blank	96	112
LCS	105	106
LCSD	106	101
Limits:	45-120	45-120

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 132740011A

	2,4-Dichlorophenylacetic acid
7213403	82
Blank	91
LCS	105
LCSD	105
Limits:	50-150

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132750029A

	Tetrachloro-m-xylene	Decachlorobiphenyl

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Surrogate Quality Control

7213406	99	106
7213409	99	103
7213410	105	111
7213411	101	111
7213412	106	114
7213413	100	105
7213414	106	113
7213416	95	103
Blank	117	117
LCS	117	122*
LCSD	109	120
MS	100	105
MSD	106	113
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132730022A

	Chlorobenzene	Orthoterphenyl
7213403	126	88
Blank	122	81
LCS	121	95
LCSD	112	85
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132730031A

	Chlorobenzene	Orthoterphenyl
7213406	105	71
7213409	107	89
7213410	103	89
7213411	111	88
7213412	105	88
7213413	104	84
7213414	100	81
7213416	102	87
Blank	112	90
LCS	109	88
MS	104	84
MSD	100	81
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13273002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7213406	67	65	66	72	67	67
7213409	72	70	70	75	73	75
7213411	70	71	72	76	74	75
Blank	69	71	70	73	71	74
MS	67	68	69	75	71	68

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

Surrogate Quality Control

MSD	69	69	69	76	70	71
OPR	65	69	68	75	72	68
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7213406	83	64	60	69	72	73
7213409	85	71	68	71	77	76
7213411	90	71	69	76	80	78
Blank	89	73	73	74	77	77
MS	90	68	66	72	77	76
MSD	94	67	64	73	79	76
OPR	93	70	68	75	80	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7213406	72	75	72	64	70	
7213409	76	78	76	68	73	
7213411	79	82	83	66	73	
Blank	77	81	85	65	72	
MS	77	79	80	63	72	
MSD	76	81	80	64	74	
OPR	81	84	83	59	73	
Limits:	28-130	23-140	17-157	24-169	24-185	

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13276002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7213403	69	71	76	75	76	82
Blank	79	92	94	93	95	109
OPR	73	82	79	79	79	85
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7213403	78	79	83	69	77	77
Blank	104	103	100	87	91	97
OPR	81	80	77	80	80	79
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7213403	78	79	84	71	69	
Blank	104	102	99	85	89	
OPR	80	81	78	75	79	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1421713
Reported: 10/09/13 at 03:04 PM

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1421713 7213403-16

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/25/2013
CarrierName: FedEx
AirbillNo: 796770904674

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130925-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	1,4 Dioxane 8260 SIM	VOCs 8260	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Fowler

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	9/25/2013	1600									
									[illegible]	9-26-13	0903

13013 1421713 7213403-16

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/25/2013
CarrierName: FedEx
AirbillNo: 796770904674

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130925-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-092513	9/25/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-569-SA5D-SB-0.0-0.5	9/25/13 10:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-569-SA5D-SB-0.0-0.5	9/25/13 10:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-573-SA5D-SB-0.0-0.5	9/25/13 07:45	SO	None	1 - SS-Sleeve	10 day							X									X															
SL-573-SA5D-SB-4.0-5.0	9/25/13 08:00	SO	None	1 - SS-Sleeve	10 day																X															
SL-562-SA5D-SB-0.0-0.5	9/25/13 13:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-562-SA5D-SB-0.0-0.5	9/25/13 13:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-562-SA5D-SB-4.0-5.0	9/25/13 13:50	SO	None	2 - SS-Sleeve	10 day	X	X					X			X											X										
SL-562-SA5D-SB-4.0-5.0	9/25/13 13:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-562-SA5D-SB-4.0-5.0	9/25/13 13:50	SO	None	2 - Encore	10 day																			X												
SL-563-SA5D-SB-0.0-0.5	9/25/13 12:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-563-SA5D-SB-0.0-0.5	9/25/13 12:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-563-SA5D-SB-4.0-5.0MS	9/25/13 12:45	SO	None	6 - SS-Sleeve	10 day	X	X					X			X											X										MS/MSD
SL-563-SA5D-SB-4.0-5.0MS	9/25/13 12:45	SO	None	1 - 8 oz glass	10 day													X																		MS/MSD
SL-563-SA5D-SB-4.0-5.0MS	9/25/13 12:45	SO	None	6 - Encore	10 day																			X												MS/MSD
SL-863-SA5D-SB-4.0-5.0MS	9/25/13 13:00	SO	None	2 - SS-Sleeve	10 day	X	X					X			X											X										
SL-863-SA5D-SB-4.0-5.0	9/25/13 13:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-863-SA5D-SB-4.0-5.0	9/25/13 13:00	SO	None	2 - Encore	10 day																			X												

NDM 10/16/13 – "MS" was removed per SM.

13013 1421713 7213403-16

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/25/2013
CarrierName: FedEx
AirbillNo: 796770904674

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130925-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-092513	9/25/13 15:00	WQ	None	3 - 250 mL Amber	10 day							X			X							X														
EB1-092513	9/25/13 15:00	WQ	None	3 - 250 mL Poly	10 day				X										X																	
EB1-092513	9/25/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
EB1-092513	9/25/13 15:00	WQ	None	1 - 40 mL Vial	10 day												X																			
EB1-092513	9/25/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												

Special Instructions:

Sampler: Pat Hart

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Murphy	09/25/2013	1600									
										9-26-13	0905

COC Rev 2

COC 20130925-02, Page 1 of 1

13013 1421713 7213403-16

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/25/2013
CarrierName: FedEx
AirbillNo: 796770904674

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130925-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-092513	9/25/13 15:00	WQ	None	4 - 1 L Amber	10 day									X							X															
EB1-092513	9/25/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																					X										

Special Instructions:

Sampler: Pam Hart

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shay Myers	09/25/2013	1600									
										9-26-13	0905

Subarea 5D

eurofins | Lancaster Laboratories

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 9-26-13

Time of Receipt: 0905

Source Code: 5.

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	2.3	TB	WI	Y	B	
2	↓	1.3	↓	↓	↓	↓	
3	↓	1.4	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 5200 **Date/Time:** 9-26-13 1115

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH116

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 08, 2013

Project: SSFL Phase 3 Sampling

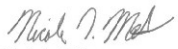
Submittal Date: 09/27/2013
Group Number: 1422079
SDG: PH116
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB1-092613 Water	7215510
SL-512-SA5D-SB-0.0-0.5 Soil	7215511
SL-512-SA5D-SB-4.0-5.0 Soil	7215512

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,



Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB1-092613 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7215510
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 08:00

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512TB SDG#: PH116-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13275A20A	10/04/2013 13:15	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13275A20A	10/04/2013 13:15	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7215511
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 07:35 by VC

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512-0 SDG#: PH116-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	0.76	J	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.2	J	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.99	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.2	J	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	0.76	J	1.8	0.70	1
12969	Naphthalene	91-20-3	0.84	J	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.2	J	1.8	0.70	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.88	U	0.88	0.18	1
10590	Alpha BHC	319-84-6	0.88	U	0.88	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.88	U	0.88	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.88	U	0.88	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.88	U	0.88	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.88	U	0.88	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.88	U	0.88	0.18	1
10590	Methoxychlor	72-43-5	7.1	U	7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7215511
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 07:35 by VC

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512-0 SDG#: PH116-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,600		41.1	7.42	1
06944	Antimony	7440-36-0	4.11	U	4.11	0.761	1
06935	Arsenic	7440-38-2	5.15		4.11	0.720	1
06946	Barium	7440-39-3	130		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.948	J	1.03	0.0689	1
07914	Boron	7440-42-8	5.74	J	10.3	0.864	1
06949	Cadmium	7440-43-9	0.347	J	1.03	0.0782	1
01650	Calcium	7440-70-2	9,970		20.6	3.44	1
06951	Chromium	7440-47-3	34.8		3.09	0.165	1
06952	Cobalt	7440-48-4	10.5		1.03	0.102	1
06953	Copper	7440-50-8	21.0		2.06	0.298	1
01654	Iron	7439-89-6	35,600		82.3	7.45	2
06955	Lead	7439-92-1	11.1		3.09	0.514	1
01656	Lithium	7439-93-2	23.0		4.1	0.35	1
01657	Magnesium	7439-95-4	6,990		10.3	1.72	1
06958	Manganese	7439-96-5	457		1.03	0.0854	1
06960	Molybdenum	7439-98-7	2.06	U	2.06	0.175	1
06961	Nickel	7440-02-0	20.5		2.06	0.134	1
10145	Phosphorus	7723-14-0	381		10.3	2.97	1
01662	Potassium	7440-09-7	5,490		103	8.58	1
01667	Sodium	7440-23-5	117		103	17.2	1
06969	Tin	7440-31-5	2.97	J	10.3	0.226	1
06970	Titanium	7440-32-6	857		1.03	0.175	1
06971	Vanadium	7440-62-2	59.8		1.03	0.134	1
06972	Zinc	7440-66-6	76.5		4.11	0.206	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7215511
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 07:35 by VC

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512-0 SDG#: PH116-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
10146	Zirconium	7440-67-7	3.68 J	5.14	0.864	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.198 J	0.411	0.103	2
06142	Silver	7440-22-4	0.0482 J	0.206	0.0267	2
06144	Strontium	7440-24-6	45.4	0.411	0.0699	2
06145	Thallium	7440-28-0	0.466	0.206	0.0309	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172 U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.89	0.0100	0.0100	1
	The pH was measured in water at 20.1 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.6	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7215511
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 07:35 by VC

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512-0 SDG#: PH116-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02 U	1.02	0.0412	1
11031	12378-PeCDD	40321-76-4	0.0551 JB	5.12	0.0288	1
11031	123478-HxCDD	39227-28-6	0.0321 JBQ	5.12	0.0213	1
11031	123678-HxCDD	57653-85-7	0.143 JB	5.12	0.0230	1
11031	123789-HxCDD	19408-74-3	0.307 JBQ	5.12	0.0206	1
11031	1234678-HpCDD	35822-46-9	0.273 JB	5.12	0.0203	1
11031	OCDD	3268-87-9	1.70 JB	10.2	0.0195	1
11031	2378-TCDF	51207-31-9	1.02 U	1.02	0.0368	1
11031	12378-PeCDF	57117-41-6	0.215 JBQ	5.12	0.0163	1
11031	23478-PeCDF	57117-31-4	0.0925 JBQ	5.12	0.0161	1
11031	123478-HxCDF	70648-26-9	0.0538 JBQ	5.12	0.0142	1
11031	123678-HxCDF	57117-44-9	0.0675 JBQ	5.12	0.0128	1
11031	123789-HxCDF	72918-21-9	0.367 JB	5.12	0.0133	1
11031	234678-HxCDF	60851-34-5	0.0367 JBQ	5.12	0.0127	1
11031	1234678-HpCDF	67562-39-4	0.0996 JBQ	5.12	0.00731	1
11031	1234789-HpCDF	55673-89-7	0.0440 JB	5.12	0.0106	1
11031	OCDF	39001-02-0	0.201 JB	10.2	0.0273	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.110			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7215511
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 07:35 by VC

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512-0 SDG#: PH116-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7215511
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 07:35 by VC

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512-0 SDG#: PH116-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13273SLE026	10/02/2013 08:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13273SLE026	10/01/2013 08:00	Kerrie A Freeburn	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132760006A	10/07/2013 10:09	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750010A	10/04/2013 03:53	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750010A	10/02/2013 18:10	Sally L Appleyard	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132760006A	10/03/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132730031A	10/02/2013 11:23	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132730031A	10/01/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13273002	10/03/2013 19:42	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13273002	09/30/2013 12:35	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132740637001	10/04/2013 01:35	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132740637001	10/04/2013 01:32	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132740637001	10/04/2013 01:32	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132740637001	10/03/2013 15:10	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7215511
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 07:35 by VC

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512-0 SDG#: PH116-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132740637001B	10/03/2013 06:43	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637001A	10/03/2013 06:43	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637001A	10/03/2013 06:43	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132740637001A	10/03/2013 06:43	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638001	10/03/2013 04:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637001	10/02/2013 09:39	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638001	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13270039402A	09/27/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401A	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7215512
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 08:00 by VC

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512-4 SDG#: PH116-03*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.0	J	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.76
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.95	U	0.95	0.19	1
10590	Alpha BHC	319-84-6	0.95	U	0.95	0.19	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.95	U	0.95	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.6	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.38	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.38	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.40	1
10590	Delta BHC	319-86-8	0.95	U	0.95	0.51	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.38	1
10590	Endosulfan I	959-98-8	0.95	U	0.95	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.38	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.38	1
10590	Endrin	72-20-8	1.9	U	1.9	0.38	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.38	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.68	1
10590	Heptachlor	76-44-8	0.95	U	0.95	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.95	U	0.95	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7215512
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 08:00 by VC

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512-4 SDG#: PH116-03*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.6	U	7.6	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.40	1
10590	Toxaphene	8001-35-2	38	U	38	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.5	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,200		44.8	8.07	1
06944	Antimony	7440-36-0	4.48	U	4.48	0.828	1
06935	Arsenic	7440-38-2	5.68		4.48	0.783	1
06946	Barium	7440-39-3	142		1.12	0.0369	1
06947	Beryllium	7440-41-7	1.03	J	1.12	0.0750	1
07914	Boron	7440-42-8	7.63	J	11.2	0.940	1
06949	Cadmium	7440-43-9	0.270	J	1.12	0.0851	1
01650	Calcium	7440-70-2	8,200		22.4	3.74	1
06951	Chromium	7440-47-3	40.0		3.36	0.179	1
06952	Cobalt	7440-48-4	11.0		1.12	0.111	1
06953	Copper	7440-50-8	23.3		2.24	0.325	1
01654	Iron	7439-89-6	40,200		89.5	8.10	2
06955	Lead	7439-92-1	12.2		3.36	0.560	1
01656	Lithium	7439-93-2	30.0		4.5	0.38	1
01657	Magnesium	7439-95-4	8,450		11.2	1.87	1
06958	Manganese	7439-96-5	510		1.12	0.0929	1
06960	Molybdenum	7439-98-7	2.24	U	2.24	0.190	1
06961	Nickel	7440-02-0	22.7		2.24	0.145	1
10145	Phosphorus	7723-14-0	399		11.2	3.23	1
01662	Potassium	7440-09-7	5,390		112	9.33	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7215512
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 08:00 by VC

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512-4 SDG#: PH116-03*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01667	Sodium	7440-23-5	157	112	18.7	1
06969	Tin	7440-31-5	3.61 J	11.2	0.246	1
06970	Titanium	7440-32-6	1,250	2.24	0.381	2
06971	Vanadium	7440-62-2	72.2	1.12	0.145	1
06972	Zinc	7440-66-6	86.7	4.48	0.224	1
10146	Zirconium	7440-67-7	4.72 J	5.60	0.940	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.148 J	0.448	0.112	2
06142	Silver	7440-22-4	0.0436 J	0.224	0.0291	2
06144	Strontium	7440-24-6	54.4	0.448	0.0761	2
06145	Thallium	7440-28-0	0.444	0.224	0.0336	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182 U	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.4 C.	n.a.	7.99	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	12.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13273SLE026	10/02/2013 09:18	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13273SLE026	10/01/2013 08:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13274A31A	10/01/2013 20:42	Laura M Krieger	23.76
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327032541	09/27/2013 16:36	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327032541	09/27/2013 16:37	Larry E Bevins	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132760006A	10/07/2013 10:55	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132750010A	10/04/2013 04:11	Monica M Souders	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7215512
LL Group # 1422079
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/26/2013 08:00 by VC

Submitted: 09/27/2013 09:15
Reported: 10/08/2013 20:01

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

512-4 SDG#: PH116-03*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132750010A	10/02/2013 18:10	Sally L Appleyard	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132760006A	10/03/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132730031A	10/02/2013 11:44	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132730031A	10/01/2013 08:00	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132740637001	10/04/2013 01:43	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132740637001	10/04/2013 01:43	John W Yanzuk II	2
06971	Vanadium	SW-846 6010C	1	132740637001	10/04/2013 01:39	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132740637001	10/03/2013 15:15	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132740637001B	10/03/2013 06:45	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132740637001A	10/03/2013 06:45	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132740637001A	10/03/2013 06:45	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132740637001A	10/03/2013 06:45	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132740638001	10/03/2013 04:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132740637001	10/02/2013 09:39	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132740638001	10/02/2013 12:35	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13270039402A	09/27/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401A	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422079
Reported: 10/08/13 at 08:01 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13273SLE026	Sample number(s): 7215511-7215512									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	99		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	105		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	97		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	100		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	98		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	103		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	109		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	109		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	100		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	105		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	103		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	101		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	108		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	105		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	111		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	114		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	97		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	103		79-112		
Batch number: 13274A31A	Sample number(s): 7215512									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	91		67-119		
Batch number: 13275A20A	Sample number(s): 7215510									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	109	107	75-135	2	30
Batch number: 132750010A	Sample number(s): 7215511-7215512									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	86	83	62-87	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	95		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422079
Reported: 10/08/13 at 08:01 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	112		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132760006A	Sample number(s): 7215511-7215512									
Aldrin	0.83	U	0.83	0.17	ug/kg	95		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	99		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	97		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	95		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	103		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	104		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	103		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	101		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	106		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	100		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	109		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	112		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	101		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	104		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	104		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	95		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	103		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	97		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132730031A	Sample number(s): 7215511-7215512									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	94		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	99		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	95		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	76		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	78		49-107		
Batch number: 132740637001	Sample number(s): 7215511-7215512									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	102		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	103		80-120		
Calcium	9.48	J	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	105		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	105		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	107		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	100		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	104		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	103		80-120		
Potassium	100 U		100.	8.34	mg/kg	99		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422079
Reported: 10/08/13 at 08:01 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Sodium	100 U		100.	16.7	mg/kg	99		80-120		
Tin	1.46	J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	101		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	103		80-120		
Zinc	0.850	J	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	101		80-120		
Batch number: 132740637001A	Sample number(s): 7215511-7215512									
Silver	0.200	U	0.200	0.0260	mg/kg	95		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	96		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	96		80-120		
Batch number: 132740637001B	Sample number(s): 7215511-7215512									
Selenium	0.400	U	0.400	0.100	mg/kg	101		80-120		
Batch number: 132740638001	Sample number(s): 7215511-7215512									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	109		85-120		
Batch number: 13270039402A	Sample number(s): 7215511-7215512									
15a pH by 9045D						100		95-105		
Batch number: 13277162401A	Sample number(s): 7215511-7215512									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13273002	Sample number(s): 7215511									
2378-TCDD	1.00	U	1.00	0.0390	ng/kg	100		67-158		
12378-PeCDD	0.0738	J	5.00	0.0254	ng/kg	102		70-142		
123478-HxCDD	0.0334	J	5.00	0.0169	ng/kg	101		70-164		
123678-HxCDD	0.0256	J	5.00	0.0182	ng/kg	101		76-134		
123789-HxCDD	0.0369	J	5.00	0.0172	ng/kg	99		64-162		
1234678-HpCDD	0.0965	J	5.00	0.0155	ng/kg	98		70-140		
OCDD	0.249	J	10.0	0.0199	ng/kg	97		78-144		
2378-TCDF	1.00	U	1.00	0.0244	ng/kg	103		75-158		
12378-PeCDF	0.0876	J	5.00	0.0133	ng/kg	99		80-134		
23478-PeCDF	0.0646	J	5.00	0.0127	ng/kg	101		68-160		
123478-HxCDF	0.0515	J	5.00	0.0108	ng/kg	100		72-134		
123678-HxCDF	0.0453	J	5.00	0.0101	ng/kg	102		84-130		
123789-HxCDF	0.0754	J	5.00	0.0107	ng/kg	102		78-130		
234678-HxCDF	0.0332	J	5.00	0.0106	ng/kg	101		70-156		
1234678-HpCDF	0.0595	J	5.00	0.00690	ng/kg	99		82-122		
1234789-HpCDF	0.0657	J	5.00	0.00960	ng/kg	101		78-138		
OCDF	0.137	J	10.0	0.0215	ng/kg	100		63-170		
TEQ WHO 2005 - EDLx0.0	0.00400				ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422079
Reported: 10/08/13 at 08:01 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13273SLE026	Sample number(s): 7215511-7215512 UNSPK: P213412								
Acenaphthene	85	84	48-127	1	30				
Acenaphthylene	90	90	49-121	0	30				
Anthracene	84	88	52-126	4	30				
Benzo(a)anthracene	84	90	44-143	6	30				
Benzo(a)pyrene	81	86	44-140	6	30				
Benzo(b)fluoranthene	86	89	26-142	4	30				
Benzo(e)pyrene	76	80	70-130	5	30				
Benzo(g,h,i)perylene	84	90	33-141	7	30				
Benzo(k)fluoranthene	81	86	54-142	7	30				
Butylbenzylphthalate	97	107	49-151	10	30				
Di-n-butylphthalate	94	97	52-147	3	30				
Chrysene	83	87	29-148	5	30				
Dibenz(a,h)anthracene	90	97	20-137	7	30				
Diethylphthalate	91	91	43-145	0	30				
Dimethylphthalate	80	89	58-129	11	30				
Bis(2-Ethylhexyl)phthalate	94	100	39-167	7	30				
Fluoranthene	84	88	40-148	5	30				
Fluorene	85	86	51-137	1	30				
Indeno(1,2,3-cd)pyrene	88	95	17-136	8	30				
1-Methylnaphthalene	78	77	50-131	1	30				
2-Methylnaphthalene	57	57	35-152	0	30				
Naphthalene	68	67	31-148	1	30				
N-Nitrosodimethylamine	93	93	48-113	1	30				
Di-n-octylphthalate	97	102	52-162	5	30				
Phenanthrene	83	85	29-142	2	30				
Pyrene	86	87	26-143	1	30				
Batch number: 13274A31A	Sample number(s): 7215512 UNSPK: P213412								
11a TPH by EPA 8015B GRO	92	86	69-123	2	30				
Batch number: 132750010A	Sample number(s): 7215511-7215512 UNSPK: P211497								
PCB-1016	87	92	41-135	6	50				
PCB-1260	105	111	40-134	5	50				
Batch number: 132760006A	Sample number(s): 7215511-7215512 UNSPK: 7215511								
Aldrin	89	88	16-126	1	50				
Alpha BHC	90	90	14-140	0	50				
Beta BHC	110	109	42-133	1	50				
Gamma BHC - Lindane	88	87	30-137	0	50				
p,p-DDD	94	92	43-149	2	50				
p,p-DDE	96	94	35-152	2	50				
p,p-DDT	95	93	12-193	2	50				
Delta BHC	93	92	13-153	2	50				
Dieldrin	96	94	41-153	1	50				
Endosulfan I	91	89	26-146	2	50				
Endosulfan II	100	97	34-141	3	50				
Endosulfan Sulfate	101	100	10-181	1	50				
Endrin	92	91	30-152	1	50				
Endrin Aldehyde	93	92	23-138	2	50				
Endrin Ketone	94	93	30-148	2	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422079
Reported: 10/08/13 at 08:01 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Heptachlor	87	86	16-152	2	50				
Heptachlor Epoxide	93	92	33-144	1	50				
Methoxychlor	91	90	41-161	2	50				
Batch number: 132730031A	Sample number(s): 7215511-7215512 UNSPK: P213412								
EFH (C12-C14)	90	84	49-123	8	20				
EFH (C15-C20)	98	92	49-123	7	20				
EFH (C21-C30)	91	87	49-123	6	20				
EFH (C30-C40)	90	93	49-123	3	20				
EFH (C8-C11)	73	71	49-123	2	20				
Batch number: 132740637001	Sample number(s): 7215511-7215512 UNSPK: P208982 BKG: P208982								
Aluminum	-136 (2)	-131 (2)	75-125	0	20	20,500	13,200	43*	20
Antimony	44*	42*	75-125	6	20	4.00 U	3.96 U	0 (1)	20
Arsenic	97	104	75-125	4	20	4.06	3.28 J	21* (1)	20
Barium	94	92	75-125	3	20	95.6	88.7	8	20
Beryllium	97	98	75-125	0	20	0.565 J	0.412 J	31* (1)	20
Boron	97	100	75-125	1	20	9.44 J	6.97 J	30* (1)	20
Cadmium	94	97	75-125	2	20	0.321 J	0.442 J	32* (1)	20
Calcium	1949 (2)	2450 (2)	75-125	4	20	37,100	42,800	14	20
Chromium	123	109	75-125	6	20	31.3	27.9	12	20
Cobalt	89	90	75-125	0	20	7.96	5.90	30*	20
Copper	97	98	75-125	0	20	16.0	13.1	20	20
Iron	-5142 (2)	-6500 (2)	75-125	6	20	26,000	17,500	39*	20
Lead	88	91	75-125	1	20	7.08	6.86	3 (1)	20
Lithium	91	92	75-125	0	20	32.9	18.4	56* (1)	20
Magnesium	-455 (2)	-524 (2)	75-125	2	20	7,180	5,120	33*	20
Manganese	230 (2)	342 (2)	75-125	13	20	266	355	29*	20
Molybdenum	93	94	75-125	1	20	2.00 U	0.388 J	200* (1)	20
Nickel	89	87	75-125	3	20	17.4	14.8	16	20
Phosphorus	173 (2)	168 (2)	75-125	1	20	439	503	14	20
Potassium	48*	64*	75-125	4	20	3,370	2,470	31*	20
Sodium	94	94	75-125	2	20	187	146	25* (1)	20
Tin	84	86	75-125	1	20	3.09 J	2.55 J	19 (1)	20
Titanium	177 (2)	236 (2)	75-125	4	20	1,100	652	51*	20
Vanadium	103	111	75-125	3	20	56.4	41.7	30*	20
Zinc	57*	66*	75-125	4	20	78.2	54.7	35*	20
Zirconium	95	99	75-125	2	20	4.25 J	5.63	28* (1)	20
Batch number: 132740637001A	Sample number(s): 7215511-7215512 UNSPK: P208982 BKG: P208982								
Silver	111	114	75-125	0	20	0.0327 J	0.0359 J	9 (1)	20
Strontium	145 (2)	98 (2)	75-125	4	20	89.7	84.5	6	20
Thallium	123	117	75-125	4	20	0.283	0.251	12 (1)	20
Batch number: 132740637001B	Sample number(s): 7215511-7215512 UNSPK: P208982 BKG: P208982								
Selenium	106	113	75-125	4	20	0.183 J	0.238 J	26* (1)	20
Batch number: 132740638001	Sample number(s): 7215511-7215512 UNSPK: P208982 BKG: P208982								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422079
Reported: 10/08/13 at 08:01 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
3a Mercury 7471A	115	103	65-135	11	20	0.0115 J	0.0111 J	4 (1)	20
Batch number: 13270039402A	Sample number(s): 7215511-7215512					BKG: 7215511			
15a pH by 9045D						7.89	7.91	0	3
Batch number: 13277162401A	Sample number(s): 7215511-7215512					BKG: P218895			
14a Moisture Content by 160.3						11.7	11.5	1	20
Batch number: 13273002	Sample number(s): 7215511 UNSPK: P211497								
2378-TCDD	97	102	40-135	4	20				
12378-PeCDD	102	103	40-135	0	20				
123478-HxCDD	99	100	40-135	1	20				
123678-HxCDD	104	102	40-135	3	20				
123789-HxCDD	97	100	40-135	2	20				
1234678-HpCDD	99	100	40-135	0	20				
OCDD	97	100	40-135	2	20				
2378-TCDF	103	105	40-135	0	20				
12378-PeCDF	101	100	40-135	2	20				
23478-PeCDF	100	103	40-135	2	20				
123478-HxCDF	100	103	40-135	2	20				
123678-HxCDF	103	104	40-135	1	20				
123789-HxCDF	101	104	40-135	1	20				
234678-HxCDF	101	102	40-135	0	20				
1234678-HpCDF	99	101	40-135	1	20				
1234789-HpCDF	102	102	40-135	1	20				
OCDF	100	103	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13273SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7215511	84	93	105
7215512	87	90	106
Blank	89	96	108
LCS	92	100	110
MS	78	83	97
MSD	82	86	95
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13274A31A

	Trifluorotoluene-F

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422079
Reported: 10/08/13 at 08:01 PM

Surrogate Quality Control

7215512	78	
Blank	92	
LCS	95	
MS	70	
MSD	77	
Limits:	50-142	

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13275A20A

	Trifluorotoluene-F
7215510	93
Blank	92
LCS	98
LCSD	99
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132750010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7215511	116	121*
7215512	112	113
Blank	113	121*
LCS	113	120
LCSD	113	122*
MS	105	112
MSD	111	122*
Limits:	45-120	45-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132760006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7215511	91	102
7215512	93	102
Blank	94	109
LCS	96	111
MS	92	101
MSD	91	100
Limits:	50-130	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132730031A

	Chlorobenzene	Orthoterphenyl
7215511	105	91
7215512	106	86
Blank	112	90
LCS	109	88
MS	104	84

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422079
Reported: 10/08/13 at 08:01 PM

Surrogate Quality Control

MSD	100	81
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13273002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7215511	69	70	69	74	72	76
Blank	69	71	70	73	71	74
MS	67	68	69	75	71	68
MSD	69	69	69	76	70	71
OPR	65	69	68	75	72	68
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7215511	88	69	67	73	76	75
Blank	89	73	73	74	77	77
MS	90	68	66	72	77	76
MSD	94	67	64	73	79	76
OPR	93	70	68	75	80	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7215511	75	79	79	63	73
Blank	77	81	85	65	72
MS	77	79	80	63	72
MSD	76	81	80	64	74
OPR	81	84	83	59	73
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Cap# 1422079 Sample# 7215510-12

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/26/2013
CarrierName: FedEx
AirbillNo: 796780309074

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130926-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB1-092613	9/26/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-512-SA5D-SB-0.0-0.5	9/26/13 07:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X			X											
SL-512-SA5D-SB-0.0-0.5	9/26/13 07:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-512-SA5D-SB-4.0-5.0	9/26/13 08:00	SO	None	2 - SS-Sleeve	10 day	X	X					X			X							X			X											
SL-512-SA5D-SB-4.0-5.0	9/26/13 08:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-512-SA5D-SB-4.0-5.0	9/26/13 08:00	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Coates

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steph Myers	09/26/2013	1600									
									Brian Hall	9.27.13	915

Subarea 5D

eurofins | Lancaster Laboratories

C# 1422079

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 9.27.13

Time of Receipt: 915

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	1.2	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 2299 Date/Time: 9.27.13 1112

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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SAMPLE DELIVERY GROUP

PH118

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 15, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 10/01/2013
Group Number: 1422668
SDG: PH118
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-093013 Water	7218893
SL-582-SA5D-SB-0.0-0.5 Soil	7218894
SL-582-SA5D-SB-4.0-5.0 Soil	7218895
SL-582-SA5D-SB-4.0-5.0MS Soil	7218896
SL-582-SA5D-SB-4.0-5.0MSD Soil	7218897
SL-582-SA5D-SB-4.0-5.0DUP Soil	7218898
SL-882-SA5D-SB-4.0-5.0 Soil	7218899
SL-582-SA5D-SB-10.0-11.0 Soil	7218900
SL-595-SA5D-SB-0.0-0.5 Soil	7218901
SL-595-SA5D-SB-4.0-5.0 Soil	7218902
SL-595-SA5D-SB-9.0-10.0 Soil	7218903
SL-595-SA5D-SB-14.0-15.0 Soil	7218904
SL-595-SA5D-SB-17.0-18.0 Soil	7218905
SL-596-SA5D-SB-0.0-0.5 Soil	7218906
SL-596-SA5D-SB-4.0-5.0 Soil	7218907
SL-596-SA5D-SB-11.5-12.5 Soil	7218908
SL-597-SA5D-SB-0.0-0.5 Soil	7218909
SL-597-SA5D-SB-4.0-5.0 Soil	7218910
SL-597-SA5D-SB-9.0-10.0 Soil	7218911
SL-597-SA5D-SB-14.0-15.0 Soil	7218912
SL-597-SA5D-SB-17.0-18.0 Soil	7218913

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-093013 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7218893
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:00

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

118TB SDG#: PH118-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13275A20A	10/04/2013 14:20	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13275A20A	10/04/2013 14:20	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218894
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:45 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58200 SDG#: PH118-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	0.91	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	94	U	94	46	1
10401	2,4-DB	94-82-6	18	U	18	6.5	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.4	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.4	1
10401	MCPA	94-74-6	2,600	U	2,600	800	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.86	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218894
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:45 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58200 SDG#: PH118-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken. The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,100		41.5	7.47	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.767	1
06935	Arsenic	7440-38-2	6.76		4.15	0.725	1
06946	Barium	7440-39-3	100		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.816	J	1.04	0.0694	1
07914	Boron	7440-42-8	6.31	J	10.4	0.871	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0788	1
01650	Calcium	7440-70-2	15,800		20.7	3.46	1
06951	Chromium	7440-47-3	36.7		3.11	0.166	1
06952	Cobalt	7440-48-4	9.03		1.04	0.103	1
06953	Copper	7440-50-8	10.4	U	10.4	1.50	5
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	32,900		207	18.8	5
06955	Lead	7439-92-1	5.71		3.11	0.518	1
01656	Lithium	7439-93-2	32.2		4.1	0.35	1
01657	Magnesium	7439-95-4	8,360		10.4	1.73	1
06958	Manganese	7439-96-5	362		1.04	0.0860	1
06960	Molybdenum	7439-98-7	2.07	U	2.07	0.176	1
06961	Nickel	7440-02-0	16.3		2.07	0.135	1
10145	Phosphorus	7723-14-0	604		10.4	3.00	1
01662	Potassium	7440-09-7	5,110		104	8.64	1
01667	Sodium	7440-23-5	98.2	J	104	17.3	1
06969	Tin	7440-31-5	2.86	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,420		1.04	0.176	1
06971	Vanadium	7440-62-2	72.0		1.04	0.135	1
06972	Zinc	7440-66-6	78.4		4.15	0.207	1
10146	Zirconium	7440-67-7	6.41		5.18	0.871	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218894
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:45 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58200 SDG#: PH118-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.277 J	0.415	0.104	2
06142	Silver	7440-22-4	0.0311 J	0.207	0.0269	2
06144	Strontium	7440-24-6	32.9	0.415	0.0705	2
06145	Thallium	7440-28-0	0.352	0.207	0.0311	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173 U	0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.82	0.0100	0.0100	1
	The pH was measured in water at 21.3 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.4	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218894
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:45 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58200 SDG#: PH118-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0727	1
11031	12378-PeCDD	40321-76-4	5.29	U	5.29	0.0656	1
11031	123478-HxCDD	39227-28-6	0.0673	JB	5.29	0.0375	1
11031	123678-HxCDD	57653-85-7	0.0554	JQ	5.29	0.0392	1
11031	123789-HxCDD	19408-74-3	0.118	JB	5.29	0.0379	1
11031	1234678-HpCDD	35822-46-9	5.29	U	5.29	0.0416	1
11031	OCDD	3268-87-9	0.839	JB	10.6	0.0376	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0707	1
11031	12378-PeCDF	57117-41-6	0.0935	JBQ	5.29	0.0370	1
11031	23478-PeCDF	57117-31-4	0.0515	J	5.29	0.0364	1
11031	123478-HxCDF	70648-26-9	0.0836	JB	5.29	0.0349	1
11031	123678-HxCDF	57117-44-9	0.0566	JBQ	5.29	0.0325	1
11031	123789-HxCDF	72918-21-9	0.141	JQ	5.29	0.0320	1
11031	234678-HxCDF	60851-34-5	0.0497	JBQ	5.29	0.0333	1
11031	1234678-HpCDF	67562-39-4	0.0334	JBQ	5.29	0.0167	1
11031	1234789-HpCDF	55673-89-7	5.29	U	5.29	0.0282	1
11031	OCDF	39001-02-0	0.203	JBQ	10.6	0.0611	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0426				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	105	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218894
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:45 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58200 SDG#: PH118-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218894
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:45 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58200 SDG#: PH118-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/05/2013 03:45	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132760027A	10/04/2013 18:40	Elizabeth J Marin	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/07/2013 23:58	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132760027A	10/04/2013 09:15	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132760019A	10/04/2013 16:37	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132760019A	10/04/2013 06:00	Roman Kuropatkin	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13277002	10/09/2013 15:40	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13277002	10/04/2013 13:00	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/10/2013 15:52	Katlin N Cataldi	5
01654	Iron	SW-846 6010C	1	132750637003	10/10/2013 15:52	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 06:15	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218894
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:45 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58200 SDG#: PH118-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 14:33	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 23:01	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 23:01	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 23:01	David K Beck	2
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 23:01	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:00	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402A	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401A	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218895
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.28
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	41	U	41	14	1
10401	Dalapon	75-99-0	100	U	100	50	1
10401	2,4-DB	94-82-6	19	U	19	7.0	1
10401	Dicamba	1918-00-9	14	U	14	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	860	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	850	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.93	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.85	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218895
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken. The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,800		44.9	8.08	1
06944	Antimony	7440-36-0	4.49	U	4.49	0.830	1
06935	Arsenic	7440-38-2	6.58		4.49	0.785	1
06946	Barium	7440-39-3	95.3		1.12	0.0370	1
06947	Beryllium	7440-41-7	0.771	J	1.12	0.0751	1
07914	Boron	7440-42-8	5.70	J	11.2	0.942	1
06949	Cadmium	7440-43-9	1.12	U	1.12	0.0852	1
01650	Calcium	7440-70-2	26,200		22.4	3.75	1
06951	Chromium	7440-47-3	34.1		3.36	0.179	1
06952	Cobalt	7440-48-4	8.11		1.12	0.111	1
06953	Copper	7440-50-8	11.2	U	11.2	1.63	5
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	30,200		224	20.3	5
06955	Lead	7439-92-1	5.23		3.36	0.561	1
01656	Lithium	7439-93-2	29.5		4.5	0.38	1
01657	Magnesium	7439-95-4	7,620		11.2	1.87	1
06958	Manganese	7439-96-5	326		1.12	0.0931	1
06960	Molybdenum	7439-98-7	2.24	U	2.24	0.191	1
06961	Nickel	7440-02-0	14.0		2.24	0.146	1
10145	Phosphorus	7723-14-0	433		11.2	3.24	1
01662	Potassium	7440-09-7	3,880		112	9.35	1
01667	Sodium	7440-23-5	146		112	18.7	1
06969	Tin	7440-31-5	2.98	J	11.2	0.247	1
06970	Titanium	7440-32-6	1,360		1.12	0.191	1
06971	Vanadium	7440-62-2	67.8		1.12	0.146	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218895
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03BKG

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06972	Zinc		7440-66-6	69.4	4.49	0.224	1
10146	Zirconium		7440-67-7	8.23	5.61	0.942	1
		SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium		7782-49-2	0.220 J	0.449	0.112	2
06142	Silver		7440-22-4	0.224 U	0.224	0.0292	2
06144	Strontium		7440-24-6	61.4	0.449	0.0762	2
06145	Thallium		7440-28-0	0.297	0.224	0.0336	2
		SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A		7439-97-6	0.0186 U	0.0186	0.0112	1
Wet Chemistry		**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.1 C.		n.a.	8.18	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	11.7	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/05/2013 00:57	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 00:04	Laura M Krieger	23.28
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327432582	10/01/2013 20:16	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327432582	10/01/2013 20:17	Lois E Hiltz	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132760027A	10/04/2013 19:06	Elizabeth J Marin	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 00:16	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132760027A	10/04/2013 09:15	Katheryne V Sponheimer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218895
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132760019A	10/04/2013 16:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132760019A	10/04/2013 06:00	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/10/2013 15:20	Katlin N Cataldi	5
01654	Iron	SW-846 6010C	1	132750637003	10/10/2013 15:20	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 05:51	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 14:07	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 22:47	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 22:47	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 22:47	David K Beck	2
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 22:47	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:02	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402A	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401A	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218896
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	36		1.9	0.75	1
12969	Acenaphthylene	208-96-8	38		1.9	0.37	1
12969	Anthracene	120-12-7	34		1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	37		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	36		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	37		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	33		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	37		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	37		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	43		20	6.7	1
12969	Di-n-butylphthalate	84-74-2	38		20	6.7	1
12969	Chrysene	218-01-9	36		1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	37		1.9	0.75	1
12969	Diethylphthalate	84-66-2	39		20	6.7	1
12969	Dimethylphthalate	131-11-3	37		20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	41		20	6.7	1
12969	Fluoranthene	206-44-0	35		1.9	0.75	1
12969	Fluorene	86-73-7	36		1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	37		1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	37		1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	35		1.9	0.75	1
12969	Naphthalene	91-20-3	38		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	40		1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	45		20	6.7	1
12969	Phenanthrene	85-01-8	37		1.9	0.75	1
12969	Pyrene	129-00-0	36		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	9.7		1.0	0.2	22.48
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	110		41	14	1
10401	Dalapon	75-99-0	150		100	50	1
10401	2,4-DB	94-82-6	110		19	7.0	1
10401	Dicamba	1918-00-9	9.9	J	14	4.5	1
10401	Dinoseb	88-85-7	16	J	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	120		19	10	1
10401	MCPA	94-74-6	9,600		2,800	860	1
10401	MCPP (Mecoprop)	93-65-2	9,700		2,800	850	1
10401	2,4,5-T	93-76-5	11		1.9	0.93	1
10401	2,4,5-TP	93-72-1	11		1.9	0.85	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	160		19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218896
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	190		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken. The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	J	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	8.7		5.6	2.3	1
12952	EFH (C21-C30)	n.a.	13		5.6	2.3	1
12952	EFH (C30-C40)	n.a.	14		11	4.5	1
12952	EFH (C8-C11)	n.a.	4.3	J	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,300		44.9	8.08	1
06944	Antimony	7440-36-0	23.0		4.49	0.830	1
06935	Arsenic	7440-38-2	23.8		4.49	0.785	1
06946	Barium	7440-39-3	325		1.12	0.0370	1
06947	Beryllium	7440-41-7	6.29		1.12	0.0751	1
07914	Boron	7440-42-8	224		11.2	0.942	1
06949	Cadmium	7440-43-9	5.31		1.12	0.0852	1
01650	Calcium	7440-70-2	25,100		22.4	3.75	1
06951	Chromium	7440-47-3	59.9		3.36	0.179	1
06952	Cobalt	7440-48-4	60.8		1.12	0.111	1
06953	Copper	7440-50-8	21.5		11.2	1.63	5
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	32,200		224	20.3	5
06955	Lead	7439-92-1	21.3		3.36	0.561	1
01656	Lithium	7439-93-2	144		4.5	0.38	1
01657	Magnesium	7439-95-4	8,500		11.2	1.87	1
06958	Manganese	7439-96-5	400		1.12	0.0931	1
06960	Molybdenum	7439-98-7	206		2.24	0.191	1
06961	Nickel	7440-02-0	67.2		2.24	0.146	1
10145	Phosphorus	7723-14-0	557		11.2	3.24	1
01662	Potassium	7440-09-7	5,820		112	9.35	1
01667	Sodium	7440-23-5	1,270		112	18.7	1
06969	Tin	7440-31-5	385		11.2	0.247	1
06970	Titanium	7440-32-6	1,920		1.12	0.191	1
06971	Vanadium	7440-62-2	133		1.12	0.146	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218896
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06972	Zinc	7440-66-6	127	4.49	0.224	1
10146	Zirconium	7440-67-7	117	5.61	0.942	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.31	0.449	0.112	2
06142	Silver	7440-22-4	11.3	0.224	0.0292	2
06144	Strontium	7440-24-6	71.1	0.449	0.0762	2
06145	Thallium	7440-28-0	0.775	0.224	0.0336	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.217	0.0184	0.0111	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	11.7	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/05/2013 01:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 00:42	Laura M Krieger	22.48
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327432582	10/01/2013 20:18	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327432582	10/01/2013 20:19	Lois E Hiltz	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132760027A	10/04/2013 19:33	Elizabeth J Marin	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 00:35	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132760027A	10/04/2013 09:15	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132760019A	10/04/2013 17:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132760019A	10/04/2013 06:00	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218896
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

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58240 SDG#: PH118-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/10/2013 15:40	Katlin N Cataldi	5
01654	Iron	SW-846 6010C	1	132750637003	10/10/2013 15:40	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 06:04	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 14:20	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 22:54	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 22:54	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 22:54	David K Beck	2
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 22:54	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:08	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401A	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218897
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
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58240 SDG#: PH118-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	37		1.9	0.75	1
12969	Acenaphthylene	208-96-8	39		1.9	0.38	1
12969	Anthracene	120-12-7	35		1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	38		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	37		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	37		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	34		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	37		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	38		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	43		20	6.8	1
12969	Di-n-butylphthalate	84-74-2	40		20	6.8	1
12969	Chrysene	218-01-9	36		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	38		1.9	0.75	1
12969	Diethylphthalate	84-66-2	40		20	6.8	1
12969	Dimethylphthalate	131-11-3	39		20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	40		20	6.8	1
12969	Fluoranthene	206-44-0	36		1.9	0.75	1
12969	Fluorene	86-73-7	38		1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	38		1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	38		1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	36		1.9	0.75	1
12969	Naphthalene	91-20-3	39		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	40		1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	44		20	6.8	1
12969	Phenanthrene	85-01-8	38		1.9	0.75	1
12969	Pyrene	129-00-0	37		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	11		1.0	0.2	22.56
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	99		41	14	1
10401	Dalapon	75-99-0	130		100	50	1
10401	2,4-DB	94-82-6	110		19	7.0	1
10401	Dicamba	1918-00-9	8.8	J	14	4.5	1
10401	Dinoseb	88-85-7	17	J	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	110		19	10	1
10401	MCPA	94-74-6	9,200		2,800	860	1
10401	MCPP (Mecoprop)	93-65-2	9,400		2,800	850	1
10401	2,4,5-T	93-76-5	10		1.9	0.93	1
10401	2,4,5-TP	93-72-1	10		1.9	0.85	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	170		19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218897
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	210		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken. The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	J	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	8.6		5.6	2.3	1
12952	EFH (C21-C30)	n.a.	14		5.6	2.3	1
12952	EFH (C30-C40)	n.a.	14		11	4.5	1
12952	EFH (C8-C11)	n.a.	4.3	J	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,600		44.9	8.08	1
06944	Antimony	7440-36-0	24.1		4.49	0.830	1
06935	Arsenic	7440-38-2	24.9		4.49	0.785	1
06946	Barium	7440-39-3	322		1.12	0.0370	1
06947	Beryllium	7440-41-7	6.27		1.12	0.0751	1
07914	Boron	7440-42-8	223		11.2	0.942	1
06949	Cadmium	7440-43-9	5.31		1.12	0.0852	1
01650	Calcium	7440-70-2	26,500		22.4	3.75	1
06951	Chromium	7440-47-3	60.1		3.36	0.179	1
06952	Cobalt	7440-48-4	62.5		1.12	0.111	1
06953	Copper	7440-50-8	21.6		11.2	1.63	5
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	31,300		224	20.3	5
06955	Lead	7439-92-1	22.3		3.36	0.561	1
01656	Lithium	7439-93-2	143		4.5	0.38	1
01657	Magnesium	7439-95-4	8,360		11.2	1.87	1
06958	Manganese	7439-96-5	409		1.12	0.0931	1
06960	Molybdenum	7439-98-7	205		2.24	0.191	1
06961	Nickel	7440-02-0	67.5		2.24	0.146	1
10145	Phosphorus	7723-14-0	548		11.2	3.24	1
01662	Potassium	7440-09-7	5,750		112	9.35	1
01667	Sodium	7440-23-5	1,250		112	18.7	1
06969	Tin	7440-31-5	385		11.2	0.247	1
06970	Titanium	7440-32-6	1,890		1.12	0.191	1
06971	Vanadium	7440-62-2	133		1.12	0.146	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218897
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06972	Zinc	7440-66-6	127	4.49	0.224	1
10146	Zirconium	7440-67-7	115	5.61	0.942	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.32	0.449	0.112	2
06142	Silver	7440-22-4	11.7	0.224	0.0292	2
06144	Strontium	7440-24-6	74.4	0.449	0.0762	2
06145	Thallium	7440-28-0	0.750	0.224	0.0336	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.210	0.0184	0.0110	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	11.7	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/05/2013 02:05	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 01:20	Laura M Krieger	22.56
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327432582	10/01/2013 20:19	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327432582	10/01/2013 20:20	Lois E Hiltz	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132760027A	10/04/2013 20:52	Elizabeth J Marin	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 00:53	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132760027A	10/04/2013 09:15	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132760019A	10/04/2013 17:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132760019A	10/04/2013 06:00	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218897
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/10/2013 15:44	Katlin N Cataldi	5
01654	Iron	SW-846 6010C	1	132750637003	10/10/2013 15:44	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 06:08	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 14:24	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 22:56	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 22:56	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 22:56	David K Beck	2
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 22:56	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:10	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401A	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218898
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,500		44.9	8.08	1
06944	Antimony	7440-36-0	4.49	U	4.49	0.830	1
06935	Arsenic	7440-38-2	6.38		4.49	0.785	1
06946	Barium	7440-39-3	98.3		1.12	0.0370	1
06947	Beryllium	7440-41-7	0.788	J	1.12	0.0751	1
07914	Boron	7440-42-8	5.61	J	11.2	0.942	1
06949	Cadmium	7440-43-9	1.12	U	1.12	0.0852	1
01650	Calcium	7440-70-2	26,700		22.4	3.75	1
06951	Chromium	7440-47-3	34.5		3.36	0.179	1
06952	Cobalt	7440-48-4	8.12		1.12	0.111	1
06953	Copper	7440-50-8	11.2	U	11.2	1.63	5
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	30,300		224	20.3	5
06955	Lead	7439-92-1	5.35		3.36	0.561	1
01656	Lithium	7439-93-2	30.1		4.5	0.38	1
01657	Magnesium	7439-95-4	7,720		11.2	1.87	1
06958	Manganese	7439-96-5	336		1.12	0.0931	1
06960	Molybdenum	7439-98-7	2.24	U	2.24	0.191	1
06961	Nickel	7440-02-0	13.9		2.24	0.146	1
10145	Phosphorus	7723-14-0	434		11.2	3.24	1
01662	Potassium	7440-09-7	3,950		112	9.35	1
01667	Sodium	7440-23-5	148		112	18.7	1
06969	Tin	7440-31-5	3.07	J	11.2	0.247	1
06970	Titanium	7440-32-6	1,390		1.12	0.191	1
06971	Vanadium	7440-62-2	68.5		1.12	0.146	1
06972	Zinc	7440-66-6	70.4		4.49	0.224	1
10146	Zirconium	7440-67-7	8.39		5.61	0.942	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.183	J	0.449	0.112	2
06142	Silver	7440-22-4	0.224	U	0.224	0.0292	2
06144	Strontium	7440-24-6	63.0		0.449	0.0762	2
06145	Thallium	7440-28-0	0.307		0.224	0.0336	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183	U	0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.20		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	11.7		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	11.5		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218898
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 08:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58240 SDG#: PH118-03DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/10/2013 15:28	Katlin N Cataldi	5
01654	Iron	SW-846 6010C	1	132750637003	10/10/2013 15:28	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 05:59	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 14:16	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 22:52	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 22:52	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 22:52	David K Beck	2
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 22:52	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:06	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402A	10/01/2013 20:00	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401A	10/04/2013 23:44	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401A	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-882-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218899
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 09:00 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

88200 SDG#: PH118-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.04
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	41	U	41	14	1
10401	Dalapon	75-99-0	100	U	100	50	1
10401	2,4-DB	94-82-6	19	U	19	7.0	1
10401	Dicamba	1918-00-9	14	U	14	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	860	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	850	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.92	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.85	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-882-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218899
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 09:00 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

88200 SDG#: PH118-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken. The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,200		43.9	7.92	1
06944	Antimony	7440-36-0	4.39	U	4.39	0.813	1
06935	Arsenic	7440-38-2	6.42		4.39	0.769	1
06946	Barium	7440-39-3	108		1.10	0.0362	1
06947	Beryllium	7440-41-7	0.789	J	1.10	0.0736	1
07914	Boron	7440-42-8	6.43	J	11.0	0.923	1
06949	Cadmium	7440-43-9	1.10	U	1.10	0.0835	1
01650	Calcium	7440-70-2	30,200		22.0	3.67	1
06951	Chromium	7440-47-3	34.8		3.29	0.176	1
06952	Cobalt	7440-48-4	8.59		1.10	0.109	1
06953	Copper	7440-50-8	11.0	U	11.0	1.59	5
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	31,200		220	19.9	5
06955	Lead	7439-92-1	5.50		3.29	0.549	1
01656	Lithium	7439-93-2	30.8		4.4	0.37	1
01657	Magnesium	7439-95-4	7,760		11.0	1.83	1
06958	Manganese	7439-96-5	396		1.10	0.0912	1
06960	Molybdenum	7439-98-7	2.20	U	2.20	0.187	1
06961	Nickel	7440-02-0	15.2		2.20	0.143	1
10145	Phosphorus	7723-14-0	462		11.0	3.17	1
01662	Potassium	7440-09-7	4,170		110	9.16	1
01667	Sodium	7440-23-5	144		110	18.3	1
06969	Tin	7440-31-5	2.85	J	11.0	0.242	1
06970	Titanium	7440-32-6	1,460		1.10	0.187	1
06971	Vanadium	7440-62-2	69.2		1.10	0.143	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-882-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218899
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 09:00 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

88200 SDG#: PH118-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06972	Zinc	7440-66-6	69.5	4.39	0.220	1
10146	Zirconium	7440-67-7	7.78	5.49	0.923	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.184 J	0.439	0.110	2
06142	Silver	7440-22-4	0.220 U	0.220	0.0286	2
06144	Strontium	7440-24-6	62.7	0.439	0.0747	2
06145	Thallium	7440-28-0	0.318	0.220	0.0329	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0181 U	0.0181	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.1 C.	n.a.	8.26	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	11.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/08/2013 05:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/08/2013 19:38	Laura M Krieger	24.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327432582	10/01/2013 20:21	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327432582	10/01/2013 20:22	Lois E Hiltz	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132760027A	10/04/2013 21:18	Elizabeth J Marin	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 01:11	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132760027A	10/04/2013 09:15	Katheryne V Sponheimer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-882-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218899
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 09:00 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

88200 SDG#: PH118-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132760019A	10/04/2013 18:02	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132760019A	10/04/2013 06:00	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/10/2013 15:56	Katlin N Cataldi	5
01654	Iron	SW-846 6010C	1	132750637003	10/10/2013 15:56	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 06:19	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 14:37	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 23:03	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 23:03	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 23:03	David K Beck	2
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 23:03	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:12	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402A	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218900
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 09:10 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58210 SDG#: PH118-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	0.82	J	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.0	J	1.9	0.74	1
12969	Naphthalene	91-20-3	0.99	J	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.78
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	100	U	100	49	1
10401	2,4-DB	94-82-6	19	U	19	6.9	1
10401	Dicamba	1918-00-9	13	U	13	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	850	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	840	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.92	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.84	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218900
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 09:10 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58210 SDG#: PH118-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken. The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,200		44.3	7.99	1
06944	Antimony	7440-36-0	4.43	U	4.43	0.820	1
06935	Arsenic	7440-38-2	6.54		4.43	0.775	1
06946	Barium	7440-39-3	79.0		1.11	0.0365	1
06947	Beryllium	7440-41-7	0.765	J	1.11	0.0742	1
07914	Boron	7440-42-8	5.51	J	11.1	0.930	1
06949	Cadmium	7440-43-9	1.11	U	1.11	0.0842	1
01650	Calcium	7440-70-2	11,200		22.1	3.70	1
06951	Chromium	7440-47-3	33.5		3.32	0.177	1
06952	Cobalt	7440-48-4	8.06		1.11	0.110	1
06953	Copper	7440-50-8	12.5		2.21	0.321	1
01654	Iron	7439-89-6	30,500		221	20.0	5
06955	Lead	7439-92-1	5.33		3.32	0.554	1
01656	Lithium	7439-93-2	28.7		4.4	0.38	1
01657	Magnesium	7439-95-4	7,360		11.1	1.85	1
06958	Manganese	7439-96-5	315		1.11	0.0919	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	13.6		2.21	0.144	1
10145	Phosphorus	7723-14-0	464		11.1	3.20	1
01662	Potassium	7440-09-7	3,380		111	9.24	1
01667	Sodium	7440-23-5	129		111	18.5	1
06969	Tin	7440-31-5	2.93	J	11.1	0.244	1
06970	Titanium	7440-32-6	1,380		1.11	0.188	1
06971	Vanadium	7440-62-2	66.6		1.11	0.144	1
06972	Zinc	7440-66-6	63.9		4.43	0.221	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218900
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 09:10 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58210 SDG#: PH118-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
10146	Zirconium	7440-67-7	7.74	5.54	0.930	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.150 J	0.443	0.111	2
06142	Silver	7440-22-4	0.221 U	0.221	0.0288	2
06144	Strontium	7440-24-6	48.0	0.443	0.0753	2
06145	Thallium	7440-28-0	0.304	0.221	0.0332	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0178 U	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21 C.	n.a.	8.18	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	10.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/08/2013 06:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/08/2013 20:16	Laura M Krieger	21.78
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327432582	10/01/2013 20:23	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327432582	10/01/2013 20:23	Lois E Hiltz	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132760027A	10/04/2013 21:45	Elizabeth J Marin	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 01:30	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132760027A	10/04/2013 09:15	Katheryne V Sponheimer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA5D-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218900
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 09:10 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58210 SDG#: PH118-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132760019A	10/04/2013 18:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132760019A	10/04/2013 06:00	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/11/2013 06:31	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132750637003	10/11/2013 07:03	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 06:31	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 14:50	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 23:10	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 23:10	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 23:10	David K Beck	2
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 23:10	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:14	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402A	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-595-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218901
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 09:50 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59500 SDG#: PH118-06

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	2.0	1.1	0.44	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.1 C.		n.a.	8.35	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	9.0	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13275275202A	10/02/2013 20:18	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202A	10/02/2013 07:15	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402A	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-595-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218902
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 10:00 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59540 SDG#: PH118-07

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	2.2	1.1	0.44	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.2 C.		n.a.	8.14	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	10.5	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13275275202A	10/02/2013 21:42	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202A	10/02/2013 07:15	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402A	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-595-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218903
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 10:10 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59590 SDG#: PH118-08

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	6.1	2.3	0.93	2
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.1 C.		n.a.	8.18	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	13.8	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	3	13275275202A	10/03/2013 18:19	Sandra J Miller	2
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202A	10/02/2013 07:15	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402A	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-595-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218904
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 10:20 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59514 SDG#: PH118-09

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	8.9	1.2	0.46	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.2 C.		n.a.	8.19	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	14.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13275275202A	10/02/2013 22:16	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202A	10/02/2013 07:15	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402A	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-595-SA5D-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218905
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 10:30 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59517 SDG#: PH118-10

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	5.3	2.3	0.92	2
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.2 C.		n.a.	8.32	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	13.9	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	3	13275275202A	10/03/2013 18:35	Sandra J Miller	2
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202A	10/02/2013 07:15	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402A	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218906
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 12:35 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH118-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	2.1	1.1	0.43	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.4	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13275275202A	10/02/2013 22:49	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202A	10/02/2013 07:15	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218907
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 12:45 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59640 SDG#: PH118-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	1.9	J	2.2	0.89	2
	Reporting limits were raised due to interference from the sample matrix.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	3	13275275202A	10/03/2013 18:52	Sandra J Miller	2
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202A	10/02/2013 07:15	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5D-SB-11.5-12.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218908
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 12:55 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59611 SDG#: PH118-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	2.5	2.2	0.90	2
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.1	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	3	13275275202A	10/03/2013 19:08	Sandra J Miller	2
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202A	10/02/2013 07:15	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-597-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218909
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 13:40 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59700 SDG#: PH118-14

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	2.7	2.2	0.88	2
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.2 C.		n.a.	8.08	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	9.5	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	3	13275275202A	10/03/2013 19:24	Sandra J Miller	2
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202A	10/02/2013 07:15	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402B	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-597-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218910
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 13:50 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59740 SDG#: PH118-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	2.8	2.2	0.89	2
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.4 C.	n.a.	8.13	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	10	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	3	13275275202A	10/03/2013 19:40	Sandra J Miller	2
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202A	10/02/2013 07:15	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402B	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-597-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218911
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 14:00 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59790 SDG#: PH118-16

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	4.2	2.3	0.90	2
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.3 C.		n.a.	8.12	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	11.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	3	13275275202B	10/03/2013 19:56	Sandra J Miller	2
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202B	10/02/2013 07:15	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402B	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-597-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218912
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 14:10 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59714 SDG#: PH118-17

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	2.9	2.2	0.89	2
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.5 C.		n.a.	8.28	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	10.1	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	3	13275275202B	10/03/2013 21:01	Sandra J Miller	2
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202B	10/02/2013 07:15	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402B	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-597-SA5D-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7218913
LL Group # 1422668
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 09/30/2013 14:15 by VC

Submitted: 10/01/2013 09:10
Reported: 10/15/2013 09:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59717 SDG#: PH118-18*

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	3.5	1.1	0.44	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.3 C.		n.a.	8.35	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	9.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13275275202B	10/03/2013 01:55	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13275275202B	10/02/2013 07:15	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13274039402B	10/01/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13277162401B	10/04/2013 23:44	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422668
Reported: 10/15/13 at 09:33 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13276SLA026	Sample number(s): 7218894-7218897,7218899-7218900									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	94		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	97		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	112		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	109		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	97		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	106		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	104		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	98		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	102		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	106		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	119		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		79-112		
Batch number: 13275A20A	Sample number(s): 7218893									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	109	107	75-135	2	30
Batch number: 13281A16A	Sample number(s): 7218895-7218897,7218899-7218900									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	78		67-119		
Batch number: 132760027A	Sample number(s): 7218894-7218897,7218899-7218900									
2,4-D	36	U	36.	12	ug/kg	108		59-122		
Dalapon	90	U	90.	44	ug/kg	72		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	112		54-131		
Dicamba	12	U	12.	4.0	ug/kg	108		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	9*		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	121		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	100		56-133		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	100		54-134		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422668
Reported: 10/15/13 at 09:33 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,4,5-T	1.7	U	1.7	0.82	ug/kg	107		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	114		63-130		
Batch number: 132780008A	Sample number(s): 7218894-7218897,7218899-7218900									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	81	90*	62-87	11	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	96		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	116		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132760019A	Sample number(s): 7218894-7218897,7218899-7218900									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	94		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	99		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	95		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	68		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	76		49-107		
Batch number: 132750637003	Sample number(s): 7218894-7218900									
Aluminum	8.51	J	40.0	7.21	mg/kg	99		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	102		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	97		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		
Calcium	15.2	J	20.0	3.34	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	106		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	102		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	108		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	100		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	100		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	101		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	107		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100	U	100.	8.34	mg/kg	101		80-120		
Sodium	100	U	100.	16.7	mg/kg	100		80-120		
Tin	1.39	J	10.0	0.220	mg/kg	99		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	1.38	J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132750637003A	Sample number(s): 7218894-7218900									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422668
Reported: 10/15/13 at 09:33 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	112		80-120		
Batch number: 132750637003B	Sample number(s): 7218894-7218900									
Selenium	0.400	U	0.400	0.100	mg/kg	111		80-120		
Batch number: 132750638003	Sample number(s): 7218894-7218900									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	108		85-120		
Batch number: 13275275202A	Sample number(s): 7218901-7218910									
1a Anions by 300.0 - Fluoride	1.0	U	1.0	0.40	mg/kg	99		90-110		
Batch number: 13275275202B	Sample number(s): 7218911-7218913									
1a Anions by 300.0 - Fluoride	1.0	U	1.0	0.40	mg/kg	99		90-110		
Batch number: 13274039402A	Sample number(s): 7218894-7218895,7218898-7218905									
15a pH by 9045D						100		95-105		
Batch number: 13274039402B	Sample number(s): 7218909-7218913									
15a pH by 9045D						100		95-105		
Batch number: 13277162401A	Sample number(s): 7218894-7218898									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
Batch number: 13277162401B	Sample number(s): 7218899-7218913									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13277002	Sample number(s): 7218894									
2378-TCDD	1.00	U	1.00	0.109	ng/kg	89		67-158		
12378-PeCDD	5.00	U	5.00	0.0807	ng/kg	96		70-142		
123478-HxCDD	0.0584	J	5.00	0.0464	ng/kg	100		70-164		
123678-HxCDD	5.00	U	5.00	0.0501	ng/kg	98		76-134		
123789-HxCDD	0.0594	J	5.00	0.0518	ng/kg	96		64-162		
1234678-HpCDD	5.00	U	5.00	0.0585	ng/kg	96		70-140		
OCDD	0.386	J	10.0	0.0440	ng/kg	100		78-144		
2378-TCDF	1.00	U	1.00	0.0843	ng/kg	94		75-158		
12378-PeCDF	0.0547	J	5.00	0.0508	ng/kg	96		80-134		
23478-PeCDF	5.00	U	5.00	0.0536	ng/kg	99		68-160		
123478-HxCDF	0.0979	J	5.00	0.0483	ng/kg	98		72-134		
123678-HxCDF	0.0632	J	5.00	0.0458	ng/kg	99		84-130		
123789-HxCDF	5.00	U	5.00	0.0505	ng/kg	98		78-130		
234678-HxCDF	0.104	J	5.00	0.0435	ng/kg	99		70-156		
1234678-HpCDF	0.0524	J	5.00	0.0213	ng/kg	97		82-122		
1234789-HpCDF	0.0495	J	5.00	0.0376	ng/kg	97		78-138		
OCDF	0.187	J	10.0	0.0849	ng/kg	99		63-170		
TEQ WHO 2005 - EDLx0.0	0.00990				ng/kg					

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422668
Reported: 10/15/13 at 09:33 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13276SLA026	Sample number(s): 7218894-7218897,7218899-7218900 UNSPK: 7218895								
Acenaphthene	96	100	48-127	4	30				
Acenaphthylene	102	105	49-121	3	30				
Anthracene	90	93	52-126	4	30				
Benzo(a)anthracene	100	101	44-143	2	30				
Benzo(a)pyrene	96	98	44-140	3	30				
Benzo(b)fluoranthene	99	99	26-142	0	30				
Benzo(e)pyrene	90	91	70-130	2	30				
Benzo(g,h,i)perylene	98	100	33-141	2	30				
Benzo(k)fluoranthene	98	102	54-142	5	30				
Butylbenzylphthalate	116	115	49-151	0	30				
Di-n-butylphthalate	103	106	52-147	3	30				
Chrysene	97	97	29-148	1	30				
Dibenz(a,h)anthracene	100	102	20-137	3	30				
Diethylphthalate	104	107	43-145	3	30				
Dimethylphthalate	100	104	58-129	4	30				
Bis(2-Ethylhexyl)phthalate	111	108	39-167	3	30				
Fluoranthene	94	97	40-148	3	30				
Fluorene	95	100	51-137	6	30				
Indeno(1,2,3-cd)pyrene	100	102	17-136	3	30				
1-Methylnaphthalene	99	102	50-131	3	30				
2-Methylnaphthalene	94	97	35-152	3	30				
Naphthalene	103	103	31-148	0	30				
N-Nitrosodimethylamine	108	106	48-113	1	30				
Di-n-octylphthalate	121	118	52-162	2	30				
Phenanthrene	98	102	29-142	5	30				
Pyrene	98	99	26-143	2	30				
Batch number: 13281A16A	Sample number(s): 7218895-7218897,7218899-7218900 UNSPK: 7218895								
11a TPH by EPA 8015B GRO	87	94	69-123	9	30				
Batch number: 132760027A	Sample number(s): 7218894-7218897,7218899-7218900 UNSPK: 7218895								
2,4-D	113	105	42-143	7	35				
Dalapon	64	54	16-98	16	50				
2,4-DB	121	116	10-179	4	50				
Dicamba	105	94	55-133	11	50				
Dinoseb	10	11	10-52	7	35				
2,4-DP (Dichlorprop)	127	117	32-171	8	50				
MCPA	102	97	23-169	5	50				
MCPP (Mecoprop)	102	99	24-164	3	50				
2,4,5-T	116	108	12-172	7	35				
2,4,5-TP	119	111	10-142	7	35				
Batch number: 132780008A	Sample number(s): 7218894-7218897,7218899-7218900 UNSPK: 7218895								
PCB-1016	88	90	41-135	4	50				

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422668
Reported: 10/15/13 at 09:33 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
PCB-1260	99	111	40-134	12	50				
Batch number: 132760019A	Sample number(s): 7218894-7218897,7218899-7218900 UNSPK: 7218895								
EFH (C12-C14)	93	93	49-123	0	20				
EFH (C15-C20)	102	101	49-123	1	20				
EFH (C21-C30)	95	96	49-123	1	20				
EFH (C30-C40)	84	81	49-123	3	20				
EFH (C8-C11)	76	77	49-123	0	20				
Batch number: 132750637003	Sample number(s): 7218894-7218900 UNSPK: 7218895 BKG: 7218895								
Aluminum	3336 (2)	3044 (2)	75-125	2	20	21,000	21,600	3	20
Antimony	41*	43*	75-125	5	20	3.96 U	3.96 U	0 (1)	20
Arsenic	102	109	75-125	5	20	5.81	5.63	3 (1)	20
Barium	102	101	75-125	1	20	84.1	86.8	3	20
Beryllium	98	98	75-125	0	20	0.681 J	0.696 J	2 (1)	20
Boron	97	97	75-125	1	20	5.04 J	4.95 J	2 (1)	20
Cadmium	95	95	75-125	0	20	0.990 U	0.990 U	0 (1)	20
Calcium	-261 (2)	57 (2)	75-125	6	20	23,200	23,600	2	20
Chromium	115	116	75-125	0	20	30.1	30.5	1	20
Cobalt	94	97	75-125	3	20	7.17	7.17	0	20
Copper	77	77	75-125	0	20	9.90 U	9.90 U	0 (1)	20
Iron	1811 (2)	975 (2)	75-125	3	20	26,600	26,700	0	20
Lead	95	101	75-125	5	20	4.62	4.72	2 (1)	20
Lithium	102	101	75-125	1	20	26.0	26.6	2	20
Magnesium	396 (2)	332 (2)	75-125	2	20	6,720	6,810	1	20
Manganese	133 (2)	148 (2)	75-125	2	20	288	297	3	20
Molybdenum	92	91	75-125	0	20	1.98 U	1.98 U	0 (1)	20
Nickel	95	95	75-125	0	20	12.4	12.3	0	20
Phosphorus	110	102	75-125	2	20	383	383	0	20
Potassium	173*	167*	75-125	1	20	3,430	3,490	2	20
Sodium	100	98	75-125	1	20	129	130	1 (1)	20
Tin	85	85	75-125	0	20	2.64 J	2.71 J	3 (1)	20
Titanium	499 (2)	469 (2)	75-125	2	20	1,200	1,220	2	20
Vanadium	116	116	75-125	0	20	59.8	60.5	1	20
Zinc	103	104	75-125	0	20	61.3	62.2	2	20
Zirconium	97	96	75-125	1	20	7.27	7.41	2 (1)	20
Batch number: 132750637003A	Sample number(s): 7218894-7218900 UNSPK: 7218895 BKG: 7218895								
Silver	101	104	75-125	3	20	0.198 U	0.198 U	0 (1)	20
Strontium	107 (2)	145 (2)	75-125	5	20	54.3	55.6	2	20
Thallium	106	101	75-125	3	20	0.262	0.271	3 (1)	20
Batch number: 132750637003B	Sample number(s): 7218894-7218900 UNSPK: 7218895 BKG: 7218895								
Selenium	93	94	75-125	0	20	0.194 J	0.161 J	18 (1)	20
Batch number: 132750638003	Sample number(s): 7218894-7218900 UNSPK: 7218895 BKG: 7218895								
3a Mercury 7471A	118	114	65-135	3	20	0.0165 U	0.0162 U	0 (1)	20
Batch number: 13275275202A	Sample number(s): 7218901-7218910 UNSPK: 7218901 BKG: 7218901								

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422668
Reported: 10/15/13 at 09:33 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc		DUP RPD	Dup RPD Max
1a Anions by 300.0 - Fluoride	65*		80-120			1.9	2.0	J	6 (1)	20
Batch number: 13275275202B	Sample number(s): 7218911-7218913 UNSPK: 7218911 BKG: 7218911									
1a Anions by 300.0 - Fluoride	23*		80-120			3.7	4.1		8 (1)	20
Batch number: 13274039402A	Sample number(s): 7218894-7218895,7218898-7218905 BKG: 7218895									
15a pH by 9045D						8.18	8.20		0	3
Batch number: 13274039402B	Sample number(s): 7218909-7218913 BKG: 7218913									
15a pH by 9045D						8.35	8.33		0	3
Batch number: 13277162401A	Sample number(s): 7218894-7218898 BKG: 7218895									
14a Moisture Content by 160.3						11.7	11.5		1	20
14a Moisture Content by 160.3						11.7	11.5		1	20
14a Moisture Content by 160.3						11.7	11.5		1	20
Batch number: 13277162401B	Sample number(s): 7218899-7218913 BKG: 7218899									
14a Moisture Content by 160.3						11.6	11.8		2	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13276SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7218894	85	96	102
7218895	86	93	98
7218896	85	94	100
7218897	87	96	100
7218899	91	98	107
7218900	90	99	105
Blank	89	96	100
LCS	92	99	105
MS	85	94	100
MSD	87	96	100
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13275A20A

	Trifluorotoluene-F
7218893	92
Blank	92
LCS	98

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422668
Reported: 10/15/13 at 09:33 AM

Surrogate Quality Control

LCSD	99	
Limits:	63-135	

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13281A16A

	Trifluorotoluene-F
7218895	87
7218896	85
7218897	93
7218899	96
7218900	87
Blank	102
LCS	86
MS	85
MSD	93
Limits:	50-142

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132760027A

	2,4-Dichlorophenylacetic acid
7218894	89
7218895	91
7218896	101
7218897	97
7218899	90
7218900	90
Blank	92
LCS	101
MS	101
MSD	97
Limits:	50-150

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132780008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7218894	107	109
7218895	117	117
7218896	107	109
7218897	113	113
7218899	112	114
7218900	115	115
Blank	112	112
LCS	117	122*
LCSD	120	123*
MS	107	109
MSD	113	113
Limits:	45-120	45-120

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1422668
Reported: 10/15/13 at 09:33 AM

Surrogate Quality Control

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132760019A

	Chlorobenzene	Orthoterphenyl
7218894	104	93
7218895	106	91
7218896	110	86
7218897	108	90
7218899	106	92
7218900	109	94
Blank	109	90
LCS	105	90
MS	110	86
MSD	108	90
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13277002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7218894	72	69	76	83	81	105
Blank	66	63	69	80	77	84
OPR	65	61	71	79	77	76
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7218894	101	76	71	75	80	88
Blank	91	68	65	67	78	83
OPR	91	71	72	68	79	83
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7218894	88	88	86	63	75
Blank	82	83	84	58	68
OPR	84	83	92	58	65
Limits:	28-130	23-140	17-157	24-169	24-185

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(2) The unspiked result was more than four times the spike added.

13013 1422668 7218893-13

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/30/2013
CarrierName: FedEx
AirbillNo: 796803920665

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130930-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-093013	9/30/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-582-SA5D-SB-0.0-0.5	9/30/13 08:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X					X										
SL-582-SA5D-SB-0.0-0.5	9/30/13 08:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-582-SA5D-SB-4.0-5.0MS	9/30/13 08:55	SO	None	6 - 16 oz glass	10 day	X	X					X			X			X			X					X										MS/MSD
SL-582-SA5D-SB-4.0-5.0MS	9/30/13 08:55	SO	None	6 - Encore	10 day																			X												MS/MSD
SL-882-SA5D-SB-4.0-5.0	9/30/13 09:00	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X			X					X										
SL-882-SA5D-SB-4.0-5.0	9/30/13 09:00	SO	None	2 - Encore	10 day																			X												
SL-582-SA5D-SB-10.0-11.0	9/30/13 09:10	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X			X					X										
SL-582-SA5D-SB-10.0-11.0	9/30/13 09:10	SO	None	2 - Encore	10 day																			X												
SL-595-SA5D-SB-0.0-0.5	9/30/13 09:50	SO	None	1 - SS-Sleeve	10 day				X																											
SL-595-SA5D-SB-0.0-0.5	9/30/13 09:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-595-SA5D-SB-4.0-5.0	9/30/13 10:00	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-595-SA5D-SB-9.0-10.0	9/30/13 10:10	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-595-SA5D-SB-14.0-15.0	9/30/13 10:20	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-595-SA5D-SB-17.0-18.0	9/30/13 10:30	SO	None	1 - 8 oz glass	10 day				X									X																		

Special Instructions:

Sampler: V. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[signature]	09/30/2013	1600									
										10-1-13	0916

COC Rev 2

COC 20130930-01, Page 1 of 1

13013 1422668 7218893-13

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 9/30/2013
CarrierName: FedEx
AirbillNo: 796803920665

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130930-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-596-SA5D-SB-0.0-0.5	9/30/13 12:35	SO	None	1 - SS-Sleeve	10 day				X																											
SL-596-SA5D-SB-4.0-5.0	9/30/13 12:45	SO	None	1 - 4 oz glass	10 day				X																											
SL-596-SA5D-SB-11.5-12.5	9/30/13 12:55	SO	None	1 - 4 oz glass	10 day				X																											
SL-597-SA5D-SB-0.0-0.5	9/30/13 13:40	SO	None	1 - SS-Sleeve	10 day				X																											
SL-597-SA5D-SB-0.0-0.5	9/30/13 13:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-597-SA5D-SB-4.0-5.0	9/30/13 13:50	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-597-SA5D-SB-9.0-10.0	9/30/13 14:00	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-597-SA5D-SB-14.0-15.0	9/30/13 14:10	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-597-SA5D-SB-17.0-18.0	9/30/13 14:15	SO	None	1 - 8 oz glass	10 day				X									X																		

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shyf Mype	09/30/2013	1600									
										10-1-13	0916

COC Rev 2

COC 20130930-02, Page 1 of 1

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Environmental Sample Administration Receipt Documentation Log

1422668

Client/Project: CDM

Date of Receipt: 10-1-13

Time of Receipt: 0910

Source Code: Sc

Shipping Container Sealed: YES NO

Custody Seal Present * : YES NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	0.8	TB	WI	Y	B	
2	↓	1.2	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 52...

Date/Time: 10-1-13 1022

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH119

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 16, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 10/02/2013
Group Number: 1423103
SDG: PH119
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-100113 Water	7220652
SL-570-SA5D-SB-0.0-0.5 Soil	7220653
SL-570-SA5D-SB-4.0-5.0 Soil	7220654
SL-598-SA5D-SB-0.0-0.5 Soil	7220655
SL-598-SA5D-SB-4.0-5.0 Soil	7220656
SL-598-SA5D-SB-9.0-10.0 Soil	7220657
SL-598-SA5D-SB-14.0-15.0 Soil	7220658
SL-598-SA5D-SB-18.0-19.0 Soil	7220659
SL-564-SA5D-SB-0.0-0.5 Soil	7220660
SL-564-SA5D-SB-4.0-5.0 Soil	7220661
SL-607-SA5D-SB-0.0-0.5 Soil	7220662
SL-607-SA5D-SB-4.0-5.0 Soil	7220663

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-100113 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7220652
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 08:00

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

119TB SDG#: PH119-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13277A20A	10/07/2013 12:02	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13277A20A	10/07/2013 12:02	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220653
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:10

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH119-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	39	U	39	13	1
10401	Dalapon	75-99-0	98	U	98	48	1
10401	2,4-DB	94-82-6	19	U	19	6.8	1
10401	Dicamba	1918-00-9	13	U	13	4.4	1
10401	Dinoseb	88-85-7	26	U	26	9.8	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	9.8	1
10401	MCPA	94-74-6	2,700	U	2,700	830	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	820	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.89	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.82	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.38	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220653
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:10

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH119-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	0.91	U	0.91	0.49	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.65	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,100		42.8	7.71	1
06944	Antimony	7440-36-0	4.28	U	4.28	0.791	1
06935	Arsenic	7440-38-2	4.54		4.28	0.748	1
06946	Barium	7440-39-3	127		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.667	J	1.07	0.0716	1
07914	Boron	7440-42-8	6.97	J	10.7	0.898	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220653
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:10

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH119-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0813	1
01650	Calcium	7440-70-2	25,500		21.4	3.57	1
06951	Chromium	7440-47-3	31.9		3.21	0.171	1
06952	Cobalt	7440-48-4	7.99		1.07	0.106	1
06953	Copper	7440-50-8	13.2		2.14	0.310	1
01654	Iron	7439-89-6	30,400		214	19.4	5
06955	Lead	7439-92-1	4.36		3.21	0.535	1
01656	Lithium	7439-93-2	40.5		4.3	0.36	1
01657	Magnesium	7439-95-4	8,350		10.7	1.79	1
06958	Manganese	7439-96-5	245		1.07	0.0887	1
06960	Molybdenum	7439-98-7	2.14	U	2.14	0.182	1
06961	Nickel	7440-02-0	15.3		2.14	0.139	1
10145	Phosphorus	7723-14-0	583		10.7	3.09	1
01662	Potassium	7440-09-7	4,350		107	8.92	1
01667	Sodium	7440-23-5	138		107	17.9	1
06969	Tin	7440-31-5	2.90	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,270		1.07	0.182	1
06971	Vanadium	7440-62-2	61.0		1.07	0.139	1
06972	Zinc	7440-66-6	73.7		4.28	0.214	1
10146	Zirconium	7440-67-7	6.75		5.35	0.898	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.177	J	0.428	0.107	2
06142	Silver	7440-22-4	0.214	U	0.214	0.0278	2
06144	Strontium	7440-24-6	62.9		0.428	0.0727	2
06145	Thallium	7440-28-0	0.338		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.17		0.0100	0.0100	1
	The pH was measured in water at 19.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220653
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:10

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH119-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0394	1
11031	12378-PeCDD	40321-76-4	0.0532	JB	5.32	0.0253	1
11031	123478-HxCDD	39227-28-6	0.0355	JQ	5.32	0.0180	1
11031	123678-HxCDD	57653-85-7	0.0568	JBQ	5.32	0.0192	1
11031	123789-HxCDD	19408-74-3	0.0504	JB	5.32	0.0178	1
11031	1234678-HpCDD	35822-46-9	0.235	JBQ	5.32	0.0215	1
11031	OCDD	3268-87-9	1.53	JB	10.6	0.0222	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0248	1
11031	12378-PeCDF	57117-41-6	0.0599	JBQ	5.32	0.0133	1
11031	23478-PeCDF	57117-31-4	0.0432	JBQ	5.32	0.0131	1
11031	123478-HxCDF	70648-26-9	0.0512	JBQ	5.32	0.0113	1
11031	123678-HxCDF	57117-44-9	0.0321	JBQ	5.32	0.0105	1
11031	123789-HxCDF	72918-21-9	0.0565	JBQ	5.32	0.0121	1
11031	234678-HxCDF	60851-34-5	0.0544	JB	5.32	0.0112	1
11031	1234678-HpCDF	67562-39-4	0.0877	JBQ	5.32	0.00698	1
11031	1234789-HpCDF	55673-89-7	0.0742	JBQ	5.32	0.00992	1
11031	OCDF	39001-02-0	0.167	JBQ	10.6	0.0230	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0641				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	62	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220653
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:10

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH119-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220653
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:10

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH119-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/08/2013 06:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132820019A	10/11/2013 18:24	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132760006A	10/07/2013 12:27	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 01:48	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132760006A	10/03/2013 16:25	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132820019A	10/10/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132800038A	10/08/2013 22:15	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132800038A	10/08/2013 07:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13281002	10/11/2013 01:13	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13281002	10/08/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/11/2013 06:35	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132750637003	10/11/2013 07:07	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 06:35	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220653
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:10

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH119-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 14:54	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 23:12	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 23:12	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 23:12	David K Beck	2
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 23:12	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:20	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13275039403A	10/02/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401A	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220654
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:20

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH119-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	0.41	J	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	2.2		1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.5	J	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	2.4		1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.0	J	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	2.6		1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	4.4		1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.1	J	1.8	0.74	1
12969	Naphthalene	91-20-3	1.1	J	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.8	J	1.8	0.74	1
12969	Pyrene	129-00-0	4.0		1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.85
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	100	U	100	49	1
10401	2,4-DB	94-82-6	19	U	19	6.9	1
10401	Dicamba	1918-00-9	13	U	13	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	850	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	840	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.92	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.84	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.93	U	0.93	0.19	1
10590	Alpha BHC	319-84-6	0.93	U	0.93	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.93	U	0.93	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220654
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:20

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH119-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.93	U	0.93	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.93	U	0.93	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.93	U	0.93	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.93	U	0.93	0.19	1
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,500		44.3	7.98	1
06944	Antimony	7440-36-0	4.43	U	4.43	0.819	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220654
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:20

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH119-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	5.33		4.43	0.774	1
06946	Barium	7440-39-3	99.4		1.11	0.0365	1
06947	Beryllium	7440-41-7	0.556	J	1.11	0.0741	1
07914	Boron	7440-42-8	6.60	J	11.1	0.929	1
06949	Cadmium	7440-43-9	0.218	J	1.11	0.0841	1
01650	Calcium	7440-70-2	90,600		111	18.5	5
06951	Chromium	7440-47-3	26.9		3.32	0.177	1
06952	Cobalt	7440-48-4	6.54		1.11	0.110	1
06953	Copper	7440-50-8	10.1		2.21	0.321	1
01654	Iron	7439-89-6	28,900		44.3	4.00	1
06955	Lead	7439-92-1	3.05	J	3.32	0.553	1
01656	Lithium	7439-93-2	31.7		4.4	0.38	1
01657	Magnesium	7439-95-4	7,070		11.1	1.85	1
06958	Manganese	7439-96-5	297		1.11	0.0918	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	12.6		2.21	0.144	1
10145	Phosphorus	7723-14-0	538		11.1	3.20	1
01662	Potassium	7440-09-7	3,520		111	9.23	1
01667	Sodium	7440-23-5	136		111	18.5	1
06969	Tin	7440-31-5	0.977	J	11.1	0.243	1
06970	Titanium	7440-32-6	912		1.11	0.188	1
06971	Vanadium	7440-62-2	51.9		1.11	0.144	1
06972	Zinc	7440-66-6	61.0		4.43	0.221	1
10146	Zirconium	7440-67-7	6.05		5.53	0.929	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.177	J	0.443	0.111	2
06142	Silver	7440-22-4	0.221	U	0.221	0.0288	2
06144	Strontium	7440-24-6	110		1.11	0.188	5
06145	Thallium	7440-28-0	0.274		0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.67		0.0100	0.0100	1
	The pH was measured in water at 20.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220654
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:20

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH119-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/08/2013 07:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/08/2013 20:54	Laura M Krieger	24.85
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327532606	10/02/2013 17:02	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327532606	10/02/2013 17:02	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132820019A	10/11/2013 19:43	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132760006A	10/07/2013 12:42	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 02:06	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132760006A	10/03/2013 16:25	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132820019A	10/10/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132800038A	10/09/2013 01:05	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132800038A	10/08/2013 07:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/11/2013 07:18	Tara L Snyder	5
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/11/2013 06:39	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 06:39	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220654
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 10:20

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH119-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 14:58	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 23:15	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 23:15	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 23:34	David K Beck	5
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 23:15	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:22	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13275039403A	10/02/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401A	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-598-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220655
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 08:35

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59800 SDG#: PH119-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	2.2	1.1	0.42	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.6	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201A	10/11/2013 21:36	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201A	10/10/2013 07:05	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401A	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-598-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220656
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 08:45

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59840 SDG#: PH119-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	2.9	1.1	0.45	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.0	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201A	10/11/2013 22:25	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201A	10/10/2013 07:05	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401A	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-598-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220657
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 08:55

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59890 SDG#: PH119-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	2.5	1.1	0.46	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.8	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201A	10/11/2013 23:14	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201A	10/10/2013 07:05	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401A	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-598-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220658
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 09:05

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59814 SDG#: PH119-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	3.1	1.2	0.47	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	15.5	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201A	10/11/2013 23:30	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201A	10/10/2013 07:05	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-598-SA5D-SB-18.0-19.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220659
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 09:15

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59818 SDG#: PH119-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	3.8	1.2	0.47	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.8	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201A	10/11/2013 23:46	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201A	10/10/2013 07:05	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220660
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 12:50

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56400 SDG#: PH119-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220660
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 12:50

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56400 SDG#: PH119-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,600		42.7	7.69	1
06944	Antimony	7440-36-0	4.27	U	4.27	0.790	1
06935	Arsenic	7440-38-2	7.67		4.27	0.747	1
06946	Barium	7440-39-3	96.1		1.07	0.0352	1
06947	Beryllium	7440-41-7	0.974	J	1.07	0.0715	1
07914	Boron	7440-42-8	7.13	J	10.7	0.896	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0811	1
01650	Calcium	7440-70-2	98,100		107	17.8	5
06951	Chromium	7440-47-3	29.7		3.20	0.171	1
06952	Cobalt	7440-48-4	7.47		1.07	0.106	1
06953	Copper	7440-50-8	19.1		2.13	0.309	1
01654	Iron	7439-89-6	45,200		213	19.3	5
06955	Lead	7439-92-1	5.73		3.20	0.533	1
01656	Lithium	7439-93-2	26.3		4.3	0.36	1
01657	Magnesium	7439-95-4	7,820		10.7	1.78	1
06958	Manganese	7439-96-5	260		1.07	0.0886	1
06960	Molybdenum	7439-98-7	2.13	U	2.13	0.181	1
06961	Nickel	7440-02-0	20.2		2.13	0.139	1
10145	Phosphorus	7723-14-0	533		10.7	3.08	1
01662	Potassium	7440-09-7	3,920		107	8.90	1
01667	Sodium	7440-23-5	163		107	17.8	1
06969	Tin	7440-31-5	2.75	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,320		1.07	0.181	1
06971	Vanadium	7440-62-2	66.0		1.07	0.139	1
06972	Zinc	7440-66-6	87.1		4.27	0.213	1
10146	Zirconium	7440-67-7	8.48		5.33	0.896	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.227	J	0.427	0.107	2
06142	Silver	7440-22-4	0.0504	J	0.213	0.0277	2
06144	Strontium	7440-24-6	196		2.13	0.363	10
06145	Thallium	7440-28-0	0.331		0.213	0.0320	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0258		0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.70		0.0100	0.0100	1
	The pH was measured in water at 20.9 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220660
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 12:50

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56400 SDG#: PH119-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	7.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220660
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 12:50

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56400 SDG#: PH119-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0495 JBQ	1.04	0.0383	1
11031	12378-PeCDD	40321-76-4	5.22 U	5.22	0.0269	1
11031	123478-HxCDD	39227-28-6	0.0308 JQ	5.22	0.0164	1
11031	123678-HxCDD	57653-85-7	5.22 U	5.22	0.0172	1
11031	123789-HxCDD	19408-74-3	0.0569 JBQ	5.22	0.0156	1
11031	1234678-HpCDD	35822-46-9	0.0954 JBQ	5.22	0.0175	1
11031	OCDD	3268-87-9	0.289 JBQ	10.4	0.0230	1
11031	2378-TCDF	51207-31-9	1.04 U	1.04	0.0333	1
11031	12378-PeCDF	57117-41-6	0.0728 JB	5.22	0.0158	1
11031	23478-PeCDF	57117-31-4	0.0515 JBQ	5.22	0.0164	1
11031	123478-HxCDF	70648-26-9	0.0209 JBQ	5.22	0.0152	1
11031	123678-HxCDF	57117-44-9	0.0273 JBQ	5.22	0.0137	1
11031	123789-HxCDF	72918-21-9	0.0890 JBQ	5.22	0.0154	1
11031	234678-HxCDF	60851-34-5	0.0550 JBQ	5.22	0.0134	1
11031	1234678-HpCDF	67562-39-4	0.0856 JBQ	5.22	0.00744	1
11031	1234789-HpCDF	55673-89-7	0.0361 JBQ	5.22	0.0115	1
11031	OCDF	39001-02-0	0.188 JB	10.4	0.0263	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00226			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220660
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 12:50

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56400 SDG#: PH119-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220660
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 12:50

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56400 SDG#: PH119-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/08/2013 08:05	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 02:25	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132800038A	10/08/2013 23:19	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132800038A	10/08/2013 07:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13281002	10/11/2013 02:10	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13281002	10/08/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/11/2013 07:22	Tara L Snyder	5
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/11/2013 06:43	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132750637003	10/11/2013 07:22	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 06:43	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 15:03	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 23:17	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 23:17	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 23:37	David K Beck	10
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 23:17	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220660
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 12:50

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56400 SDG#: PH119-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13275039403A	10/02/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220661
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 13:00

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56440 SDG#: PH119-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.24
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s)

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220661
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 13:00

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56440 SDG#: PH119-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
was not detected in the sample, the data is reported.							
GC Petroleum Hydrocarbons		**SW-846 8015B modified**	**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals		**SW-846 6010C**	**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,200		44.2	7.97	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.818	1
06935	Arsenic	7440-38-2	7.36		4.42	0.774	1
06946	Barium	7440-39-3	96.5		1.11	0.0365	1
06947	Beryllium	7440-41-7	0.864	J	1.11	0.0740	1
07914	Boron	7440-42-8	9.38	J	11.1	0.928	1
06949	Cadmium	7440-43-9	1.11	U	1.11	0.0840	1
01650	Calcium	7440-70-2	79,000		111	18.5	5
06951	Chromium	7440-47-3	27.0		3.32	0.177	1
06952	Cobalt	7440-48-4	12.9		1.11	0.109	1
06953	Copper	7440-50-8	7.17		2.21	0.320	1
01654	Iron	7439-89-6	30,700		221	20.0	5
06955	Lead	7439-92-1	12.5		3.32	0.553	1
01656	Lithium	7439-93-2	25.8		4.4	0.38	1
01657	Magnesium	7439-95-4	7,960		11.1	1.85	1
06958	Manganese	7439-96-5	369		1.11	0.0917	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	18.2		2.21	0.144	1
10145	Phosphorus	7723-14-0	584		11.1	3.19	1
01662	Potassium	7440-09-7	4,150		111	9.22	1
01667	Sodium	7440-23-5	346		111	18.5	1
06969	Tin	7440-31-5	2.73	J	11.1	0.243	1
06970	Titanium	7440-32-6	1,010		1.11	0.188	1
06971	Vanadium	7440-62-2	58.7		1.11	0.144	1
06972	Zinc	7440-66-6	81.4		4.42	0.221	1
10146	Zirconium	7440-67-7	10.9		5.53	0.928	1
		SW-846 6020A	**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.195	J	0.442	0.111	2
06142	Silver	7440-22-4	0.221	U	0.221	0.0287	2
06144	Strontium	7440-24-6	215		2.21	0.376	10
06145	Thallium	7440-28-0	0.285		0.221	0.0332	2
		SW-846 7471B	**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0202		0.0184	0.0110	1
Wet Chemistry		**SW-846 9045D modified**	**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.20		0.0100	0.0100	1
	The pH was measured in water at 20.7 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220661
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 13:00

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56440 SDG#: PH119-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	10.4	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/08/2013 08:37	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/08/2013 21:32	Laura M Krieger	22.24
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327532606	10/02/2013 17:04	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327532606	10/02/2013 17:05	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 02:43	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132800038A	10/08/2013 23:40	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132800038A	10/08/2013 07:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/11/2013 07:26	Tara L Snyder	5
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132750637003	10/11/2013 07:26	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 06:47	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220661
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 13:00

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56440 SDG#: PH119-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 15:07	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 23:19	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 23:19	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 23:39	David K Beck	10
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 23:19	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:26	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13275039403A	10/02/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220662
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 13:55

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH119-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	0.82	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220662
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 13:55

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH119-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,000		42.5	7.67	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.787	1
06935	Arsenic	7440-38-2	7.85		4.25	0.744	1
06946	Barium	7440-39-3	150		1.06	0.0351	1
06947	Beryllium	7440-41-7	1.11		1.06	0.0713	1
07914	Boron	7440-42-8	4.64	J	10.6	0.893	1
06949	Cadmium	7440-43-9	1.06	U	1.06	0.0808	1
01650	Calcium	7440-70-2	6,900		21.3	3.55	1
06951	Chromium	7440-47-3	40.2		3.19	0.170	1
06952	Cobalt	7440-48-4	10.5		1.06	0.105	1
06953	Copper	7440-50-8	18.9		2.13	0.308	1
01654	Iron	7439-89-6	37,500		213	19.2	5
06955	Lead	7439-92-1	7.99		3.19	0.532	1
01656	Lithium	7439-93-2	27.4		4.3	0.36	1
01657	Magnesium	7439-95-4	7,860		10.6	1.78	1
06958	Manganese	7439-96-5	439		1.06	0.0883	1
06960	Molybdenum	7439-98-7	0.190	J	2.13	0.181	1
06961	Nickel	7440-02-0	20.8		2.13	0.138	1
10145	Phosphorus	7723-14-0	308		10.6	3.07	1
01662	Potassium	7440-09-7	4,870		106	8.87	1
01667	Sodium	7440-23-5	134		106	17.8	1
06969	Tin	7440-31-5	3.04	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,570		1.06	0.181	1
06971	Vanadium	7440-62-2	76.7		1.06	0.138	1
06972	Zinc	7440-66-6	80.3		4.25	0.213	1
10146	Zirconium	7440-67-7	8.10		5.32	0.893	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.177	J	0.425	0.106	2
06142	Silver	7440-22-4	0.0545	J	0.213	0.0277	2
06144	Strontium	7440-24-6	41.9		0.425	0.0723	2
06145	Thallium	7440-28-0	0.389		0.213	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0121	J	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.08		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220662
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 13:55

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH119-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	6.9	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220662
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 13:55

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH119-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05 U	1.05	0.0369	1
11031	12378-PeCDD	40321-76-4	0.0276 JBQ	5.25	0.0228	1
11031	123478-HxCDD	39227-28-6	0.0561 J	5.25	0.0230	1
11031	123678-HxCDD	57653-85-7	0.108 JBQ	5.25	0.0242	1
11031	123789-HxCDD	19408-74-3	0.256 JBQ	5.25	0.0219	1
11031	1234678-HpCDD	35822-46-9	0.239 JB	5.25	0.0205	1
11031	OCDD	3268-87-9	0.701 JBQ	10.5	0.0226	1
11031	2378-TCDF	51207-31-9	0.0277 JQ	1.05	0.0252	1
11031	12378-PeCDF	57117-41-6	0.0885 JBQ	5.25	0.0131	1
11031	23478-PeCDF	57117-31-4	0.0442 JB	5.25	0.0129	1
11031	123478-HxCDF	70648-26-9	0.0311 JBQ	5.25	0.0131	1
11031	123678-HxCDF	57117-44-9	0.0334 JBQ	5.25	0.0122	1
11031	123789-HxCDF	72918-21-9	0.411 JB	5.25	0.0134	1
11031	234678-HxCDF	60851-34-5	0.0348 JBQ	5.25	0.0119	1
11031	1234678-HpCDF	67562-39-4	0.0307 JB	5.25	0.00698	1
11031	1234789-HpCDF	55673-89-7	0.0229 JBQ	5.25	0.00934	1
11031	OCDF	39001-02-0	0.125 JBQ	10.5	0.0214	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0627			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220662
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 13:55

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH119-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220662
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 13:55

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH119-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/08/2013 09:11	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 03:02	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132800038A	10/09/2013 00:01	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132800038A	10/08/2013 07:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13281002	10/11/2013 03:06	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13281002	10/08/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/11/2013 06:51	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132750637003	10/11/2013 07:30	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 06:51	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 15:12	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 23:22	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 23:22	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 23:22	David K Beck	2
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 23:22	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220662
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 13:55

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH119-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:28	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13275039403A	10/02/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220663
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 14:05

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60740 SDG#: PH119-12*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.2	J	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.44
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s)

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220663
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 14:05

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60740 SDG#: PH119-12*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
was not detected in the sample, the data is reported.							
GC Petroleum Hydrocarbons		**SW-846 8015B modified**	**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals		**SW-846 6010C**	**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,000		46.1	8.30	1
06944	Antimony	7440-36-0	4.61	U	4.61	0.852	1
06935	Arsenic	7440-38-2	7.63		4.61	0.806	1
06946	Barium	7440-39-3	108		1.15	0.0380	1
06947	Beryllium	7440-41-7	0.937	J	1.15	0.0771	1
07914	Boron	7440-42-8	4.47	J	11.5	0.967	1
06949	Cadmium	7440-43-9	0.0979	J	1.15	0.0875	1
01650	Calcium	7440-70-2	5,400		23.0	3.85	1
06951	Chromium	7440-47-3	33.3		3.45	0.184	1
06952	Cobalt	7440-48-4	9.29		1.15	0.114	1
06953	Copper	7440-50-8	15.8		2.30	0.334	1
01654	Iron	7439-89-6	31,200		230	20.8	5
06955	Lead	7439-92-1	7.44		3.45	0.576	1
01656	Lithium	7439-93-2	26.0		4.6	0.39	1
01657	Magnesium	7439-95-4	6,450		11.5	1.92	1
06958	Manganese	7439-96-5	377		1.15	0.0956	1
06960	Molybdenum	7439-98-7	2.30	U	2.30	0.196	1
06961	Nickel	7440-02-0	17.4		2.30	0.150	1
10145	Phosphorus	7723-14-0	314		11.5	3.33	1
01662	Potassium	7440-09-7	3,590		115	9.60	1
01667	Sodium	7440-23-5	153		115	19.2	1
06969	Tin	7440-31-5	3.11	J	11.5	0.253	1
06970	Titanium	7440-32-6	1,450		1.15	0.196	1
06971	Vanadium	7440-62-2	65.9		1.15	0.150	1
06972	Zinc	7440-66-6	66.0		4.61	0.230	1
10146	Zirconium	7440-67-7	7.16		5.76	0.967	1
		SW-846 6020A	**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.461	U	0.461	0.115	2
06142	Silver	7440-22-4	0.0456	J	0.230	0.0299	2
06144	Strontium	7440-24-6	32.4		0.461	0.0783	2
06145	Thallium	7440-28-0	0.325		0.230	0.0345	2
		SW-846 7471B	**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0191	U	0.0191	0.0114	1
Wet Chemistry		**SW-846 9045D modified**	**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.04		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220663
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 14:05

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60740 SDG#: PH119-12*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	14.0	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13276SLA026	10/08/2013 09:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13276SLA026	10/04/2013 06:00	Roman Kuropatkin	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/08/2013 22:10	Laura M Krieger	21.44
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327532606	10/02/2013 17:03	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327532606	10/02/2013 17:03	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 03:20	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132800038A	10/09/2013 01:26	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132800038A	10/08/2013 07:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132750637003	10/11/2013 06:56	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132750637003	10/11/2013 07:33	Tara L Snyder	5
06955	Lead	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132750637003	10/11/2013 06:56	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7220663
LL Group # 1423103
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/01/2013 14:05

Submitted: 10/02/2013 09:40
Reported: 10/16/2013 09:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60740 SDG#: PH119-12*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132750637003	10/10/2013 15:16	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132750637003B	10/10/2013 23:24	David K Beck	2
06142	Silver	SW-846 6020A	1	132750637003A	10/10/2013 23:24	David K Beck	2
06144	Strontium	SW-846 6020A	1	132750637003A	10/10/2013 23:24	David K Beck	2
06145	Thallium	SW-846 6020A	1	132750637003A	10/10/2013 23:24	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132750638003	10/03/2013 06:30	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132750637003	10/02/2013 23:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132750638003	10/03/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13275039403A	10/02/2013 22:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423103
Reported: 10/16/13 at 09:34 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13276SLA026	Sample number(s): 7220653-7220654,7220660-7220663									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	94		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	97		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	112		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	109		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	97		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	106		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	104		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	98		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	102		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	106		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	119		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		79-112		
Batch number: 13277A20A	Sample number(s): 7220652									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	108	110	75-135	2	30
Batch number: 13281A16A	Sample number(s): 7220654,7220661,7220663									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	78		67-119		
Batch number: 132820019A	Sample number(s): 7220653-7220654									
2,4-D	36	U	36.	12	ug/kg	104		59-122		
Dalapon	90	U	90.	44	ug/kg	89		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	111		54-131		
Dicamba	12	U	12.	4.0	ug/kg	88		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	34		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	124		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	96		56-133		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	98		54-134		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423103
Reported: 10/16/13 at 09:34 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	112		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	113		63-130		
Batch number: 132760006A	Sample number(s): 7220653-7220654									
Aldrin	0.83	U	0.83	0.17	ug/kg	95		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	99		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	97		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	95		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	103		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	104		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	103		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	101		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	106		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	100		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	109		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	112		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	101		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	104		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	104		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	95		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	103		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	97		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132780008A	Sample number(s): 7220653-7220654,7220660-7220663									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	81	90*	62-87	11	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	96		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	116		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132800038A	Sample number(s): 7220653-7220654,7220660-7220663									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	86		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	92		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	86		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	65		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	71		49-107		
Batch number: 132750637003	Sample number(s): 7220653-7220654,7220660-7220663									
Aluminum	8.51	J	40.0	7.21	mg/kg	99		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	102		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	97		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423103
Reported: 10/16/13 at 09:34 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Calcium	15.2	J	20.0	3.34	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	106		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	102		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	108		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	100		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	100		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	101		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	107		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100	U	100.	8.34	mg/kg	101		80-120		
Sodium	100	U	100.	16.7	mg/kg	100		80-120		
Tin	1.39	J	10.0	0.220	mg/kg	99		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	1.38	J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132750637003A	Sample number(s): 7220653-7220654,7220660-7220663									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	112		80-120		
Batch number: 132750637003B	Sample number(s): 7220653-7220654,7220660-7220663									
Selenium	0.400	U	0.400	0.100	mg/kg	111		80-120		
Batch number: 132750638003	Sample number(s): 7220653-7220654,7220660-7220663									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	108		85-120		
Batch number: 13283283201A	Sample number(s): 7220655-7220659									
1a Anions by 300.0 - Fluoride	1.0	U	1.0	0.40	mg/kg	103		90-110		
Batch number: 13275039403A	Sample number(s): 7220653-7220654,7220660-7220663									
15a pH by 9045D						100		95-105		
Batch number: 13283162401A	Sample number(s): 7220653-7220657									
14a Moisture Content by 160.3						100		80-120		
Batch number: 13283162401B	Sample number(s): 7220658-7220663									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13281002	Sample number(s): 7220653,7220660,7220662									
2378-TCDD	0.0417	J	1.00	0.0338	ng/kg	95		67-158		
12378-PeCDD	0.0514	J	5.00	0.0266	ng/kg	98		70-142		
123478-HxCDD	5.00	U	5.00	0.0164	ng/kg	97		70-164		
123678-HxCDD	0.0350	J	5.00	0.0174	ng/kg	100		76-134		
123789-HxCDD	0.0212	J	5.00	0.0159	ng/kg	95		64-162		
1234678-HpCDD	0.0871	J	5.00	0.0158	ng/kg	97		70-140		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423103
Reported: 10/16/13 at 09:34 AM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
OCDD	0.306	J	10.0	0.0198	ng/kg	95		78-144		
2378-TCDF	1.00	U	1.00	0.0273	ng/kg	99		75-158		
12378-PeCDF	0.0743	J	5.00	0.0144	ng/kg	93		80-134		
23478-PeCDF	0.0383	J	5.00	0.0145	ng/kg	94		68-160		
123478-HxCDF	0.0397	J	5.00	0.0110	ng/kg	94		72-134		
123678-HxCDF	0.0378	J	5.00	0.00990	ng/kg	98		84-130		
123789-HxCDF	0.0565	J	5.00	0.0115	ng/kg	98		78-130		
234678-HxCDF	0.0495	J	5.00	0.0101	ng/kg	95		70-156		
1234678-HpCDF	0.0654	J	5.00	0.00590	ng/kg	94		82-122		
1234789-HpCDF	0.0445	J	5.00	0.00920	ng/kg	96		78-138		
OCDF	0.161	J	10.0	0.0258	ng/kg	96		63-170		
TEQ WHO 2005 - EDLx0.0	0.0456				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13276SLA026	Sample number(s): 7220653-7220654,7220660-7220663 UNSPK: P218895								
Acenaphthene	96	100	48-127	4	30				
Acenaphthylene	102	105	49-121	3	30				
Anthracene	90	93	52-126	4	30				
Benzo(a)anthracene	100	101	44-143	2	30				
Benzo(a)pyrene	96	98	44-140	3	30				
Benzo(b)fluoranthene	99	99	26-142	0	30				
Benzo(e)pyrene	90	91	70-130	2	30				
Benzo(g,h,i)perylene	98	100	33-141	2	30				
Benzo(k)fluoranthene	98	102	54-142	5	30				
Butylbenzylphthalate	116	115	49-151	0	30				
Di-n-butylphthalate	103	106	52-147	3	30				
Chrysene	97	97	29-148	1	30				
Dibenz(a,h)anthracene	100	102	20-137	3	30				
Diethylphthalate	104	107	43-145	3	30				
Dimethylphthalate	100	104	58-129	4	30				
Bis(2-Ethylhexyl)phthalate	111	108	39-167	3	30				
Fluoranthene	94	97	40-148	3	30				
Fluorene	95	100	51-137	6	30				
Indeno(1,2,3-cd)pyrene	100	102	17-136	3	30				
1-Methylnaphthalene	99	102	50-131	3	30				
2-Methylnaphthalene	94	97	35-152	3	30				
Naphthalene	103	103	31-148	0	30				
N-Nitrosodimethylamine	108	106	48-113	1	30				
Di-n-octylphthalate	121	118	52-162	2	30				
Phenanthrene	98	102	29-142	5	30				
Pyrene	98	99	26-143	2	30				
Batch number: 13281A16A	Sample number(s): 7220654,7220661,7220663 UNSPK: P218895								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423103
Reported: 10/16/13 at 09:34 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
11a TPH by EPA 8015B GRO	87	94	69-123	9	30				
Batch number: 132820019A	Sample number(s): 7220653-7220654 UNSPK: 7220653								
2,4-D	99	101	42-143	2	35				
Dalapon	70	70	16-98	0	50				
2,4-DB	107	113	10-179	5	50				
Dicamba	95	93	55-133	1	50				
Dinoseb	34	44	10-52	25	35				
2,4-DP (Dichlorprop)	119	120	32-171	1	50				
MCPA	90	94	23-169	5	50				
MCPP (Mecoprop)	92	93	24-164	2	50				
2,4,5-T	104	111	12-172	7	35				
2,4,5-TP	105	106	10-142	1	35				
Batch number: 132760006A	Sample number(s): 7220653-7220654 UNSPK: P215511								
Aldrin	89	88	16-126	1	50				
Alpha BHC	90	90	14-140	0	50				
Beta BHC	110	109	42-133	1	50				
Gamma BHC - Lindane	88	87	30-137	0	50				
p,p-DDD	94	92	43-149	2	50				
p,p-DDE	96	94	35-152	2	50				
p,p-DDT	95	93	12-193	2	50				
Delta BHC	93	92	13-153	2	50				
Dieldrin	96	94	41-153	1	50				
Endosulfan I	91	89	26-146	2	50				
Endosulfan II	100	97	34-141	3	50				
Endosulfan Sulfate	101	100	10-181	1	50				
Endrin	92	91	30-152	1	50				
Endrin Aldehyde	93	92	23-138	2	50				
Endrin Ketone	94	93	30-148	2	50				
Heptachlor	87	86	16-152	2	50				
Heptachlor Epoxide	93	92	33-144	1	50				
Methoxychlor	91	90	41-161	2	50				
Batch number: 132780008A	Sample number(s): 7220653-7220654,7220660-7220663 UNSPK: P218895								
PCB-1016	88	90	41-135	4	50				
PCB-1260	99	111	40-134	12	50				
Batch number: 132800038A	Sample number(s): 7220653-7220654,7220660-7220663 UNSPK: 7220653								
EFH (C12-C14)	83	74	49-123	12	20				
EFH (C15-C20)	98	93	49-123	6	20				
EFH (C21-C30)	83	71	49-123	15	20				
EFH (C30-C40)	59	56	49-123	5	20				
EFH (C8-C11)	71	67	49-123	6	20				
Batch number: 132750637003	Sample number(s): 7220653-7220654,7220660-7220663 UNSPK: P218895 BKG: P218895								
Aluminum	3336 (2)	3044 (2)	75-125	2	20	21,000	21,600	3	20
Antimony	41*	43*	75-125	5	20	3.96 U	3.96 U	0 (1)	20
Arsenic	102	109	75-125	5	20	5.81	5.63	3 (1)	20
Barium	102	101	75-125	1	20	84.1	86.8	3	20
Beryllium	98	98	75-125	0	20	0.681 J	0.696 J	2 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423103
Reported: 10/16/13 at 09:34 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Boron	97	97	75-125	1	20	5.04	J	4.95	J	2 (1)	20
Cadmium	95	95	75-125	0	20	0.990	U	0.990	U	0 (1)	20
Calcium	-261 (2)	57 (2)	75-125	6	20	23,200		23,600		2	20
Chromium	115	116	75-125	0	20	30.1		30.5		1	20
Cobalt	94	97	75-125	3	20	7.17		7.17		0	20
Copper	77	77	75-125	0	20	9.90	U	9.90	U	0 (1)	20
Iron	1811 (2)	975 (2)	75-125	3	20	26,600		26,700		0	20
Lead	95	101	75-125	5	20	4.62		4.72		2 (1)	20
Lithium	102	101	75-125	1	20	26.0		26.6		2	20
Magnesium	396 (2)	332 (2)	75-125	2	20	6,720		6,810		1	20
Manganese	133 (2)	148 (2)	75-125	2	20	288		297		3	20
Molybdenum	92	91	75-125	0	20	1.98	U	1.98	U	0 (1)	20
Nickel	95	95	75-125	0	20	12.4		12.3		0	20
Phosphorus	110	102	75-125	2	20	383		383		0	20
Potassium	173*	167*	75-125	1	20	3,430		3,490		2	20
Sodium	100	98	75-125	1	20	129		130		1 (1)	20
Tin	85	85	75-125	0	20	2.64	J	2.71	J	3 (1)	20
Titanium	499 (2)	469 (2)	75-125	2	20	1,200		1,220		2	20
Vanadium	116	116	75-125	0	20	59.8		60.5		1	20
Zinc	103	104	75-125	0	20	61.3		62.2		2	20
Zirconium	97	96	75-125	1	20	7.27		7.41		2 (1)	20
Batch number: 132750637003A	Sample number(s): 7220653-7220654,7220660-7220663 UNSPK: P218895 BKG: P218895										
Silver	101	104	75-125	3	20	0.198	U	0.198	U	0 (1)	20
Strontium	107 (2)	145 (2)	75-125	5	20	54.3		55.6		2	20
Thallium	106	101	75-125	3	20	0.262		0.271		3 (1)	20
Batch number: 132750637003B	Sample number(s): 7220653-7220654,7220660-7220663 UNSPK: P218895 BKG: P218895										
Selenium	93	94	75-125	0	20	0.194	J	0.161	J	18 (1)	20
Batch number: 132750638003	Sample number(s): 7220653-7220654,7220660-7220663 UNSPK: P218895 BKG: P218895										
3a Mercury 7471A	118	114	65-135	3	20	0.0165	U	0.0162	U	0 (1)	20
Batch number: 13283283201A	Sample number(s): 7220655-7220659 UNSPK: 7220655 BKG: 7220655										
1a Anions by 300.0 - Fluoride	49*		80-120			2.0		2.0		4 (1)	20
Batch number: 13275039403A	Sample number(s): 7220653-7220654,7220660-7220663 BKG: 7220663										
15a pH by 9045D						8.04		8.06		0	3
Batch number: 13283162401A	Sample number(s): 7220653-7220657 BKG: 7220657										
14a Moisture Content by 160.3						12.8		12.9		0	20
Batch number: 13283162401B	Sample number(s): 7220658-7220663 BKG: 7220658										
14a Moisture Content by 160.3						15.5		16.1		4	20

Surrogate Quality Control

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423103
Reported: 10/16/13 at 09:34 AM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13276SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7220653	89	94	102
7220654	85	95	101
7220660	92	96	101
7220661	88	93	101
7220662	90	99	105
7220663	87	96	104
Blank	89	96	100
LCS	92	99	105
MS	85	94	100
MSD	87	96	100
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13277A20A

	Trifluorotoluene-F
7220652	93
Blank	94
LCS	100
LCSD	99
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13281A16A

	Trifluorotoluene-F
7220654	93
7220661	94
7220663	90
Blank	102
LCS	86
MS	85
MSD	93
Limits:	50-142

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132760006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7220653	78	89
7220654	89	97
Blank	94	109
LCS	96	111
MS	92	101
MSD	91	100

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423103
Reported: 10/16/13 at 09:34 AM

Surrogate Quality Control

Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132780008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7220653	107	113
7220654	104	105
7220660	102	104
7220661	101	102
7220662	104	108
7220663	105	108
Blank	112	112
LCS	117	122*
LCSD	120	123*
MS	107	109
MSD	113	113
Limits:	45-120	45-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132820019A

	2,4-Dichlorophenylacetic acid
7220653	87
7220654	81
Blank	73
LCS	97
MS	93
MSD	95
Limits:	50-150

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132800038A

	Chlorobenzene	Orthoterphenyl
7220653	85	74
7220654	87	81
7220660	84	81
7220661	82	77
7220662	80	75
7220663	82	77
Blank	91	85
LCS	87	74
MS	88	75
MSD	82	74
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13281002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423103
Reported: 10/16/13 at 09:34 AM

Surrogate Quality Control

7220653	60	58	62	67	63	65
7220660	63	62	63	69	65	67
7220662	68	67	69	72	71	74
Blank	69	67	70	76	72	71
OPR	68	69	70	77	73	67
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7220653	86	68	74	65	74	73
7220660	90	67	73	69	74	73
7220662	83	70	73	71	77	75
Blank	96	73	76	75	83	81
OPR	96	70	74	75	81	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7220653	73	81	89	56	62	
7220660	74	83	90	56	67	
7220662	76	81	85	63	71	
Blank	81	88	95	62	73	
OPR	81	85	92	62	74	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1423103 7220652-63

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 10/1/2013
CarrierName: FedEx
AirbillNo: 796815199086

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131001-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-100113	10/1/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-570-SA5D-SB-0.0-0.5	10/1/13 10:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X	X			X											
SL-570-SA5D-SB-0.0-0.5	10/1/13 10:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-570-SA5D-SB-4.0-5.0	10/1/13 10:20	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X			X	X				X										
SL-570-SA5D-SB-4.0-5.0	10/1/13 10:20	SO	None	2 - Encore	10 day																			X												
SL-598-SA5D-SB-0.0-0.5	10/1/13 08:35	SO	None	1 - SS-Sleeve	10 day				X																											
SL-598-SA5D-SB-4.0-5.0	10/1/13 08:45	SO	None	1 - 4 oz glass	10 day				X																											
SL-598-SA5D-SB-9.0-10.0	10/1/13 08:55	SO	None	1 - 4 oz glass	10 day				X																											
SL-598-SA5D-SB-14.0-15.0	10/1/13 09:05	SO	None	1 - 4 oz glass	10 day				X																											
SL-598-SA5D-SB-18.0-19.0	10/1/13 09:15	SO	None	1 - 4 oz glass	10 day				X																											
SL-564-SA5D-SB-0.0-0.5	10/1/13 12:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X												X									
SL-564-SA5D-SB-0.0-0.5	10/1/13 12:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-564-SA5D-SB-4.0-5.0	10/1/13 13:00	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X									
SL-564-SA5D-SB-4.0-5.0	10/1/13 13:00	SO	None	2 - Encore	10 day																			X												
SL-607-SA5D-SB-0.0-0.5	10/1/13 13:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X									
SL-607-SA5D-SB-0.0-0.5	10/1/13 13:55	SO	None	1 - 4 oz glass	10 day													X																		
SL-607-SA5D-SB-4.0-5.0	10/1/13 14:05	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X									
SL-607-SA5D-SB-4.0-5.0	10/1/13 14:05	SO	None	2 - Encore	10 day																			X												

13013 1423103 7220652-63

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 10/1/2013
CarrierName: FedEx
AirbillNo: 796815199086

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131001-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Jeff Myers	10/01/2013	1600									
										10-2-13	0946

COC Rev 2

COC 20131001-01, Page 2 of 2

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1423103

Client/Project: CDM Smith

Date of Receipt: 10-2-13

Time of Receipt: 0940

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	D T131	2.4	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 800 **Date/Time:** 10-2-13 1036

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH120

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 17, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 10/03/2013
Group Number: 1423511
SDG: PH120
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB1-100213 Water	7222762
SL-589-SA5D-SB-0.0-0.5 Soil	7222763
SL-589-SA5D-SB-4.0-5.0 Soil	7222764
SL-594-SA5D-SB-0.0-0.5 Soil	7222765
SL-594-SA5D-SB-4.0-5.0 Soil	7222766
SL-594-SA5D-SB-7.0-8.0 Soil	7222767
TB1-100213 Water	7222768
SL-600-SA5D-SB-0.0-0.5 Soil	7222769
SL-600-SA5D-SB-0.0-0.5MS Soil	7222770
SL-600-SA5D-SB-0.0-0.5DUP Soil	7222771
SL-900-SA5D-SB-0.0-0.5 Soil	7222772
SL-600-SA5D-SB-4.0-5.0 Soil	7222773
SL-600-SA5D-SB-9.0-10.0 Soil	7222774
SL-600-SA5D-SB-14.0-15.0 Soil	7222775
SL-600-SA5D-SB-18.5-19.5 Soil	7222776

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: EB1-100213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7222762
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 14:00 by PH

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

20EB1 SDG#: PH120-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.18	J	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.27	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.059	J	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.051	U	0.051	0.010	1
12971	Naphthalene	91-20-3	0.051	U	0.051	0.030	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.030	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.48	U	0.48	0.15	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.95	U	0.95	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.076	1
10407	Dinoseb	88-85-7	0.48	U	0.48	0.11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.48	U	0.48	0.15	1
10407	MCPA	94-74-6	190	U	190	48	1
10407	MCPP	93-65-2	190	U	190	48	1
10407	2,4,5-T	93-76-5	0.048	U	0.048	0.014	1
10407	2,4,5-TP	93-72-1	0.048	U	0.048	0.0095	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-100213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7222762
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 14:00 by PH

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

20EB1 SDG#: PH120-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0084	U	0.0084	0.0017	1
10589	Alpha BHC	319-84-6	0.0084	U	0.0084	0.0025	1
10589	Beta BHC	319-85-7	0.0084	U	0.0084	0.0029	1
10589	Gamma BHC - Lindane	58-89-9	0.0084	U	0.0084	0.0017	1
10589	Chlordane	57-74-9	0.42	U	0.42	0.13	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0042	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0042	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0044	1
10589	Delta BHC	319-86-8	0.0084	U	0.0084	0.0029	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0045	1
10589	Endosulfan I	959-98-8	0.0084	U	0.0084	0.0036	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0049	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0068	1
10589	Endrin Aldehyde	7421-93-4	0.084	U	0.084	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0042	1
10589	Heptachlor	76-44-8	0.0084	U	0.0084	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0084	U	0.0084	0.0019	1
10589	Methoxychlor	72-43-5	0.084	U	0.084	0.025	1
10589	Mirex	2385-85-5	0.042	U	0.042	0.0084	1
10589	Toxaphene	8001-35-2	2.5	U	2.5	0.84	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.42	U	0.42	0.084	1
13092	Aroclor 5442	12642-23-8	0.42	U	0.42	0.084	1
13092	Aroclor 5460	11126-42-4	0.42	U	0.42	0.092	1
13092	PCB-1016	12674-11-2	0.42	U	0.42	0.084	1
13092	PCB-1221	11104-28-2	0.42	U	0.42	0.084	1
13092	PCB-1232	11141-16-5	0.42	U	0.42	0.17	1
13092	PCB-1242	53469-21-9	0.42	U	0.42	0.084	1
13092	PCB-1248	12672-29-6	0.42	U	0.42	0.084	1
13092	PCB-1254	11097-69-1	0.42	U	0.42	0.084	1
13092	PCB-1260	11096-82-5	0.42	U	0.42	0.13	1
13092	PCB-1262	37324-23-5	0.42	U	0.42	0.17	1
13092	PCB-1268	11100-14-4	0.42	U	0.42	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C15-C20)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C21-C30)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C30 - C40)	n.a.	0.48	U	0.48	0.097	1
10365	EFH (C8-C11)	n.a.	0.097	U	0.097	0.048	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	

*=This limit was used in the evaluation of the final result

Sample Description: EB1-100213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7222762
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 14:00 by PH

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

20EB1 SDG#: PH120-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.00058 J	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.0098 J	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.0427 J	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0028 J	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0086 J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	
01504	1b Anions by 300.0 - Fluoride	16984-48-8	0.10 U	0.10	0.080	1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	8.4	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-100213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7222762
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 14:00 by PH

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

20EB1 SDG#: PH120-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.94	U	1.94	0.324	1
10915	12378-PeCDD	40321-76-4	0.338	JBQ	9.70	0.277	1
10915	123478-HxCDD	39227-28-6	9.70	U	9.70	0.174	1
10915	123678-HxCDD	57653-85-7	0.227	JBQ	9.70	0.183	1
10915	123789-HxCDD	19408-74-3	9.70	U	9.70	0.177	1
10915	1234678-HpCDD	35822-46-9	0.368	JBQ	9.70	0.169	1
10915	OCDD	3268-87-9	1.49	JB	19.4	0.343	1
10915	2378-TCDF	51207-31-9	0.237	JQ	1.94	0.228	1
10915	12378-PeCDF	57117-41-6	0.348	JBQ	9.70	0.135	1
10915	23478-PeCDF	57117-31-4	0.247	JBQ	9.70	0.119	1
10915	123478-HxCDF	70648-26-9	0.201	JBQ	9.70	0.0844	1
10915	123678-HxCDF	57117-44-9	0.207	JBQ	9.70	0.0855	1
10915	123789-HxCDF	72918-21-9	0.334	JBQ	9.70	0.0871	1
10915	234678-HxCDF	60851-34-5	0.255	JBQ	9.70	0.0804	1
10915	1234678-HpCDF	67562-39-4	0.288	JBQ	9.70	0.0778	1
10915	1234789-HpCDF	55673-89-7	0.363	JBQ	9.70	0.0889	1
10915	OCDF	39001-02-0	1.43	JBQ	19.4	0.285	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.000400				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	100	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	99	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB1-100213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7222762
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 14:00 by PH

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

20EB1 SDG#: PH120-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB1-100213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7222762
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 14:00 by PH

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

20EB1 SDG#: PH120-01EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13282WAI026	10/11/2013 07:27	Catherine E Bachman	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13282WAI026	10/09/2013 16:55	JoElla L Rice	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13277A20A	10/07/2013 12:23	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13277A20A	10/07/2013 12:23	Marie D Beamenderfer	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132820007A	10/10/2013 19:56	Melissa McDermott	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132800003A	10/08/2013 11:37	Jamie L Brillhart	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132800002A	10/08/2013 12:16	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132800002A	10/07/2013 16:30	Seth A Farrier	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132800003A	10/07/2013 16:30	Seth A Farrier	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132820007A	10/09/2013 20:30	Elaine F Stoltzfus	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132800018A	10/08/2013 18:42	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132800018A	10/07/2013 23:00	Karen L Beyer	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13281001	10/10/2013 16:36	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13281001	10/08/2013 08:30	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07052	Cobalt	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
01756	Lithium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07060	Molybdenum	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-100213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7222762
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 14:00 by PH

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

20EB1 SDG#: PH120-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07061	Nickel	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
10143	Phosphorus	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
07072	Zinc	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	132810635001	10/12/2013 11:29	Katlin N Cataldi	1
06041	Selenium	SW-846 6020A	1	132810639001B	10/14/2013 11:11	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	132810639001A	10/14/2013 11:11	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	132810639001A	10/14/2013 11:11	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	132810639001A	10/14/2013 11:11	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	132845713016	10/13/2013 12:05	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132810635001	10/09/2013 10:33	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132810639001	10/09/2013 11:02	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132845713016	10/12/2013 14:00	Damary Valentin	1
01504	1b Anions by 300.0 - Fluoride	EPA 300.0	1	13277347602C	10/05/2013 23:21	Sandra J Miller	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13276987401A	10/03/2013 15:17	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13276003101A	10/03/2013 18:20	Michele L Graham	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222763
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 10:30 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH120-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.88	U	0.88	0.18	1
10590	Alpha BHC	319-84-6	0.88	U	0.88	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.88	U	0.88	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.88	U	0.88	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.88	U	0.88	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.88	U	0.88	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.88	U	0.88	0.18	1
10590	Methoxychlor	72-43-5	7.1	U	7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222763
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 10:30 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH120-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,700		42.6	7.69	1
06944	Antimony	7440-36-0	4.26	U	4.26	0.789	1
06935	Arsenic	7440-38-2	10.1		4.26	0.746	1
06946	Barium	7440-39-3	170		1.07	0.0352	1
06947	Beryllium	7440-41-7	1.13		1.07	0.0714	1
07914	Boron	7440-42-8	11.6		10.7	0.896	1
06949	Cadmium	7440-43-9	0.268	J	1.07	0.0810	1
01650	Calcium	7440-70-2	4,440		21.3	3.56	1
06951	Chromium	7440-47-3	36.2		3.20	0.171	1
06952	Cobalt	7440-48-4	9.63		1.07	0.106	1
06953	Copper	7440-50-8	16.7		2.13	0.309	1
01654	Iron	7439-89-6	33,100		85.3	7.72	2
06955	Lead	7439-92-1	9.78		3.20	0.533	1
01656	Lithium	7439-93-2	29.8		4.3	0.36	1
01657	Magnesium	7439-95-4	6,770		10.7	1.78	1
06958	Manganese	7439-96-5	333		1.07	0.0885	1
06960	Molybdenum	7439-98-7	2.13	U	2.13	0.181	1
06961	Nickel	7440-02-0	19.6		2.13	0.139	1
10145	Phosphorus	7723-14-0	141		10.7	3.08	1
01662	Potassium	7440-09-7	2,940		107	8.89	1
01667	Sodium	7440-23-5	152		107	17.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222763
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 10:30 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH120-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06969	Tin	7440-31-5	3.05 J	10.7	0.235	1
06970	Titanium	7440-32-6	1,010	1.07	0.181	1
06971	Vanadium	7440-62-2	65.9	1.07	0.139	1
06972	Zinc	7440-66-6	58.1	4.26	0.213	1
10146	Zirconium	7440-67-7	6.90	5.33	0.896	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.249 J	0.426	0.107	2
06142	Silver	7440-22-4	0.0665 J	0.213	0.0277	2
06144	Strontium	7440-24-6	35.4	0.426	0.0725	2
06145	Thallium	7440-28-0	0.374	0.213	0.0320	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.71	0.0100	0.0100	1
	The pH was measured in water at 20.6 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222763
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 10:30 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH120-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.153	1
11031	12378-PeCDD	40321-76-4	5.22	U	5.22	0.127	1
11031	123478-HxCDD	39227-28-6	0.0707	JQ	5.22	0.0558	1
11031	123678-HxCDD	57653-85-7	0.133	JQ	5.22	0.0600	1
11031	123789-HxCDD	19408-74-3	0.0953	JQ	5.22	0.0619	1
11031	1234678-HpCDD	35822-46-9	0.0854	JBQ	5.22	0.0596	1
11031	OCDD	3268-87-9	0.858	JBQ	10.4	0.0576	1
11031	2378-TCDF	51207-31-9	1.04	U	1.04	0.140	1
11031	12378-PeCDF	57117-41-6	5.22	U	5.22	0.0654	1
11031	23478-PeCDF	57117-31-4	5.22	U	5.22	0.0632	1
11031	123478-HxCDF	70648-26-9	5.22	U	5.22	0.0548	1
11031	123678-HxCDF	57117-44-9	5.22	U	5.22	0.0525	1
11031	123789-HxCDF	72918-21-9	0.139	JQ	5.22	0.0435	1
11031	234678-HxCDF	60851-34-5	5.22	U	5.22	0.0498	1
11031	1234678-HpCDF	67562-39-4	0.0915	JBQ	5.22	0.0258	1
11031	1234789-HpCDF	55673-89-7	5.22	U	5.22	0.0448	1
11031	OCDF	39001-02-0	0.219	JBQ	10.4	0.0764	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	U				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	61	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	107	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222763
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 10:30 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH120-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222763
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 10:30 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH120-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 03:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132810021A	10/14/2013 20:04	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 03:39	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132810021A	10/09/2013 10:00	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132800038A	10/09/2013 00:23	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132800038A	10/08/2013 07:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13283005	10/14/2013 15:43	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13283005	10/10/2013 10:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/15/2013 07:03	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 13:14	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222763
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 10:30 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH120-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 07:48	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 07:48	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/15/2013 08:22	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 07:48	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 06:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13276039404A	10/03/2013 23:25	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222764
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 10:40 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58940 SDG#: PH120-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.0	J	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.0	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.4	J	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.1	J	1.8	0.74	1
12969	Pyrene	129-00-0	1.3	J	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.67
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.92	U	0.92	0.19	1
10590	Alpha BHC	319-84-6	0.92	U	0.92	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.92	U	0.92	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.92	U	0.92	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.92	U	0.92	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.92	U	0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.92	U	0.92	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222764
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 10:40 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58940 SDG#: PH120-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.4	U	7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,300		44.3	7.98	1
06944	Antimony	7440-36-0	4.43	U	4.43	0.819	1
06935	Arsenic	7440-38-2	4.61		4.43	0.775	1
06946	Barium	7440-39-3	122		1.11	0.0365	1
06947	Beryllium	7440-41-7	0.932	J	1.11	0.0742	1
07914	Boron	7440-42-8	14.8		11.1	0.930	1
06949	Cadmium	7440-43-9	0.372	J	1.11	0.0842	1
01650	Calcium	7440-70-2	4,800		22.1	3.70	1
06951	Chromium	7440-47-3	35.1		3.32	0.177	1
06952	Cobalt	7440-48-4	10.0		1.11	0.110	1
06953	Copper	7440-50-8	20.0		2.21	0.321	1
01654	Iron	7439-89-6	35,300		88.6	8.02	2
06955	Lead	7439-92-1	9.05		3.32	0.554	1
01656	Lithium	7439-93-2	30.3		4.4	0.38	1
01657	Magnesium	7439-95-4	7,690		11.1	1.85	1
06958	Manganese	7439-96-5	356		1.11	0.0919	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222764
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 10:40 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58940 SDG#: PH120-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06960	Molybdenum	7439-98-7	0.281 J	2.21	0.188	1
06961	Nickel	7440-02-0	18.7	2.21	0.144	1
10145	Phosphorus	7723-14-0	289	11.1	3.20	1
01662	Potassium	7440-09-7	4,600	111	9.24	1
01667	Sodium	7440-23-5	158	111	18.5	1
06969	Tin	7440-31-5	2.86 J	11.1	0.244	1
06970	Titanium	7440-32-6	996	1.11	0.188	1
06971	Vanadium	7440-62-2	65.4	1.11	0.144	1
06972	Zinc	7440-66-6	73.2	4.43	0.221	1
10146	Zirconium	7440-67-7	6.68	5.54	0.930	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.289 J	0.443	0.111	2
06142	Silver	7440-22-4	0.0485 J	0.221	0.0288	2
06144	Strontium	7440-24-6	38.3	0.443	0.0753	2
06145	Thallium	7440-28-0	0.487	0.221	0.0332	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179 U	0.0179	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.7 C.	n.a.	7.19	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	9.7	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 05:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/08/2013 22:48	Laura M Krieger	23.67
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327632621	10/03/2013 14:16	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327632621	10/03/2013 14:16	Mitchell R Washel	n.a.

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222764
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 10:40 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58940 SDG#: PH120-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132810021A	10/14/2013 20:49	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132780008A	10/08/2013 03:57	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132780008A	10/07/2013 05:20	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132810021A	10/09/2013 10:00	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132800038A	10/09/2013 00:44	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132800038A	10/08/2013 07:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/15/2013 07:07	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 13:18	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 07:50	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 07:50	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/15/2013 08:24	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 07:50	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 06:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13276039404A	10/03/2013 23:25	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-594-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222765
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 09:40 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59400 SDG#: PH120-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	0.76	J	1.0	0.41	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.4		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201A	10/12/2013 00:02	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201A	10/10/2013 07:05	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-594-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222766
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 09:50 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59440 SDG#: PH120-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	2.0	1.1	0.44	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.7	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201A	10/12/2013 00:19	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201A	10/10/2013 07:05	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-594-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222767
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 09:55 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59470 SDG#: PH120-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	2.3	1.1	0.43	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.0	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201A	10/12/2013 00:35	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201A	10/10/2013 07:05	Nancy J Shoop	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB1-100213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7222768
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 08:00

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

120TB SDG#: PH120-07TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13277A20A	10/07/2013 12:45	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13277A20A	10/07/2013 12:45	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222769
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 13:25 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60000 SDG#: PH120-08BKG

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	0.93	J	1.0	0.42	1
		SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.6 C.		n.a.	6.83		0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	5.0		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201B	10/12/2013 01:23	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201B	10/10/2013 07:05	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13276039404A	10/03/2013 23:25	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA5D-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222770
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 13:25 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60000 SDG#: PH120-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	2.8	1.1	0.42	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	5.0	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201B	10/12/2013 02:28	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201B	10/10/2013 07:05	Nancy J Shoop	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA5D-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222771
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 13:25 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60000 SDG#: PH120-08DUP

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	0.87	J	1.1	0.42	1
		SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D		n.a.	6.84		0.0100	0.0100	1
	The pH was measured in water at 20.6 C.							
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3		n.a.	5.0		0.10	0.10	1
11626	14a Moisture Content by 160.3		n.a.	5.0		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201B	10/12/2013 01:39	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201B	10/10/2013 07:05	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13276039404A	10/03/2013 23:25	Michelle L Lalli	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-900-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222772
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 13:30 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

90000 SDG#: PH120-09

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	2.5	1.1	0.44	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.7 C.		n.a.	7.26	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	8.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201A	10/12/2013 00:51	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201A	10/10/2013 07:05	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13276039404A	10/03/2013 23:25	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222773
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 13:35 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60040 SDG#: PH120-10

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	1.3	1.1	0.43	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.5 C.		n.a.	7.19	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	6.7	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201A	10/12/2013 01:07	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201A	10/10/2013 07:05	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13276039404A	10/03/2013 23:25	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222774
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 13:45 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60090 SDG#: PH120-11

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	9.3	1.2	0.46	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.6 C.		n.a.	7.56	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	14.3	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201B	10/12/2013 02:44	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201B	10/10/2013 07:05	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13276039404A	10/03/2013 23:25	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222775
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 13:55 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60014 SDG#: PH120-12

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	7.1	1.1	0.46	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19.8 C.		n.a.	7.64	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	13.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201B	10/12/2013 03:01	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201B	10/10/2013 07:05	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13276039404A	10/03/2013 23:25	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162402A	10/11/2013 00:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA5D-SB-18.5-19.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7222776
LL Group # 1423511
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/02/2013 14:05 by VC

Submitted: 10/03/2013 10:05
Reported: 10/17/2013 15:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60018 SDG#: PH120-13*

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	4.1	1.1	0.45	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.8 C.		n.a.	8.06	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	12.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13283283201B	10/12/2013 03:17	Christopher D Meeks	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13283283201B	10/10/2013 07:05	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13276039404A	10/03/2013 23:25	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13280SLE026	Sample number(s): 7222763-7222764									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	102		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	100		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	101		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	120		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	103		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	103		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	108		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	106		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	103		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	97		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	101		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	103		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	74		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	104		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	98		79-112		
Batch number: 13282WAI026	Sample number(s): 7222762									
Acenaphthene	0.050	U	0.050	0.010	ug/l	57*	98	77-118	53*	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	57*	104	80-123	59*	30
Anthracene	0.050	U	0.050	0.010	ug/l	60*	104	78-123	53*	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	62*	103	73-127	50*	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	65*	105	72-120	47*	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	66*	107	79-136	47*	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	60*	99	70-130	49*	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	75	105	64-130	33*	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	71*	112	73-131	45*	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	42	71	40-138	50*	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	61*	101	64-141	50*	30
Chrysene	0.050	U	0.050	0.010	ug/l	63*	100	76-125	45*	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	85	104	58-131	20	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	63*	104	64-128	49*	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	50	83	23-139	50*	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	1.0	U	1.0	0.050	ug/l	130	72	70-143	58*	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	61*	104	79-124	51*	30
Fluorene	0.050	U	0.050	0.010	ug/l	55*	97	74-115	55*	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	78	104	62-130	29	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	60*	106	80-126	55*	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	58*	103	81-124	56*	30
Naphthalene	0.050	U	0.050	0.030	ug/l	57*	101	75-120	56*	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	68	85	36-120	21	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	92	96	57-145	4	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	58*	98	75-120	52*	30
Pyrene	0.050	U	0.050	0.010	ug/l	61*	99	71-130	48*	30
Batch number: 13277A20A	Sample number(s): 7222762,7222768									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	108	110	75-135	2	30
Batch number: 13281A16A	Sample number(s): 7222764									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	78		67-119		
Batch number: 132820007A	Sample number(s): 7222762									
2,4-D	0.50	U	0.50	0.16	ug/l	118	126	68-155	6	30
Dalapon	1.3	U	1.3	0.25	ug/l	81	96	25-119	17	30
2,4-DB	1.0	U	1.0	0.30	ug/l	117	123	50-163	5	30
Dicamba	0.30	U	0.30	0.080	ug/l	110	109	64-163	1	30
Dinoseb	0.50	U	0.50	0.12	ug/l	238*	238*	16-163	0	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	132	130	89-162	2	30
MCPA	200 U		200.	50	ug/l	96	105	68-154	9	30
MCPP	200 U		200.	50	ug/l	111	120	46-173	8	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	119	122	71-174	2	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	118	122	58-155	3	30
Batch number: 132780008A	Sample number(s): 7222763-7222764									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	81	90*	62-87	11	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	96		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	116		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132800002A	Sample number(s): 7222762									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	63	73	35-84	14	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	80	87	67-117	8	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	0.40	U	0.40	0.12	ug/l	99	108	67-128	9	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132800003A	Sample number(s): 7222762									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	85	83	45-125	2	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	95	89	51-139	6	30
Beta BHC	0.0046	J	0.0080	0.0027	ug/l	90	87	57-127	4	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	89	85	57-133	5	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	89	87	55-145	3	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	92	87	58-130	5	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	89	84	45-140	6	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	93	88	52-133	5	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	94	90	60-135	5	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	88	86	56-128	3	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	94	89	53-123	5	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	97	92	51-130	5	30
Endrin	0.016	U	0.016	0.0065	ug/l	84	83	43-139	2	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	94	89	50-122	6	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	92	87	51-133	6	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	84	81	48-130	4	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	92	88	65-128	4	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	83	80	40-150	3	30
Mirex	0.040	U	0.040	0.0080	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132810021A	Sample number(s): 7222763-7222764									
Aldrin	0.83	U	0.83	0.17	ug/kg	86		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	90		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	92		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	89		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	93		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	94		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	92		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	92		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	94		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	93		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	95		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	97		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	91		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	92		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	90		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	87		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	93		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	92		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132800018A	Sample number(s): 7222762									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	86	88	70-130	3	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	99	98	70-130	2	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	92	93	70-130	1	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	81	81	70-130	0	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	64*	65*	70-130	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132800038A	Sample number(s): 7222763-7222764								
EFH (C12-C14)	5.0 U	5.0	2.0	mg/kg	86		70-123		
EFH (C15-C20)	5.0 U	5.0	2.0	mg/kg	92		75-128		
EFH (C21-C30)	5.0 U	5.0	2.0	mg/kg	86		64-134		
EFH (C30-C40)	10 U	10.	4.0	mg/kg	65		65-128		
EFH (C8-C11)	5.0 U	5.0	2.0	mg/kg	71		49-107		
Batch number: 132810635001	Sample number(s): 7222762								
Aluminum	0.400 U	0.400	0.0828	mg/l	101	99	90-112	2	20
Antimony	0.0400 U	0.0400	0.0053	mg/l	102	103	88-111	1	20
Arsenic	0.0400 U	0.0400	0.0068	mg/l	102	99	90-113	3	20
Barium	0.0100 U	0.0100	0.00033	mg/l	103	101	90-110	2	20
Beryllium	0.0100 U	0.0100	0.00067	mg/l	100	98	90-111	1	20
Boron	0.100 U	0.100	0.0084	mg/l	96	95	90-110	1	20
Cadmium	0.0100 U	0.0100	0.00076	mg/l	102	101	90-112	1	20
Calcium	0.400 U	0.400	0.0334	mg/l	101	99	90-112	2	20
Chromium	0.0300 U	0.0300	0.0016	mg/l	101	99	90-110	2	20
Cobalt	0.0100 U	0.0100	0.0013	mg/l	103	102	90-110	1	20
Copper	0.0200 U	0.0200	0.0027	mg/l	106	105	90-112	1	20
Iron	0.400 U	0.400	0.0430	mg/l	101	99	90-112	2	20
Lead	0.0300 U	0.0300	0.0047	mg/l	104	101	88-110	2	20
Lithium	0.0400 U	0.0400	0.0047	mg/l	102	101	90-110	1	20
Magnesium	0.200 U	0.200	0.0167	mg/l	100	98	89-110	2	20
Manganese	0.0100 U	0.0100	0.00083	mg/l	103	102	90-110	1	20
Molybdenum	0.0200 U	0.0200	0.0017	mg/l	106	106	90-110	0	20
Nickel	0.0200 U	0.0200	0.0015	mg/l	105	104	90-111	1	20
Phosphorus	0.0547 J	0.200	0.0418	mg/l	106	104	90-110	2	20
Potassium	0.203 J	1.00	0.0980	mg/l	100	99	90-110	2	20
Sodium	2.00 U	2.00	0.167	mg/l	100	99	87-114	1	20
Tin	0.0400 U	0.0400	0.0029	mg/l	99	99	90-110	0	20
Titanium	0.0200 U	0.0200	0.0017	mg/l	103	102	90-113	1	20
Vanadium	0.0100 U	0.0100	0.0020	mg/l	102	101	90-110	1	20
Zinc	0.0059 J	0.0400	0.0020	mg/l	101	100	90-110	1	20
Zirconium	0.100 U	0.100	0.0084	mg/l	103	102	90-110	1	20
Batch number: 132810637001	Sample number(s): 7222763-7222764								
Aluminum	9.86 J	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00 U	4.00	0.740	mg/kg	101		80-120		
Arsenic	4.00 U	4.00	0.700	mg/kg	99		80-120		
Barium	1.00 U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00 U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0 U	10.0	0.840	mg/kg	91		80-120		
Cadmium	1.00 U	1.00	0.0760	mg/kg	100		80-120		
Calcium	12.9 J	20.0	3.34	mg/kg	103		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	108		80-120		
Iron	3.84 J	40.0	3.62	mg/kg	104		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	102		80-120		
Lithium	4.0 U	4.0	0.34	mg/kg	105		80-120		
Magnesium	2.49 J	10.0	1.67	mg/kg	103		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00 U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	101		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.41	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	0.656	J	4.00	0.200	mg/kg	101		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132810637001A	Sample number(s): 7222763-7222764									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	102		80-120		
Batch number: 132810637001B	Sample number(s): 7222763-7222764									
Selenium	0.400	U	0.400	0.100	mg/kg	111		80-120		
Batch number: 132810638001	Sample number(s): 7222763-7222764									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	106		85-120		
Batch number: 132810639001A	Sample number(s): 7222762									
Silver	0.0010	U	0.0010	0.00011	mg/l	102	104	90-115	2	20
Strontium	0.0020	U	0.0020	0.00034	mg/l	101	102	90-110	1	20
Thallium	0.0010	U	0.0010	0.00015	mg/l	104	106	90-115	2	20
Batch number: 132810639001B	Sample number(s): 7222762									
Selenium	0.0040	U	0.0040	0.00050	mg/l	104	104	90-120	0	20
Batch number: 132845713016	Sample number(s): 7222762									
3b Mercury 7470A	0.00020	U	0.00020	0.00006 0	mg/l	102	101	90-115	1	20
Batch number: 13276987401A	Sample number(s): 7222762									
2b Chromium VI by EPA 7199	10.0	U	10.0	5.0	ug/l	100	100	90-110	0	20
Batch number: 13277347602C	Sample number(s): 7222762									
1b Anions by 300.0 - Fluoride	0.10	U	0.10	0.080	mg/l	102	101	90-110	2	20
Batch number: 13283283201A	Sample number(s): 7222765-7222767,7222772-7222773									
1a Anions by 300.0 - Fluoride	1.0	U	1.0	0.40	mg/kg	103		90-110		
Batch number: 13283283201B	Sample number(s): 7222769-7222771,7222774-7222776									
1a Anions by 300.0 - Fluoride	1.0	U	1.0	0.40	mg/kg	103		90-110		
Batch number: 13276003101A	Sample number(s): 7222762									
28b pH (9040B and 9040C)						99		99-103		
Batch number: 13276039404A	Sample number(s): 7222763-7222764,7222769,7222771-7222776									
15a pH by 9045D						100		95-105		
Batch number: 13283162401B	Sample number(s): 7222776									
14a Moisture Content by 160.3						100		80-120		
Batch number: 13283162402A	Sample number(s): 7222763-7222767,7222769-7222775									
14a Moisture Content by 160.3						100		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13281001	Sample number(s): 7222762								
2378-TCDD	2.00 U	2.00	0.338	pg/l	94		60-150		
12378-PeCDD	0.427 J	10.0	0.280	pg/l	99		60-150		
123478-HxCDD	10.0 U	10.0	0.266	pg/l	99		60-150		
123678-HxCDD	0.572 J	10.0	0.281	pg/l	102		60-150		
123789-HxCDD	0.348 J	10.0	0.258	pg/l	97		60-150		
1234678-HpCDD	0.614 J	10.0	0.281	pg/l	97		60-150		
OCDD	1.53 J	20.0	0.593	pg/l	96		60-150		
2378-TCDF	2.00 U	2.00	0.230	pg/l	92		60-150		
12378-PeCDF	0.502 J	10.0	0.124	pg/l	96		60-150		
23478-PeCDF	0.364 J	10.0	0.116	pg/l	95		60-150		
123478-HxCDF	0.571 J	10.0	0.181	pg/l	95		60-150		
123678-HxCDF	0.559 J	10.0	0.178	pg/l	98		60-150		
123789-HxCDF	0.600 J	10.0	0.186	pg/l	99		60-150		
234678-HxCDF	0.387 J	10.0	0.171	pg/l	98		60-150		
1234678-HpCDF	0.745 J	10.0	0.144	pg/l	99		60-150		
1234789-HpCDF	0.694 J	10.0	0.156	pg/l	98		60-150		
OCDF	2.35 J	20.0	0.424	pg/l	99		60-150		
Batch number: 13283005	Sample number(s): 7222763								
2378-TCDD	1.00 U	1.00	0.140	ng/kg	87		67-158		
12378-PeCDD	5.00 U	5.00	0.115	ng/kg	96		70-142		
123478-HxCDD	5.00 U	5.00	0.0593	ng/kg	101		70-164		
123678-HxCDD	5.00 U	5.00	0.0617	ng/kg	99		76-134		
123789-HxCDD	5.00 U	5.00	0.0661	ng/kg	93		64-162		
1234678-HpCDD	0.0753 J	5.00	0.0723	ng/kg	93		70-140		
OCDD	0.215 J	10.0	0.0473	ng/kg	97		78-144		
2378-TCDF	1.00 U	1.00	0.137	ng/kg	94		75-158		
12378-PeCDF	0.0800 J	5.00	0.0711	ng/kg	95		80-134		
23478-PeCDF	5.00 U	5.00	0.0701	ng/kg	95		68-160		
123478-HxCDF	5.00 U	5.00	0.0561	ng/kg	98		72-134		
123678-HxCDF	0.0948 J	5.00	0.0516	ng/kg	98		84-130		
123789-HxCDF	5.00 U	5.00	0.0600	ng/kg	84		78-130		
234678-HxCDF	5.00 U	5.00	0.0489	ng/kg	95		70-156		
1234678-HpCDF	0.0423 J	5.00	0.0263	ng/kg	93		82-122		
1234789-HpCDF	5.00 U	5.00	0.0422	ng/kg	96		78-138		
OCDF	0.137 J	10.0	0.0908	ng/kg	98		63-170		
Batch number: 13281001	Sample number(s): 7222762								
TEQ WHO 2005 - EDLx0.0	0.164			pg/l					
Batch number: 13283005	Sample number(s): 7222763								
TEQ WHO 2005 - EDLx0.0	U			ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13280SLE026	Sample number(s): 7222763-7222764 UNSPK: 7222763								
Acenaphthene	96	96	48-127	0	30				
Acenaphthylene	104	103	49-121	1	30				
Anthracene	99	97	52-126	3	30				
Benzo(a)anthracene	97	94	44-143	2	30				
Benzo(a)pyrene	97	97	44-140	0	30				
Benzo(b)fluoranthene	113	117	26-142	4	30				
Benzo(e)pyrene	89	89	70-130	0	30				
Benzo(g,h,i)perylene	101	101	33-141	0	30				
Benzo(k)fluoranthene	102	100	54-142	1	30				
Butylbenzylphthalate	107	105	49-151	2	30				
Di-n-butylphthalate	108	106	52-147	2	30				
Chrysene	96	94	29-148	2	30				
Dibenz(a,h)anthracene	104	104	20-137	0	30				
Diethylphthalate	105	102	43-145	2	30				
Dimethylphthalate	101	101	58-129	1	30				
Bis(2-Ethylhexyl)phthalate	103	101	39-167	2	30				
Fluoranthene	100	98	40-148	2	30				
Fluorene	101	98	51-137	4	30				
Indeno(1,2,3-cd)pyrene	103	103	17-136	0	30				
1-Methylnaphthalene	103	100	50-131	2	30				
2-Methylnaphthalene	97	94	35-152	3	30				
Naphthalene	100	97	31-148	2	30				
N-Nitrosodimethylamine	61	60	48-113	2	30				
Di-n-octylphthalate	109	109	52-162	0	30				
Phenanthrene	96	93	29-142	2	30				
Pyrene	95	93	26-143	2	30				
Batch number: 13281A16A	Sample number(s): 7222764 UNSPK: P218895								
11a TPH by EPA 8015B GRO	87	94	69-123	9	30				
Batch number: 132780008A	Sample number(s): 7222763-7222764 UNSPK: P218895								
PCB-1016	88	90	41-135	4	50				
PCB-1260	99	111	40-134	12	50				
Batch number: 132810021A	Sample number(s): 7222763-7222764 UNSPK: 7222763								
Aldrin	85	80	16-126	6	50				
Alpha BHC	85	79	14-140	6	50				
Beta BHC	90	85	42-133	5	50				
Gamma BHC - Lindane	85	78	30-137	8	50				
p,p-DDD	90	86	43-149	4	50				
p,p-DDE	92	85	35-152	7	50				
p,p-DDT	89	84	12-193	5	50				
Delta BHC	89	82	13-153	6	50				
Dieldrin	90	84	41-153	6	50				
Endosulfan I	88	83	26-146	5	50				
Endosulfan II	93	87	34-141	5	50				
Endosulfan Sulfate	94	90	10-181	4	50				

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Quality Control Summary

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Reported: 10/17/13 at 03:03 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Endrin	88	82	30-152	6	50						
Endrin Aldehyde	88	83	23-138	5	50						
Endrin Ketone	86	82	30-148	5	50						
Heptachlor	84	77	16-152	7	50						
Heptachlor Epoxide	89	83	33-144	6	50						
Methoxychlor	88	86	41-161	1	50						
Batch number: 132800038A	Sample number(s): 7222763-7222764 UNSPK: P220653										
EFH (C12-C14)	83	74	49-123	12	20						
EFH (C15-C20)	98	93	49-123	6	20						
EFH (C21-C30)	83	71	49-123	15	20						
EFH (C30-C40)	59	56	49-123	5	20						
EFH (C8-C11)	71	67	49-123	6	20						
Batch number: 132810637001	Sample number(s): 7222763-7222764 UNSPK: P222779 BKG: P222779										
Aluminum	2134 (2)	1672 (2)	75-125	8	20	8,800		9,900		12	20
Antimony	58*	50*	75-125	17	20	4.00	U	3.88	U	0 (1)	20
Arsenic	103	95	75-125	7	20	3.94	J	4.24		7 (1)	20
Barium	105	97	75-125	7	20	60.6		66.6		9	20
Beryllium	101	96	75-125	6	20	0.403	J	0.413	J	2 (1)	20
Boron	91	88	75-125	6	20	6.15	J	6.11	J	1 (1)	20
Cadmium	96	93	75-125	5	20	0.212	J	0.254	J	18 (1)	20
Calcium	-7 (2)	-181 (2)	75-125	10	20	7,360		7,550		3	20
Chromium	119	104	75-125	9	20	14.2		17.3		19 (1)	20
Cobalt	97	93	75-125	6	20	3.83		4.41		14 (1)	20
Copper	111	104	75-125	6	20	9.16		10.1		10 (1)	20
Iron	2130 (2)	574 (2)	75-125	9	20	15,500		17,200		10	20
Lead	99	95	75-125	5	20	3.29		3.91		17 (1)	20
Lithium	106	100	75-125	6	20	26.9		30.2		11	20
Magnesium	560 (2)	327 (2)	75-125	9	20	4,340		4,900		12	20
Manganese	158 (2)	105 (2)	75-125	10	20	221		250		12	20
Molybdenum	99	96	75-125	5	20	0.267	J	0.290	J	8 (1)	20
Nickel	99	94	75-125	6	20	7.11		8.40		17 (1)	20
Phosphorus	298*	38*	75-125	48*	20	371		362		3	20
Potassium	136*	105	75-125	9	20	2,500		2,760		10	20
Sodium	102	98	75-125	5	20	108		126		16 (1)	20
Tin	91	89	75-125	5	20	2.56	J	2.58	J	1 (1)	20
Titanium	525 (2)	340 (2)	75-125	15	20	808		896		10	20
Vanadium	116	104	75-125	8	20	26.8		29.8		10	20
Zinc	105	93	75-125	7	20	47.4		51.2		8	20
Zirconium	102	99	75-125	5	20	2.30	J	3.36	J	37* (1)	20
Batch number: 132810637001A	Sample number(s): 7222763-7222764 UNSPK: P222779 BKG: P222779										
Silver	111	110	75-125	3	20	0.200	U	0.194	U	0 (1)	20
Strontium	42*	263*	75-125	57*	20	18.0		18.2		1	20
Thallium	107	102	75-125	4	20	0.241		0.257		7 (1)	20
Batch number: 132810637001B	Sample number(s): 7222763-7222764 UNSPK: P222779 BKG: P222779										
Selenium	109	111	75-125	0	20	0.400	U	0.388	U	0 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132810638001	Sample number(s): 7222763-7222764 UNSPK: P222779 BKG: P222779								
3a Mercury 7471A	111	106	65-135	4	20	0.0158 U	0.0160 U	0 (1)	20
Batch number: 13283283201A	Sample number(s): 7222765-7222767,7222772-7222773 UNSPK: P220655 BKG: P220655								
1a Anions by 300.0 - Fluoride	49*		80-120			2.0	2.0	4 (1)	20
Batch number: 13283283201B	Sample number(s): 7222769-7222771,7222774-7222776 UNSPK: 7222769 BKG: 7222769								
1a Anions by 300.0 - Fluoride	36*		80-120			0.89 J	0.82 J	8 (1)	20
Batch number: 13276003101A	Sample number(s): 7222762 BKG: P220584								
28b pH (9040B and 9040C)						7.5	7.5	1	3
Batch number: 13276039404A	Sample number(s): 7222763-7222764,7222769,7222771-7222776 BKG: 7222769								
15a pH by 9045D						6.83	6.84	0	3
Batch number: 13283162401B	Sample number(s): 7222776 BKG: P220658								
14a Moisture Content by 160.3						15.5	16.1	4	20
Batch number: 13283162402A	Sample number(s): 7222763-7222767,7222769-7222775 BKG: 7222769								
14a Moisture Content by 160.3						5.0	5.0	1	20
14a Moisture Content by 160.3						5.0	5.0	1	20
14a Moisture Content by 160.3						5.0	5.0	1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13280SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7222763	88	96	97
7222764	86	89	97
Blank	88	94	102
LCS	91	99	104
MS	90	95	101
MSD	89	97	102
Limits:	54-129	59-125	61-125

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13282WAI026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Surrogate Quality Control

7222762	88	97	90
Blank	96	106	97
LCS	57	69	57
LCSD	97	111	100
Limits:	44-137	62-141	51-136

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13277A20A

	Trifluorotoluene-F
7222762	95
7222768	93
Blank	94
LCS	100
LCSD	99
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13281A16A

	Trifluorotoluene-F
7222764	99
Blank	102
LCS	86
MS	85
MSD	93
Limits:	50-142

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132780008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7222763	109	114
7222764	104	109
Blank	112	112
LCS	117	122*
LCSD	120	123*
MS	107	109
MSD	113	113
Limits:	45-120	45-120

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132800002A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7222762	105	101
Blank	92	96
LCS	94	100
LCSD	103	97
Limits:	45-120	45-120

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Surrogate Quality Control

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132800003A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7222762	79	78
Blank	73	82
LCS	89	96
LCSD	86	92
Limits:	60-140	20-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132810021A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7222763	86	92
7222764	75	86
Blank	85	94
LCS	90	99
MS	87	94
MSD	80	90
Limits:	50-130	20-120

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 132820007A

	2,4-Dichlorophenylacetic acid
7222762	103
Blank	105
LCS	105
LCSD	112
Limits:	50-150

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132800018A

	Chlorobenzene	Orthoterphenyl
7222762	92	87
Blank	93	90
LCS	90	87
LCSD	92	81
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132800038A

	Chlorobenzene	Orthoterphenyl
7222763	84	80
7222764	79	75
Blank	91	85
LCS	87	74
MS	88	75

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Surrogate Quality Control

MSD	82	74				
Limits:	37-125	66-123				

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13281001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7222762	71	79	79	80	81	84
Blank	73	83	80	80	81	82
OPR	78	77	82	82	84	82
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7222762	87	91	99	78	85	84
Blank	83	87	92	83	84	82
OPR	81	80	74	77	83	82
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7222762	85	92	100	73	76
Blank	82	87	91	73	81
OPR	83	79	75	78	78
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13283005

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7222763	59	61	64	73	71	107
Blank	65	60	66	74	72	80
OPR	74	65	66	75	76	141
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7222763	89	70	74	62	72	77
Blank	92	75	77	66	73	79
OPR	97	81	78	70	75	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7222763	76	79	87	51	61
Blank	77	84	90	56	63
OPR	81	91	95	62	68
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423511
Reported: 10/17/13 at 03:03 PM

Surrogate Quality Control

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1423511 7222762-76

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 10/2/2013
CarrierName: FedEx
AirbillNo: 796825280883

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131002-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-100213	10/2/13 14:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB1-100213	10/2/13 14:00	WQ	None	4 - 250 mL Poly	10 day				X										X	X																
EB1-100213	10/2/13 14:00	WQ	None	3 - 250 mL Amber	10 day							X			X							X														
EB1-100213	10/2/13 14:00	WQ	None	4 - 1 L Amber	10 day									X							X															
EB1-100213	10/2/13 14:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											
EB1-100213	10/2/13 14:00	WQ	HCl	2 - 1 L Amber	10 day																					X										

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Greg Myers	10/03/2013	1600									
										10-3-13	1005

Subarea 5D

SSFL Phase 3 Chain of Custody

13013 1423511 7222762-76

CDM Smith

DateShipped: 10/2/2013
CarrierName: FedEx
AirbillNo: 796825280883

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131002-04
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-589-SA5D-SB-0.0-0.5	10/2/13 10:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X							X				X										
SL-589-SA5D-SB-0.0-0.5	10/2/13 10:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-589-SA5D-SB-4.0-5.0	10/2/13 10:40	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X				X				X										
SL-589-SA5D-SB-4.0-5.0	10/2/13 10:40	SO	None	2 - Encore	10 day																				X												
SL-594-SA5D-SB-0.0-0.5	10/2/13 09:40	SO	None	1 - SS-Sleeve	10 day				X																												
SL-594-SA5D-SB-4.0-5.0	10/2/13 09:50	SO	None	1 - 4 oz glass	10 day				X																												
SL-594-SA5D-SB-7.0-8.0	10/2/13 09:55	SO	None	1 - 4 oz glass	10 day				X																												
TB1-100213	10/2/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X												
SL-600-SA5D-SB-0.0-0.5MS	10/2/13 13:25	SO	None	3 - SS-Sleeve	10 day				X																												MS/MSD
SL-600-SA5D-SB-0.0-0.5MS	10/2/13 13:25	SO	None	1 - 8 oz glass	10 day													X																			MS/MSD
SL-900-SA5D-SB-0.0-0.5	10/2/13 13:25	SO	None	1 - 4 oz glass	10 day													X																			
SL-900-SA5D-SB-0.0-0.5	10/2/13 13:25	SO	None	1 - SS-Sleeve	10 day				X																												
SL-600-SA5D-SB-4.0-5.0	10/2/13 13:35	SO	None	1 - 8 oz glass	10 day				X									X																			
SL-600-SA5D-SB-9.0-10.0	10/2/13 13:45	SO	None	1 - 8 oz glass	10 day				X									X																			
SL-600-SA5D-SB-14.0-15.0	10/2/13 13:55	SO	None	1 - 8 oz glass	10 day				X									X																			
SL-600-SA5D-SB-18.5-19.5	10/2/13 14:05	SO	None	1 - 8 oz glass	10 day				X									X																			

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shelly Myers	10/2/2013	1600									
										10-3-13	1005

COC Rev 2

Subarea 5D

COC: 20131002-04, Page 1 of 1

Nicole Maljovec 13013/142351l/7222762-76

From: Mysel, Stefanie [MyselSJ@cdmsmith.com]
Sent: Monday, October 07, 2013 12:03 PM
To: Nicole Maljovec
Subject: Login Ph120

Follow Up Flag: Follow up
Flag Status: Red

Attachments: Lancaster 100213 COC (4)_Revised.pdf



Lancaster 100213 COC (4)_Revis...

Nicole,

Attached is the revised COC for sample 900.

Stefanie J. Mysel
Geologist

CDM Smith
111 Academy Way
Suite 150
Irvine, CA 92617
Direct: 949-930-9877
Main: 949-752-5452
Cell: 949-579-0634
Email: myselsj@cdmsmith.com<mailto:myselsj@cdmsmith.com>

SSFL Phase 3 Chain of Custody

13013/1423511/7222762-76

CDM Smith

DateShipped: 10/2/2013
CarrierName: FedEx
AirbillNo: 796825280883

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131002-04
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Amended COC

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Oxanotin	Methyl Mercury 1630	Other Analysis/Notes
SL-589-SA5D-SB-0.0-0.5	10/2/13 10:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X				X											
SL-589-SA5D-SB-0.0-0.5	10/2/13 10:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-589-SA5D-SB-4.0-5.0	10/2/13 10:40	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X			X				X											
SL-589-SA5D-SB-4.0-5.0	10/2/13 10:40	SO	None	2 - Encore	10 day																			X												
SL-594-SA5D-SB-0.0-0.5	10/2/13 09:40	SO	None	1 - SS-Sleeve	10 day				X																											
SL-594-SA5D-SB-4.0-5.0	10/2/13 09:50	SO	None	1 - 4 oz glass	10 day				X																											
SL-594-SA5D-SB-7.0-8.0	10/2/13 09:55	SO	None	1 - 4 oz glass	10 day				X																											
TB1-100213	10/2/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-600-SA5D-SB-0.0-0.5MS	10/2/13 13:25	SO	None	3 - SS-Sleeve	10 day				X																											MS/MSD
SL-600-SA5D-SB-0.0-0.5MS	10/2/13 13:25	SO	None	1 - 8 oz glass	10 day													X																		MS/MSD
SL-900-SA5D-SB-0.0-0.5	10/2/13 13:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-900-SA5D-SB-0.0-0.5	10/2/13 13:30	SO	None	1 - SS-Sleeve	10 day				X																											
SL-600-SA5D-SB-4.0-5.0	10/2/13 13:35	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-600-SA5D-SB-9.0-10.0	10/2/13 13:45	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-600-SA5D-SB-14.0-15.0	10/2/13 13:55	SO	None	1 - 8 oz glass	10 day				X									X																		
SL-600-SA5D-SB-18.5-19.5	10/2/13 14:05	SO	None	1 - 8 oz glass	10 day				X									X																		

Special Instructions:

Sampler: V. Cordero

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stacy Mupel	10/02/2013	1600									

COC Rev 7

COC 20131002-04, Page 1 of 1

1 of 1

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Environmental Sample Administration Receipt Documentation Log

1423511

Client/Project: CDM Smith

Date of Receipt: 10-3-13

Time of Receipt: 1005

Source Code: 5.

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.3	TB	WI	Y	B	
2	↓	1.2	↓	↓	↓	↓	
3	↓	1.6	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

SL-900-SA5D-SB-0.0-0.5 has collection time on label @ 1320

SL-900-SA5D-SB-0.0-0.5 Sleeve has collection time on label @ 1330

Unpacker Signature/Emp#: [signature] 5200 **Date/Time:** 10-3-13 1105

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH122

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 17, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 10/04/2013
Group Number: 1423924
SDG: PH122
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-502-SA5D-SB-0.0-0.5 Soil	7224840
SL-502-SA5D-SB-6.5-7.5 Soil	7224841
TB-100313 Water	7224842
SL-508-SA5D-SB-0.0-0.5 Soil	7224843
SL-508-SA5D-SB-4.0-5.0 Soil	7224844
SL-508-SA5D-SB-9.0-10.0 Soil	7224845
SL-508-SA5D-SB-14.0-15.0 Soil	7224846
SL-508-SA5D-SB-19.0-20.0 Soil	7224847
SL-508-SA5D-SB-23.0-24.0 Soil	7224848
SL-507-SA5D-SB-0.0-0.5 Soil	7224849
SL-507-SA5D-SB-4.0-5.0 Soil	7224850
SL-507-SA5D-SB-10.5-11.5 Soil	7224851
SL-608-SA5D-SB-0.0-0.5 Soil	7224852
SL-608-SA5D-SB-4.0-5.0 Soil	7224853

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: SL-502-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224840
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 08:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

502-0 SDG#: PH122-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	6.9	10
12969	Acenaphthylene	208-96-8	17	U	17	3.5	10
12969	Anthracene	120-12-7	17	U	17	3.5	10
12969	Benzo(a)anthracene	56-55-3	17	U	17	6.9	10
12969	Benzo(a)pyrene	50-32-8	17	U	17	6.9	10
12969	Benzo(b)fluoranthene	205-99-2	20		17	6.9	10
12969	Benzo(e)pyrene	192-97-2	46	J	180	35	10
12969	Benzo(g,h,i)perylene	191-24-2	17	J	17	6.9	10
12969	Benzo(k)fluoranthene	207-08-9	17	U	17	6.9	10
12969	Butylbenzylphthalate	85-68-7	190	U	190	62	10
12969	Di-n-butylphthalate	84-74-2	190	U	190	62	10
12969	Chrysene	218-01-9	19		17	3.5	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.9	10
12969	Diethylphthalate	84-66-2	190	U	190	62	10
12969	Dimethylphthalate	131-11-3	190	U	190	62	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	62	10
12969	Fluoranthene	206-44-0	17	U	17	6.9	10
12969	Fluorene	86-73-7	17	U	17	6.9	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	6.9	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	6.9	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	6.9	10
12969	Naphthalene	91-20-3	17	U	17	6.9	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.9	10
12969	Di-n-octylphthalate	117-84-0	190	U	190	62	10
12969	Phenanthrene	85-01-8	17	U	17	6.9	10
12969	Pyrene	129-00-0	17	U	17	6.9	10
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	7.4	J	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	100	U	100	42	20
12952	EFH (C15-C20)	n.a.	48	J	100	42	20
12952	EFH (C21-C30)	n.a.	870		100	42	20
12952	EFH (C30-C40)	n.a.	1,400		210	83	20
12952	EFH (C8-C11)	n.a.	100	U	100	42	20
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224840
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 08:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

502-0 SDG#: PH122-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,900		40.4	7.28	1
06944	Antimony	7440-36-0	4.04	U	4.04	0.747	1
06935	Arsenic	7440-38-2	4.29		4.04	0.706	1
06946	Barium	7440-39-3	126		1.01	0.0333	1
06947	Beryllium	7440-41-7	0.849	J	1.01	0.0676	1
07914	Boron	7440-42-8	12.9		10.1	0.848	1
06949	Cadmium	7440-43-9	0.518	J	1.01	0.0767	1
01650	Calcium	7440-70-2	6,680		20.2	3.37	1
06951	Chromium	7440-47-3	30.9		3.03	0.161	1
06952	Cobalt	7440-48-4	9.42		1.01	0.0999	1
06953	Copper	7440-50-8	20.6		2.02	0.293	1
01654	Iron	7439-89-6	30,600		80.7	7.31	2
06955	Lead	7439-92-1	13.5		3.03	0.505	1
01656	Lithium	7439-93-2	24.3		4.0	0.34	1
01657	Magnesium	7439-95-4	6,420		10.1	1.69	1
06958	Manganese	7439-96-5	451		1.01	0.0838	1
06960	Molybdenum	7439-98-7	4.55		2.02	0.172	1
06961	Nickel	7440-02-0	19.2		2.02	0.131	1
10145	Phosphorus	7723-14-0	416		10.1	2.92	1
01662	Potassium	7440-09-7	4,930		101	8.42	1
01667	Sodium	7440-23-5	109		101	16.9	1
06969	Tin	7440-31-5	2.44	J	10.1	0.222	1
06970	Titanium	7440-32-6	842		1.01	0.172	1
06971	Vanadium	7440-62-2	58.6		1.01	0.131	1
06972	Zinc	7440-66-6	70.7		4.04	0.202	1
10146	Zirconium	7440-67-7	6.96		5.05	0.848	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.462		0.404	0.101	2
06142	Silver	7440-22-4	0.0591	J	0.202	0.0262	2
06144	Strontium	7440-24-6	33.4		1.01	0.172	5
06145	Thallium	7440-28-0	0.424		0.202	0.0303	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0397		0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.97		0.0100	0.0100	1
	The pH was measured in water at 20.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224840
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 08:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

502-0 SDG#: PH122-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.150	J	1.01	0.0279	1
11031	12378-PeCDD	40321-76-4	0.442	JQ	5.07	0.0331	1
11031	123478-HxCDD	39227-28-6	0.361	J	5.07	0.0422	1
11031	123678-HxCDD	57653-85-7	0.970	J	5.07	0.0444	1
11031	123789-HxCDD	19408-74-3	0.807	J	5.07	0.0417	1
11031	1234678-HpCDD	35822-46-9	18.4	B	5.07	0.0359	1
11031	OCDD	3268-87-9	162	B	10.1	0.0389	1
11031	2378-TCDF	51207-31-9	0.310	JQ	1.01	0.0598	1
11031	12378-PeCDF	57117-41-6	0.846	JB	5.07	0.0262	1
11031	23478-PeCDF	57117-31-4	0.575	J	5.07	0.0236	1
11031	123478-HxCDF	70648-26-9	0.332	J	5.07	0.0293	1
11031	123678-HxCDF	57117-44-9	0.367	JB	5.07	0.0285	1
11031	123789-HxCDF	72918-21-9	0.524	J	5.07	0.0302	1
11031	234678-HxCDF	60851-34-5	0.356	J	5.07	0.0294	1
11031	1234678-HpCDF	67562-39-4	2.81	JB	5.07	0.0260	1
11031	1234789-HpCDF	55673-89-7	0.261	J	5.07	0.0269	1
11031	OCDF	39001-02-0	6.33	JB	10.1	0.0247	1

The CRS (Clean-up Recovery Spike) was inadvertently not added to the sample. Since labeled compound recoveries were within specifications in the sample, there is no impact on the data.

Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.985				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224840
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 08:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

502-0 SDG#: PH122-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224840
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 08:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

502-0 SDG#: PH122-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 13:21	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/16/2013 22:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 21:30	Heather E Williams	20
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13283005	10/15/2013 14:48	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13283005	10/10/2013 10:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/15/2013 07:11	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 13:35	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 07:59	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 07:59	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:23	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 07:59	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224840
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 08:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

502-0 SDG#: PH122-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:09	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402A	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401A	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224841
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 08:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

502-6 SDG#: PH122-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.4	10
12969	Acenaphthylene	208-96-8	19	U	19	3.7	10
12969	Anthracene	120-12-7	19	U	19	3.7	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.4	10
12969	Benzo(a)pyrene	50-32-8	19	U	19	7.4	10
12969	Benzo(b)fluoranthene	205-99-2	8.8	J	19	7.4	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	37	10
12969	Benzo(g,h,i)perylene	191-24-2	9.0	J	19	7.4	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.4	10
12969	Butylbenzylphthalate	85-68-7	200	U	200	67	10
12969	Di-n-butylphthalate	84-74-2	200	U	200	67	10
12969	Chrysene	218-01-9	12	J	19	3.7	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.4	10
12969	Diethylphthalate	84-66-2	200	U	200	67	10
12969	Dimethylphthalate	131-11-3	200	U	200	67	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	200	U	200	67	10
12969	Fluoranthene	206-44-0	19	U	19	7.4	10
12969	Fluorene	86-73-7	19	U	19	7.4	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.4	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.4	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.4	10
12969	Naphthalene	91-20-3	19	U	19	7.4	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.4	10
12969	Di-n-octylphthalate	117-84-0	200	U	200	67	10
12969	Phenanthrene	85-01-8	19	U	19	7.4	10
12969	Pyrene	129-00-0	19	U	19	7.4	10
Reporting limits were raised due to interference from the sample matrix.							
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.81
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	37	U	37	15	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224841
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 08:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

502-6 SDG#: PH122-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	37	U	37	15	1
12952	EFH (C21-C30)	n.a.	77		37	15	1
12952	EFH (C30-C40)	n.a.	230		74	30	1
12952	EFH (C8-C11)	n.a.	37	U	37	15	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,100		43.7	7.88	1
06944	Antimony	7440-36-0	4.37	U	4.37	0.809	1
06935	Arsenic	7440-38-2	8.04		4.37	0.765	1
06946	Barium	7440-39-3	117		1.09	0.0361	1
06947	Beryllium	7440-41-7	1.10		1.09	0.0732	1
07914	Boron	7440-42-8	9.05	J	10.9	0.918	1
06949	Cadmium	7440-43-9	0.343	J	1.09	0.0831	1
01650	Calcium	7440-70-2	19,600		21.9	3.65	1
06951	Chromium	7440-47-3	32.9		3.28	0.175	1
06952	Cobalt	7440-48-4	11.3		1.09	0.108	1
06953	Copper	7440-50-8	24.9		2.19	0.317	1
01654	Iron	7439-89-6	36,100		87.4	7.91	2
06955	Lead	7439-92-1	11.4		3.28	0.546	1
01656	Lithium	7439-93-2	35.5		4.4	0.37	1
01657	Magnesium	7439-95-4	7,040		10.9	1.83	1
06958	Manganese	7439-96-5	343		1.09	0.0907	1
06960	Molybdenum	7439-98-7	2.19	U	2.19	0.186	1
06961	Nickel	7440-02-0	17.4		2.19	0.142	1
10145	Phosphorus	7723-14-0	290		10.9	3.16	1
01662	Potassium	7440-09-7	2,400		109	9.12	1
01667	Sodium	7440-23-5	100	J	109	18.3	1
06969	Tin	7440-31-5	3.14	J	10.9	0.240	1
06970	Titanium	7440-32-6	1,150		1.09	0.186	1
06971	Vanadium	7440-62-2	62.0		1.09	0.142	1
06972	Zinc	7440-66-6	69.4		4.37	0.219	1
10146	Zirconium	7440-67-7	5.65		5.46	0.918	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.188	J	0.437	0.109	2
06142	Silver	7440-22-4	0.0566	J	0.219	0.0284	2
06144	Strontium	7440-24-6	47.2		0.437	0.0743	2
06145	Thallium	7440-28-0	0.378		0.219	0.0328	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0210		0.0174	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.48		0.0100	0.0100	1
	The pH was measured in water at 20.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224841
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 08:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

502-6 SDG#: PH122-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	10.3	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 06:47	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 02:36	Laura M Krieger	23.81
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327732660	10/04/2013 19:45	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327732660	10/04/2013 19:34	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/16/2013 23:08	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 20:47	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/15/2013 07:15	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA5D-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224841
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 08:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

502-6 SDG#: PH122-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 13:39	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:02	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:02	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/15/2013 08:26	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:02	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:11	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402A	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401A	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-100313 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7224842
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 08:00

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

502TB SDG#: PH122-03TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13280A20A	10/08/2013 12:18	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13280A20A	10/08/2013 12:18	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224843
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:25 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-0 SDG#: PH122-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	2.0		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.7	J	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	0.81	J	1.8	0.71	1
12969	Naphthalene	91-20-3	1.3	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.2	J	1.8	0.71	1
12969	Pyrene	129-00-0	1.1	J	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	22		18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	5.9		5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224843
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:25 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-0 SDG#: PH122-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,900		41.3	7.44	1
06944	Antimony	7440-36-0	4.13	U	4.13	0.763	1
06935	Arsenic	7440-38-2	3.72	J	4.13	0.722	1
06946	Barium	7440-39-3	124		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.959	J	1.03	0.0691	1
07914	Boron	7440-42-8	13.8		10.3	0.867	1
06949	Cadmium	7440-43-9	0.474	J	1.03	0.0784	1
01650	Calcium	7440-70-2	6,450		20.6	3.45	1
06951	Chromium	7440-47-3	35.0		3.10	0.165	1
06952	Cobalt	7440-48-4	9.68		1.03	0.102	1
06953	Copper	7440-50-8	22.6		2.06	0.299	1
01654	Iron	7439-89-6	33,300		82.5	7.47	2
06955	Lead	7439-92-1	10.9		3.10	0.516	1
01656	Lithium	7439-93-2	23.6		4.1	0.35	1
01657	Magnesium	7439-95-4	6,910		10.3	1.72	1
06958	Manganese	7439-96-5	448		1.03	0.0856	1
06960	Molybdenum	7439-98-7	0.209	J	2.06	0.175	1
06961	Nickel	7440-02-0	19.5		2.06	0.134	1
10145	Phosphorus	7723-14-0	355		10.3	2.98	1
01662	Potassium	7440-09-7	6,340		103	8.60	1
01667	Sodium	7440-23-5	82.0	J	103	17.2	1
06969	Tin	7440-31-5	2.66	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,140		1.03	0.175	1
06971	Vanadium	7440-62-2	65.7		1.03	0.134	1
06972	Zinc	7440-66-6	72.0		4.13	0.206	1
10146	Zirconium	7440-67-7	7.04		5.16	0.867	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.314	J	0.413	0.103	2
06142	Silver	7440-22-4	0.0578	J	0.206	0.0268	2
06144	Strontium	7440-24-6	35.4		1.03	0.175	5
06145	Thallium	7440-28-0	0.466		0.206	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172		0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.45		0.0100	0.0100	1
	The pH was measured in water at 20.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224843
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:25 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-0 SDG#: PH122-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.136	1
11031	12378-PeCDD	40321-76-4	0.272	JQ	5.29	0.132	1
11031	123478-HxCDD	39227-28-6	0.0866	JQ	5.29	0.0756	1
11031	123678-HxCDD	57653-85-7	0.463	JQ	5.29	0.0773	1
11031	123789-HxCDD	19408-74-3	0.733	J	5.29	0.0739	1
11031	1234678-HpCDD	35822-46-9	2.04	JBQ	5.29	0.122	1
11031	OCDD	3268-87-9	24.7	B	10.6	0.0999	1
11031	2378-TCDF	51207-31-9	0.234	JQ	1.06	0.184	1
11031	12378-PeCDF	57117-41-6	3.31	JB	5.29	0.0922	1
11031	23478-PeCDF	57117-31-4	0.136	JQ	5.29	0.0845	1
11031	123478-HxCDF	70648-26-9	0.146	JQ	5.29	0.0712	1
11031	123678-HxCDF	57117-44-9	0.305	JBQ	5.29	0.0644	1
11031	123789-HxCDF	72918-21-9	1.20	J	5.29	0.0694	1
11031	234678-HxCDF	60851-34-5	0.0997	JQ	5.29	0.0631	1
11031	1234678-HpCDF	67562-39-4	0.426	JB	5.29	0.0408	1
11031	1234789-HpCDF	55673-89-7	0.105	J	5.29	0.0555	1
11031	OCDF	39001-02-0	0.947	JBQ	10.6	0.109	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.305				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	97	17 - 157
13C12-2378-TCDF	50	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224843
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:25 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-0 SDG#: PH122-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224843
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:25 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-0 SDG#: PH122-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 07:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/16/2013 23:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 15:29	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13283005	10/14/2013 19:30	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13283005	10/10/2013 10:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/15/2013 07:19	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 13:43	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:04	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:04	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:28	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:04	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224843
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:25 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-0 SDG#: PH122-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:14	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402A	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401A	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224844
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:35 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-4 SDG#: PH122-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	20.94
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224844
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:35 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-4 SDG#: PH122-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,500		44.9	8.09	1
06944	Antimony	7440-36-0	4.49	U	4.49	0.831	1
06935	Arsenic	7440-38-2	3.46	J	4.49	0.786	1
06946	Barium	7440-39-3	140		1.12	0.0370	1
06947	Beryllium	7440-41-7	0.957	J	1.12	0.0752	1
07914	Boron	7440-42-8	11.5		11.2	0.943	1
06949	Cadmium	7440-43-9	0.395	J	1.12	0.0853	1
01650	Calcium	7440-70-2	9,630		22.4	3.75	1
06951	Chromium	7440-47-3	33.3		3.37	0.180	1
06952	Cobalt	7440-48-4	10.6		1.12	0.111	1
06953	Copper	7440-50-8	19.1		2.24	0.325	1
01654	Iron	7439-89-6	34,000		89.8	8.13	2
06955	Lead	7439-92-1	9.86		3.37	0.561	1
01656	Lithium	7439-93-2	25.6		4.5	0.38	1
01657	Magnesium	7439-95-4	7,670		11.2	1.87	1
06958	Manganese	7439-96-5	470		1.12	0.0932	1
06960	Molybdenum	7439-98-7	2.24	U	2.24	0.191	1
06961	Nickel	7440-02-0	20.8		2.24	0.146	1
10145	Phosphorus	7723-14-0	297		11.2	3.24	1
01662	Potassium	7440-09-7	3,810		112	9.36	1
01667	Sodium	7440-23-5	213		112	18.7	1
06969	Tin	7440-31-5	2.69	J	11.2	0.247	1
06970	Titanium	7440-32-6	698		1.12	0.191	1
06971	Vanadium	7440-62-2	56.6		1.12	0.146	1
06972	Zinc	7440-66-6	70.6		4.49	0.224	1
10146	Zirconium	7440-67-7	5.97		5.61	0.943	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.189	J	0.449	0.112	2
06142	Silver	7440-22-4	0.0664	J	0.224	0.0292	2
06144	Strontium	7440-24-6	45.4		1.12	0.191	5
06145	Thallium	7440-28-0	0.547		0.224	0.0337	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0148	J	0.0179	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.72		0.0100	0.0100	1
	The pH was measured in water at 20.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224844
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:35 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-4 SDG#: PH122-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 07:53	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 03:14	Laura M Krieger	20.94
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327732660	10/04/2013 19:35	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327732660	10/04/2013 19:35	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/16/2013 23:45	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 15:50	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/15/2013 07:22	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224844
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:35 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-4 SDG#: PH122-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 13:48	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:06	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:06	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:30	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:06	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:16	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402A	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401A	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224845
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:45 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-9 SDG#: PH122-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20.39
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224845
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:45 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-9 SDG#: PH122-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,700		44.6	8.04	1
06944	Antimony	7440-36-0	4.46	U	4.46	0.825	1
06935	Arsenic	7440-38-2	4.26	J	4.46	0.781	1
06946	Barium	7440-39-3	98.0		1.12	0.0368	1
06947	Beryllium	7440-41-7	0.843	J	1.12	0.0747	1
07914	Boron	7440-42-8	10.7	J	11.2	0.937	1
06949	Cadmium	7440-43-9	0.510	J	1.12	0.0848	1
01650	Calcium	7440-70-2	49,000		22.3	3.73	1
06951	Chromium	7440-47-3	28.2		3.35	0.178	1
06952	Cobalt	7440-48-4	7.02		1.12	0.110	1
06953	Copper	7440-50-8	17.8		2.23	0.323	1
01654	Iron	7439-89-6	25,300		44.6	4.04	1
06955	Lead	7439-92-1	7.87		3.35	0.558	1
01656	Lithium	7439-93-2	27.3		4.5	0.38	1
01657	Magnesium	7439-95-4	5,620		11.2	1.86	1
06958	Manganese	7439-96-5	327		1.12	0.0926	1
06960	Molybdenum	7439-98-7	2.23	U	2.23	0.190	1
06961	Nickel	7440-02-0	17.7		2.23	0.145	1
10145	Phosphorus	7723-14-0	246		11.2	3.22	1
01662	Potassium	7440-09-7	3,220		112	9.30	1
01667	Sodium	7440-23-5	295		112	18.6	1
06969	Tin	7440-31-5	2.60	J	11.2	0.245	1
06970	Titanium	7440-32-6	1,070		1.12	0.190	1
06971	Vanadium	7440-62-2	54.7		1.12	0.145	1
06972	Zinc	7440-66-6	53.6		4.46	0.223	1
10146	Zirconium	7440-67-7	6.12		5.58	0.937	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.446	U	0.446	0.112	2
06142	Silver	7440-22-4	0.0426	J	0.223	0.0290	2
06144	Strontium	7440-24-6	35.5		1.12	0.190	5
06145	Thallium	7440-28-0	0.323		0.223	0.0335	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0125	J	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.12		0.0100	0.0100	1
	The pH was measured in water at 20.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224845
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:45 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-9 SDG#: PH122-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 08:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 03:52	Laura M Krieger	20.39
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327732660	10/04/2013 19:37	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327732660	10/04/2013 19:38	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/17/2013 00:03	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 16:11	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224845
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:45 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

508-9 SDG#: PH122-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 13:52	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:09	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:09	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:37	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:09	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:18	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402A	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401A	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224846
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:55 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50814 SDG#: PH122-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	0.81	J	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	8.4		1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	12		1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	13		1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	6.9	J	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	7.5		1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	7.2		1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	8.4		1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0		1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	9.1		1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	6.9		1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	2.5		1.9	0.74	1
12969	Pyrene	129-00-0	8.3		1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20.9
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224846
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:55 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50814 SDG#: PH122-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,000		43.9	7.91	1
06944	Antimony	7440-36-0	4.39	U	4.39	0.812	1
06935	Arsenic	7440-38-2	4.39		4.39	0.768	1
06946	Barium	7440-39-3	86.3		1.10	0.0362	1
06947	Beryllium	7440-41-7	0.764	J	1.10	0.0735	1
07914	Boron	7440-42-8	8.07	J	11.0	0.921	1
06949	Cadmium	7440-43-9	0.214	J	1.10	0.0833	1
01650	Calcium	7440-70-2	6,440		21.9	3.66	1
06951	Chromium	7440-47-3	26.4		3.29	0.175	1
06952	Cobalt	7440-48-4	7.70		1.10	0.109	1
06953	Copper	7440-50-8	17.2		2.19	0.318	1
01654	Iron	7439-89-6	26,600		43.9	3.97	1
06955	Lead	7439-92-1	6.73		3.29	0.548	1
01656	Lithium	7439-93-2	24.6		4.4	0.37	1
01657	Magnesium	7439-95-4	5,440		11.0	1.83	1
06958	Manganese	7439-96-5	406		1.10	0.0910	1
06960	Molybdenum	7439-98-7	2.19	U	2.19	0.186	1
06961	Nickel	7440-02-0	15.6		2.19	0.143	1
10145	Phosphorus	7723-14-0	254		11.0	3.17	1
01662	Potassium	7440-09-7	3,030		110	9.15	1
01667	Sodium	7440-23-5	292		110	18.3	1
06969	Tin	7440-31-5	2.77	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,120		1.10	0.186	1
06971	Vanadium	7440-62-2	51.0		1.10	0.143	1
06972	Zinc	7440-66-6	55.3		4.39	0.219	1
10146	Zirconium	7440-67-7	5.56		5.48	0.921	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.439	U	0.439	0.110	2
06142	Silver	7440-22-4	0.0300	J	0.219	0.0285	2
06144	Strontium	7440-24-6	26.9		1.10	0.186	5
06145	Thallium	7440-28-0	0.337		0.219	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0133	J	0.0186	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.25		0.0100	0.0100	1
	The pH was measured in water at 20.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224846
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:55 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50814 SDG#: PH122-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 08:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 04:30	Laura M Krieger	20.9
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327732660	10/04/2013 19:36	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327732660	10/04/2013 19:36	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/17/2013 00:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 16:32	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224846
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 09:55 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50814 SDG#: PH122-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 13:56	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:11	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:11	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:40	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:11	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:20	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402A	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401A	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224847
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 10:05 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50819 SDG#: PH122-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	21.15
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	8.9	J	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224847
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 10:05 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50819 SDG#: PH122-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,500		43.1	7.78	1
06944	Antimony	7440-36-0	4.31	U	4.31	0.798	1
06935	Arsenic	7440-38-2	4.22	J	4.31	0.755	1
06946	Barium	7440-39-3	83.5		1.08	0.0356	1
06947	Beryllium	7440-41-7	0.722	J	1.08	0.0723	1
07914	Boron	7440-42-8	8.19	J	10.8	0.906	1
06949	Cadmium	7440-43-9	0.302	J	1.08	0.0820	1
01650	Calcium	7440-70-2	9,940		21.6	3.60	1
06951	Chromium	7440-47-3	25.3		3.24	0.173	1
06952	Cobalt	7440-48-4	6.80		1.08	0.107	1
06953	Copper	7440-50-8	17.1		2.16	0.313	1
01654	Iron	7439-89-6	24,700		43.1	3.91	1
06955	Lead	7439-92-1	6.70		3.24	0.539	1
01656	Lithium	7439-93-2	23.2		4.3	0.37	1
01657	Magnesium	7439-95-4	5,240		10.8	1.80	1
06958	Manganese	7439-96-5	394		1.08	0.0895	1
06960	Molybdenum	7439-98-7	2.16	U	2.16	0.183	1
06961	Nickel	7440-02-0	15.7		2.16	0.140	1
10145	Phosphorus	7723-14-0	354		10.8	3.12	1
01662	Potassium	7440-09-7	2,860		108	9.00	1
01667	Sodium	7440-23-5	252		108	18.0	1
06969	Tin	7440-31-5	2.73	J	10.8	0.237	1
06970	Titanium	7440-32-6	1,160		1.08	0.183	1
06971	Vanadium	7440-62-2	50.1		1.08	0.140	1
06972	Zinc	7440-66-6	55.4		4.31	0.216	1
10146	Zirconium	7440-67-7	5.71		5.39	0.906	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.431	U	0.431	0.108	2
06142	Silver	7440-22-4	0.0399	J	0.216	0.0280	2
06144	Strontium	7440-24-6	31.8		1.08	0.183	5
06145	Thallium	7440-28-0	0.312		0.216	0.0324	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0119	J	0.0184	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.37		0.0100	0.0100	1
	The pH was measured in water at 20.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224847
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 10:05 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50819 SDG#: PH122-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 09:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 05:08	Laura M Krieger	21.15
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327732660	10/04/2013 19:38	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327732660	10/04/2013 19:39	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/17/2013 00:40	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 16:54	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224847
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 10:05 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50819 SDG#: PH122-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 14:01	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:13	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:13	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:42	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:13	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:22	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402A	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401A	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-23.0-24.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224848
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 10:15 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50823 SDG#: PH122-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.89
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	7.8	J	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-23.0-24.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224848
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 10:15 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50823 SDG#: PH122-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,100		42.1	7.59	1
06944	Antimony	7440-36-0	4.21	U	4.21	0.779	1
06935	Arsenic	7440-38-2	3.45	J	4.21	0.737	1
06946	Barium	7440-39-3	73.7		1.05	0.0348	1
06947	Beryllium	7440-41-7	0.574	J	1.05	0.0706	1
07914	Boron	7440-42-8	6.19	J	10.5	0.885	1
06949	Cadmium	7440-43-9	0.272	J	1.05	0.0800	1
01650	Calcium	7440-70-2	5,570		21.1	3.52	1
06951	Chromium	7440-47-3	20.5		3.16	0.168	1
06952	Cobalt	7440-48-4	7.92		1.05	0.104	1
06953	Copper	7440-50-8	14.6		2.11	0.305	1
01654	Iron	7439-89-6	21,800		42.1	3.81	1
06955	Lead	7439-92-1	6.16		3.16	0.527	1
01656	Lithium	7439-93-2	19.7		4.2	0.36	1
01657	Magnesium	7439-95-4	4,460		10.5	1.76	1
06958	Manganese	7439-96-5	410		1.05	0.0874	1
06960	Molybdenum	7439-98-7	2.11	U	2.11	0.179	1
06961	Nickel	7440-02-0	14.4		2.11	0.137	1
10145	Phosphorus	7723-14-0	350		10.5	3.04	1
01662	Potassium	7440-09-7	2,350		105	8.78	1
01667	Sodium	7440-23-5	186		105	17.6	1
06969	Tin	7440-31-5	2.47	J	10.5	0.232	1
06970	Titanium	7440-32-6	796		1.05	0.179	1
06971	Vanadium	7440-62-2	39.4		1.05	0.137	1
06972	Zinc	7440-66-6	50.8		4.21	0.211	1
10146	Zirconium	7440-67-7	3.76	J	5.27	0.885	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.421	U	0.421	0.105	2
06142	Silver	7440-22-4	0.0406	J	0.211	0.0274	2
06144	Strontium	7440-24-6	22.9		1.05	0.179	5
06145	Thallium	7440-28-0	0.291		0.211	0.0316	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0111	J	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.38		0.0100	0.0100	1
	The pH was measured in water at 20.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-23.0-24.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224848
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 10:15 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50823 SDG#: PH122-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 10:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 05:46	Laura M Krieger	22.89
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327732660	10/04/2013 19:40	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327732660	10/04/2013 19:40	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/17/2013 00:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 17:15	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5D-SB-23.0-24.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224848
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 10:15 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50823 SDG#: PH122-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 14:05	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:16	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:16	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:44	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:16	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402A	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401A	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224849
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:30 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

507-0 SDG#: PH122-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	7.0	10
12969	Acenaphthylene	208-96-8	17	U	17	3.5	10
12969	Anthracene	120-12-7	19		17	3.5	10
12969	Benzo(a)anthracene	56-55-3	210		17	7.0	10
12969	Benzo(a)pyrene	50-32-8	480		17	7.0	10
12969	Benzo(b)fluoranthene	205-99-2	590		17	7.0	10
12969	Benzo(e)pyrene	192-97-2	320		180	35	10
12969	Benzo(g,h,i)perylene	191-24-2	280		17	7.0	10
12969	Benzo(k)fluoranthene	207-08-9	260		17	7.0	10
12969	Butylbenzylphthalate	85-68-7	190	U	190	63	10
12969	Di-n-butylphthalate	84-74-2	190	U	190	63	10
12969	Chrysene	218-01-9	320		17	3.5	10
12969	Dibenz(a,h)anthracene	53-70-3	92		17	7.0	10
12969	Diethylphthalate	84-66-2	190	U	190	63	10
12969	Dimethylphthalate	131-11-3	190	U	190	63	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	68	J	190	63	10
12969	Fluoranthene	206-44-0	79		17	7.0	10
12969	Fluorene	86-73-7	17	U	17	7.0	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	280		17	7.0	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	7.0	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	7.0	10
12969	Naphthalene	91-20-3	17	U	17	7.0	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	7.0	10
12969	Di-n-octylphthalate	117-84-0	190	U	190	63	10
12969	Phenanthrene	85-01-8	29		17	7.0	10
12969	Pyrene	129-00-0	120		17	7.0	10
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	13	J	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	10	J	18	4.6	1
10592	PCB-1260	11096-82-5	7.2	J	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	11	U	11	4.2	2
12952	EFH (C15-C20)	n.a.	11	U	11	4.2	2
12952	EFH (C21-C30)	n.a.	37		11	4.2	2
12952	EFH (C30-C40)	n.a.	60		21	8.5	2
12952	EFH (C8-C11)	n.a.	11	U	11	4.2	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224849
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:30 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

507-0 SDG#: PH122-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,500		41.1	7.40	1
06944	Antimony	7440-36-0	4.11	U	4.11	0.759	1
06935	Arsenic	7440-38-2	3.51	J	4.11	0.718	1
06946	Barium	7440-39-3	115		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.785	J	1.03	0.0688	1
07914	Boron	7440-42-8	11.6		10.3	0.862	1
06949	Cadmium	7440-43-9	0.690	J	1.03	0.0780	1
01650	Calcium	7440-70-2	6,500		20.5	3.43	1
06951	Chromium	7440-47-3	28.7		3.08	0.164	1
06952	Cobalt	7440-48-4	8.35		1.03	0.102	1
06953	Copper	7440-50-8	20.2		2.05	0.298	1
01654	Iron	7439-89-6	25,500		41.1	3.72	1
06955	Lead	7439-92-1	15.6		3.08	0.513	1
01656	Lithium	7439-93-2	20.2		4.1	0.35	1
01657	Magnesium	7439-95-4	6,230		10.3	1.71	1
06958	Manganese	7439-96-5	415		1.03	0.0852	1
06960	Molybdenum	7439-98-7	0.348	J	2.05	0.174	1
06961	Nickel	7440-02-0	17.5		2.05	0.133	1
10145	Phosphorus	7723-14-0	373		10.3	2.97	1
01662	Potassium	7440-09-7	5,180		103	8.56	1
01667	Sodium	7440-23-5	84.3	J	103	17.1	1
06969	Tin	7440-31-5	2.71	J	10.3	0.226	1
06970	Titanium	7440-32-6	781		1.03	0.174	1
06971	Vanadium	7440-62-2	49.5		1.03	0.133	1
06972	Zinc	7440-66-6	127		4.11	0.205	1
10146	Zirconium	7440-67-7	6.24		5.13	0.862	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.260	J	0.411	0.103	2
06142	Silver	7440-22-4	0.110	J	0.205	0.0267	2
06144	Strontium	7440-24-6	29.6		1.03	0.174	5
06145	Thallium	7440-28-0	0.382		0.205	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.150		0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.92		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224849
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:30 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

507-0 SDG#: PH122-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.121	1
11031	12378-PeCDD	40321-76-4	0.361	JQ	5.20	0.113	1
11031	123478-HxCDD	39227-28-6	0.557	JQ	5.20	0.143	1
11031	123678-HxCDD	57653-85-7	1.60	J	5.20	0.150	1
11031	123789-HxCDD	19408-74-3	1.41	J	5.20	0.133	1
11031	1234678-HpCDD	35822-46-9	33.7	B	5.20	0.132	1
11031	OCDD	3268-87-9	331	B	10.4	0.0985	1
11031	2378-TCDF	51207-31-9	0.589	J	1.04	0.163	1
11031	12378-PeCDF	57117-41-6	1.27	JBQ	5.20	0.100	1
11031	23478-PeCDF	57117-31-4	5.20	U	5.20	0.0879	1
11031	123478-HxCDF	70648-26-9	0.377	J	5.20	0.0988	1
11031	123678-HxCDF	57117-44-9	0.398	JB	5.20	0.0940	1
11031	123789-HxCDF	72918-21-9	0.920	J	5.20	0.0816	1
11031	234678-HxCDF	60851-34-5	0.380	J	5.20	0.0918	1
11031	1234678-HpCDF	67562-39-4	4.31	JB	5.20	0.0723	1
11031	1234789-HpCDF	55673-89-7	0.196	J	5.20	0.0722	1
11031	OCDF	39001-02-0	12.0	B	10.4	0.0616	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.05				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	95	23 - 140
13C12-OCDD	121	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	124	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	99	26 - 138
13C12-OCDF	118	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224849
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:30 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

507-0 SDG#: PH122-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224849
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:30 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

507-0 SDG#: PH122-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 10:36	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/17/2013 01:17	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 21:09	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13283005	10/14/2013 20:26	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13283005	10/10/2013 10:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 14:09	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:18	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:18	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:47	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:18	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224849
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:30 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

507-0 SDG#: PH122-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:26	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402A	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401A	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224850
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

507-4 SDG#: PH122-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.29
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224850
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

507-4 SDG#: PH122-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,000		44.2	7.96	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.817	1
06935	Arsenic	7440-38-2	4.07	J	4.42	0.773	1
06946	Barium	7440-39-3	143		1.10	0.0364	1
06947	Beryllium	7440-41-7	1.01	J	1.10	0.0740	1
07914	Boron	7440-42-8	16.2		11.0	0.928	1
06949	Cadmium	7440-43-9	0.423	J	1.10	0.0839	1
01650	Calcium	7440-70-2	9,760		22.1	3.69	1
06951	Chromium	7440-47-3	38.2		3.31	0.177	1
06952	Cobalt	7440-48-4	10.3		1.10	0.109	1
06953	Copper	7440-50-8	21.8		2.21	0.320	1
01654	Iron	7439-89-6	35,700		88.4	8.00	2
06955	Lead	7439-92-1	10.5		3.31	0.552	1
01656	Lithium	7439-93-2	27.7		4.4	0.38	1
01657	Magnesium	7439-95-4	8,110		11.0	1.84	1
06958	Manganese	7439-96-5	474		1.10	0.0917	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	21.4		2.21	0.144	1
10145	Phosphorus	7723-14-0	349		11.0	3.19	1
01662	Potassium	7440-09-7	3,840		110	9.21	1
01667	Sodium	7440-23-5	173		110	18.4	1
06969	Tin	7440-31-5	2.97	J	11.0	0.243	1
06970	Titanium	7440-32-6	1,280		1.10	0.188	1
06971	Vanadium	7440-62-2	71.8		1.10	0.144	1
06972	Zinc	7440-66-6	72.6		4.42	0.221	1
10146	Zirconium	7440-67-7	7.80		5.52	0.928	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.127	J	0.442	0.110	2
06142	Silver	7440-22-4	0.0418	J	0.221	0.0287	2
06144	Strontium	7440-24-6	47.2		1.10	0.188	5
06145	Thallium	7440-28-0	0.401		0.221	0.0331	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0160	J	0.0184	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.74		0.0100	0.0100	1
	The pH was measured in water at 20.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224850
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

507-4 SDG#: PH122-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 11:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 06:24	Laura M Krieger	21.29
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327732660	10/04/2013 19:41	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327732660	10/04/2013 19:41	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/17/2013 01:36	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 17:36	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/15/2013 07:26	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224850
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

507-4 SDG#: PH122-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 14:22	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:25	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:25	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:49	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:25	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:28	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402B	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401A	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224851
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50710 SDG#: PH122-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.69
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224851
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50710 SDG#: PH122-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,300		41.8	7.54	1
06944	Antimony	7440-36-0	4.18	U	4.18	0.773	1
06935	Arsenic	7440-38-2	4.71		4.18	0.732	1
06946	Barium	7440-39-3	66.1		1.05	0.0345	1
06947	Beryllium	7440-41-7	0.546	J	1.05	0.0700	1
07914	Boron	7440-42-8	7.72	J	10.5	0.878	1
06949	Cadmium	7440-43-9	0.224	J	1.05	0.0794	1
01650	Calcium	7440-70-2	14,700		20.9	3.49	1
06951	Chromium	7440-47-3	21.4		3.14	0.167	1
06952	Cobalt	7440-48-4	4.24		1.05	0.103	1
06953	Copper	7440-50-8	14.2		2.09	0.303	1
01654	Iron	7439-89-6	19,600		41.8	3.78	1
06955	Lead	7439-92-1	5.26		3.14	0.523	1
01656	Lithium	7439-93-2	21.3		4.2	0.36	1
01657	Magnesium	7439-95-4	4,070		10.5	1.75	1
06958	Manganese	7439-96-5	210		1.05	0.0868	1
06960	Molybdenum	7439-98-7	2.09	U	2.09	0.178	1
06961	Nickel	7440-02-0	11.1		2.09	0.136	1
10145	Phosphorus	7723-14-0	252		10.5	3.02	1
01662	Potassium	7440-09-7	1,920		105	8.72	1
01667	Sodium	7440-23-5	141		105	17.5	1
06969	Tin	7440-31-5	2.36	J	10.5	0.230	1
06970	Titanium	7440-32-6	891		1.05	0.178	1
06971	Vanadium	7440-62-2	37.7		1.05	0.136	1
06972	Zinc	7440-66-6	43.8		4.18	0.209	1
10146	Zirconium	7440-67-7	3.82	J	5.23	0.878	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.418	U	0.418	0.105	2
06142	Silver	7440-22-4	0.209	U	0.209	0.0272	2
06144	Strontium	7440-24-6	28.0		1.05	0.178	5
06145	Thallium	7440-28-0	0.313		0.209	0.0314	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0127	J	0.0174	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.99		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224851
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50710 SDG#: PH122-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 11:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 07:02	Laura M Krieger	22.69
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327732660	10/04/2013 19:34	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327732660	10/04/2013 19:42	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/17/2013 01:54	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 17:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA5D-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224851
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 12:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50710 SDG#: PH122-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 14:26	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:27	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:27	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:51	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:27	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:34	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402B	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13288162401A	10/15/2013 10:54	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224852
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 13:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

608-0 SDG#: PH122-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224852
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 13:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

608-0 SDG#: PH122-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,500		42.1	7.59	1
06944	Antimony	7440-36-0	4.21	U	4.21	0.779	1
06935	Arsenic	7440-38-2	3.44	J	4.21	0.737	1
06946	Barium	7440-39-3	142		1.05	0.0347	1
06947	Beryllium	7440-41-7	1.01	J	1.05	0.0705	1
07914	Boron	7440-42-8	11.1		10.5	0.884	1
06949	Cadmium	7440-43-9	0.450	J	1.05	0.0800	1
01650	Calcium	7440-70-2	5,840		21.0	3.51	1
06951	Chromium	7440-47-3	32.8		3.16	0.168	1
06952	Cobalt	7440-48-4	10.5		1.05	0.104	1
06953	Copper	7440-50-8	21.2		2.10	0.305	1
01654	Iron	7439-89-6	32,700		84.2	7.62	2
06955	Lead	7439-92-1	9.59		3.16	0.526	1
01656	Lithium	7439-93-2	23.3		4.2	0.36	1
01657	Magnesium	7439-95-4	6,710		10.5	1.76	1
06958	Manganese	7439-96-5	527		1.05	0.0873	1
06960	Molybdenum	7439-98-7	0.184	J	2.10	0.179	1
06961	Nickel	7440-02-0	20.0		2.10	0.137	1
10145	Phosphorus	7723-14-0	314		10.5	3.04	1
01662	Potassium	7440-09-7	4,890		105	8.78	1
01667	Sodium	7440-23-5	117		105	17.6	1
06969	Tin	7440-31-5	2.61	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,020		1.05	0.179	1
06971	Vanadium	7440-62-2	60.7		1.05	0.137	1
06972	Zinc	7440-66-6	70.3		4.21	0.210	1
10146	Zirconium	7440-67-7	6.17		5.26	0.884	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.240	J	0.421	0.105	2
06142	Silver	7440-22-4	0.0572	J	0.210	0.0274	2
06144	Strontium	7440-24-6	32.0		1.05	0.179	5
06145	Thallium	7440-28-0	0.469		0.210	0.0316	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0102	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.21		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224852
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 13:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

608-0 SDG#: PH122-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.265	1
11031	12378-PeCDD	40321-76-4	5.09	U	5.09	0.186	1
11031	123478-HxCDD	39227-28-6	5.09	U	5.09	0.0980	1
11031	123678-HxCDD	57653-85-7	0.175	JQ	5.09	0.105	1
11031	123789-HxCDD	19408-74-3	0.285	J	5.09	0.103	1
11031	1234678-HpCDD	35822-46-9	0.228	JB	5.09	0.108	1
11031	OCDD	3268-87-9	1.66	JBQ	10.2	0.114	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.234	1
11031	12378-PeCDF	57117-41-6	5.09	U	5.09	0.125	1
11031	23478-PeCDF	57117-31-4	5.09	U	5.09	0.121	1
11031	123478-HxCDF	70648-26-9	5.09	U	5.09	0.102	1
11031	123678-HxCDF	57117-44-9	5.09	U	5.09	0.0933	1
11031	123789-HxCDF	72918-21-9	0.590	J	5.09	0.108	1
11031	234678-HxCDF	60851-34-5	0.0897	JQ	5.09	0.0885	1
11031	1234678-HpCDF	67562-39-4	0.0750	JBQ	5.09	0.0566	1
11031	1234789-HpCDF	55673-89-7	0.126	JQ	5.09	0.0886	1
11031	OCDF	39001-02-0	0.257	JBQ	10.2	0.143	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0899				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	32	25 - 164
13C12-12378-PeCDD	38	25 - 181
13C12-123478-HxCDD	41	32 - 141
13C12-123678-HxCDD	45	28 - 130
13C12-123789-HxCDD	45	28 - 130
13C12-1234678-HpCDD	49	23 - 140
13C12-OCDD	54	17 - 157
13C12-2378-TCDF	29	24 - 169
13C12-12378-PeCDF	35	24 - 185
13C12-23478-PeCDF	34	21 - 178
13C12-123478-HxCDF	36	26 - 152
13C12-123678-HxCDF	41	26 - 123
13C12-234678-HxCDF	41	28 - 136
13C12-123789-HxCDF	45	29 - 147
13C12-1234678-HpCDF	52	28 - 143
13C12-1234789-HpCDF	41	26 - 138
13C12-OCDF	47	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224852
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 13:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

608-0 SDG#: PH122-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224852
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 13:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

608-0 SDG#: PH122-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 12:15	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/17/2013 02:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 18:19	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13283005	10/14/2013 21:23	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13283005	10/10/2013 10:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/15/2013 07:30	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 14:30	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:29	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:29	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:54	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:29	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224852
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 13:40 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

608-0 SDG#: PH122-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:36	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402B	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401B	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224853
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 13:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

608-4 SDG#: PH122-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.4
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224853
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 13:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

608-4 SDG#: PH122-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,900		43.4	7.83	1
06944	Antimony	7440-36-0	4.34	U	4.34	0.804	1
06935	Arsenic	7440-38-2	4.10	J	4.34	0.760	1
06946	Barium	7440-39-3	118		1.09	0.0358	1
06947	Beryllium	7440-41-7	0.938	J	1.09	0.0728	1
07914	Boron	7440-42-8	13.4		10.9	0.912	1
06949	Cadmium	7440-43-9	0.466	J	1.09	0.0825	1
01650	Calcium	7440-70-2	5,620		21.7	3.63	1
06951	Chromium	7440-47-3	31.7		3.26	0.174	1
06952	Cobalt	7440-48-4	10.5		1.09	0.108	1
06953	Copper	7440-50-8	18.7		2.17	0.315	1
01654	Iron	7439-89-6	36,500		86.9	7.86	2
06955	Lead	7439-92-1	10.7		3.26	0.543	1
01656	Lithium	7439-93-2	24.6		4.3	0.37	1
01657	Magnesium	7439-95-4	6,460		10.9	1.81	1
06958	Manganese	7439-96-5	460		1.09	0.0901	1
06960	Molybdenum	7439-98-7	2.17	U	2.17	0.185	1
06961	Nickel	7440-02-0	18.2		2.17	0.141	1
10145	Phosphorus	7723-14-0	343		10.9	3.14	1
01662	Potassium	7440-09-7	3,540		109	9.06	1
01667	Sodium	7440-23-5	143		109	18.1	1
06969	Tin	7440-31-5	2.75	J	10.9	0.239	1
06970	Titanium	7440-32-6	1,170		1.09	0.185	1
06971	Vanadium	7440-62-2	62.2		1.09	0.141	1
06972	Zinc	7440-66-6	64.3		4.34	0.217	1
10146	Zirconium	7440-67-7	7.06		5.43	0.912	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.148	J	0.434	0.109	2
06142	Silver	7440-22-4	0.0465	J	0.217	0.0282	2
06144	Strontium	7440-24-6	33.0		1.09	0.185	5
06145	Thallium	7440-28-0	0.410		0.217	0.0326	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0123	J	0.0184	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.42		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224853
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 13:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

608-4 SDG#: PH122-14*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13280SLE026	10/09/2013 12:48	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13280SLE026	10/08/2013 09:25	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16A	10/09/2013 07:40	Laura M Krieger	21.4
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201327732660	10/04/2013 19:44	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201327732660	10/04/2013 19:44	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/17/2013 02:31	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 18:40	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/15/2013 07:34	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7224853
LL Group # 1423924
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/03/2013 13:50 by VC

Submitted: 10/04/2013 09:10
Reported: 10/17/2013 15:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

608-4 SDG#: PH122-14*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 14:34	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:32	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:32	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/14/2013 09:56	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:32	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:38	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13277039402B	10/04/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401B	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423924
Reported: 10/17/13 at 03:17 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13280SLE026	Sample number(s): 7224840-7224841,7224843-7224853									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	102		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	100		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	101		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	120		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	103		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	103		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	108		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	106		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	103		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	97		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	101		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	103		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	74		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	104		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	98		79-112		
Batch number: 13280A20A	Sample number(s): 7224842									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	103	104	75-135	1	30
Batch number: 13281A16A	Sample number(s): 7224841,7224844-7224848,7224850-7224851,7224853									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	78		67-119		
Batch number: 132830013A	Sample number(s): 7224840-7224841,7224843-7224853									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	82	80	62-87	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	102		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423924
Reported: 10/17/13 at 03:17 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	113		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132880004A	Sample number(s): 7224840-7224841,7224843-7224853									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	103	94	70-123	9	20
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	105	98	75-128	7	20
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	105	97	64-134	8	20
EFH (C30-C40)	10	U	10.	4.0	mg/kg	78	79	65-128	1	20
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	87	80	49-107	8	20
Batch number: 132810637001	Sample number(s): 7224840-7224841,7224843-7224853									
Aluminum	9.86	J	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	101		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	99		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	91		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	100		80-120		
Calcium	12.9	J	20.0	3.34	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	108		80-120		
Iron	3.84	J	40.0	3.62	mg/kg	104		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	102		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	105		80-120		
Magnesium	2.49	J	10.0	1.67	mg/kg	103		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	101		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.41	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	0.656	J	4.00	0.200	mg/kg	101		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132810637001A	Sample number(s): 7224840-7224841,7224843-7224853									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	102		80-120		
Batch number: 132810637001B	Sample number(s): 7224840-7224841,7224843-7224853									
Selenium	0.400	U	0.400	0.100	mg/kg	111		80-120		
Batch number: 132810638001	Sample number(s): 7224840-7224841,7224843-7224853									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	106		85-120		
Batch number: 13277039402A	Sample number(s): 7224840-7224841,7224843-7224849									
15a pH by 9045D						100		95-105		
Batch number: 13277039402B	Sample number(s): 7224850-7224853									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423924
Reported: 10/17/13 at 03:17 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
15a pH by 9045D					100		95-105		
Batch number: 13284162401A	Sample number(s): 7224840-7224841,7224843-7224850								
14a Moisture Content by 160.3					100		80-120		
Batch number: 13284162401B	Sample number(s): 7224852-7224853								
14a Moisture Content by 160.3					100		80-120		
Batch number: 13288162401A	Sample number(s): 7224851								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13283005	Sample number(s): 7224840,7224843,7224849,7224852									
2378-TCDD	1.00	U	1.00	0.140	ng/kg	87		67-158		
12378-PeCDD	5.00	U	5.00	0.115	ng/kg	96		70-142		
123478-HxCDD	5.00	U	5.00	0.0593	ng/kg	101		70-164		
123678-HxCDD	5.00	U	5.00	0.0617	ng/kg	99		76-134		
123789-HxCDD	5.00	U	5.00	0.0661	ng/kg	93		64-162		
1234678-HpCDD	0.0753	J	5.00	0.0723	ng/kg	93		70-140		
OCDD	0.215	J	10.0	0.0473	ng/kg	97		78-144		
2378-TCDF	1.00	U	1.00	0.137	ng/kg	94		75-158		
12378-PeCDF	0.0800	J	5.00	0.0711	ng/kg	95		80-134		
23478-PeCDF	5.00	U	5.00	0.0701	ng/kg	95		68-160		
123478-HxCDF	5.00	U	5.00	0.0561	ng/kg	98		72-134		
123678-HxCDF	0.0948	J	5.00	0.0516	ng/kg	98		84-130		
123789-HxCDF	5.00	U	5.00	0.0600	ng/kg	84		78-130		
234678-HxCDF	5.00	U	5.00	0.0489	ng/kg	95		70-156		
1234678-HpCDF	0.0423	J	5.00	0.0263	ng/kg	93		82-122		
1234789-HpCDF	5.00	U	5.00	0.0422	ng/kg	96		78-138		
OCDF	0.137	J	10.0	0.0908	ng/kg	98		63-170		
TEQ WHO 2005 - EDLx0.0	U				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13280SLE026	Sample number(s): 7224840-7224841,7224843-7224853 UNSPK: P222763								
Acenaphthene	96	96	48-127	0	30				
Acenaphthylene	104	103	49-121	1	30				
Anthracene	99	97	52-126	3	30				
Benzo(a)anthracene	97	94	44-143	2	30				
Benzo(a)pyrene	97	97	44-140	0	30				
Benzo(b)fluoranthene	113	117	26-142	4	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423924
Reported: 10/17/13 at 03:17 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(e)pyrene	89	89	70-130	0	30				
Benzo(g,h,i)perylene	101	101	33-141	0	30				
Benzo(k)fluoranthene	102	100	54-142	1	30				
Butylbenzylphthalate	107	105	49-151	2	30				
Di-n-butylphthalate	108	106	52-147	2	30				
Chrysene	96	94	29-148	2	30				
Dibenz(a,h)anthracene	104	104	20-137	0	30				
Diethylphthalate	105	102	43-145	2	30				
Dimethylphthalate	101	101	58-129	1	30				
Bis(2-Ethylhexyl)phthalate	103	101	39-167	2	30				
Fluoranthene	100	98	40-148	2	30				
Fluorene	101	98	51-137	4	30				
Indeno(1,2,3-cd)pyrene	103	103	17-136	0	30				
1-Methylnaphthalene	103	100	50-131	2	30				
2-Methylnaphthalene	97	94	35-152	3	30				
Naphthalene	100	97	31-148	2	30				
N-Nitrosodimethylamine	61	60	48-113	2	30				
Di-n-octylphthalate	109	109	52-162	0	30				
Phenanthrene	96	93	29-142	2	30				
Pyrene	95	93	26-143	2	30				
Batch number: 13281A16A	Sample number(s): 7224841,7224844-7224848,7224850-7224851,7224853 UNSPK: P218895								
11a TPH by EPA 8015B GRO	87	94	69-123	9	30				
Batch number: 132830013A	Sample number(s): 7224840-7224841,7224843-7224853 UNSPK: 7224840								
PCB-1016	85	82	41-135	3	50				
PCB-1260	86	84	40-134	2	50				
Batch number: 132810637001	Sample number(s): 7224840-7224841,7224843-7224853 UNSPK: P222779 BKG: P222779								
Aluminum	2134 (2)	1672 (2)	75-125	8	20	8,800	9,900	12	20
Antimony	58*	50*	75-125	17	20	4.00 U	3.88 U	0 (1)	20
Arsenic	103	95	75-125	7	20	3.94 J	4.24	7 (1)	20
Barium	105	97	75-125	7	20	60.6	66.6	9	20
Beryllium	101	96	75-125	6	20	0.403 J	0.413 J	2 (1)	20
Boron	91	88	75-125	6	20	6.15 J	6.11 J	1 (1)	20
Cadmium	96	93	75-125	5	20	0.212 J	0.254 J	18 (1)	20
Calcium	-7 (2)	-181 (2)	75-125	10	20	7,360	7,550	3	20
Chromium	119	104	75-125	9	20	14.2	17.3	19 (1)	20
Cobalt	97	93	75-125	6	20	3.83	4.41	14 (1)	20
Copper	111	104	75-125	6	20	9.16	10.1	10 (1)	20
Iron	2130 (2)	574 (2)	75-125	9	20	15,500	17,200	10	20
Lead	99	95	75-125	5	20	3.29	3.91	17 (1)	20
Lithium	106	100	75-125	6	20	26.9	30.2	11	20
Magnesium	560 (2)	327 (2)	75-125	9	20	4,340	4,900	12	20
Manganese	158 (2)	105 (2)	75-125	10	20	221	250	12	20
Molybdenum	99	96	75-125	5	20	0.267 J	0.290 J	8 (1)	20
Nickel	99	94	75-125	6	20	7.11	8.40	17 (1)	20
Phosphorus	298*	38*	75-125	48*	20	371	362	3	20
Potassium	136*	105	75-125	9	20	2,500	2,760	10	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423924
Reported: 10/17/13 at 03:17 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Sodium	102	98	75-125	5	20	108		126		16 (1)	20
Tin	91	89	75-125	5	20	2.56	J	2.58	J	1 (1)	20
Titanium	525 (2)	340 (2)	75-125	15	20	808		896		10	20
Vanadium	116	104	75-125	8	20	26.8		29.8		10	20
Zinc	105	93	75-125	7	20	47.4		51.2		8	20
Zirconium	102	99	75-125	5	20	2.30	J	3.36	J	37* (1)	20
Batch number: 132810637001A	Sample number(s): 7224840-7224841,7224843-7224853 UNSPK: P222779 BKG: P222779										
Silver	111	110	75-125	3	20	0.200	U	0.194	U	0 (1)	20
Strontium	42*	263*	75-125	57*	20	18.0		18.2		1	20
Thallium	107	102	75-125	4	20	0.241		0.257		7 (1)	20
Batch number: 132810637001B	Sample number(s): 7224840-7224841,7224843-7224853 UNSPK: P222779 BKG: P222779										
Selenium	109	111	75-125	0	20	0.400	U	0.388	U	0 (1)	20
Batch number: 132810638001	Sample number(s): 7224840-7224841,7224843-7224853 UNSPK: P222779 BKG: P222779										
3a Mercury 7471A	111	106	65-135	4	20	0.0158	U	0.0160	U	0 (1)	20
Batch number: 13277039402A	Sample number(s): 7224840-7224841,7224843-7224849 BKG: 7224840										
15a pH by 9045D						6.97		6.98		0	3
Batch number: 13277039402B	Sample number(s): 7224850-7224853 BKG: 7224853										
15a pH by 9045D						7.42		7.42		0	3
Batch number: 13284162401A	Sample number(s): 7224840-7224841,7224843-7224850 BKG: 7224847										
14a Moisture Content by 160.3						10		9.4		6	20
Batch number: 13284162401B	Sample number(s): 7224852-7224853 BKG: P224851										
14a Moisture Content by 160.3						5.4		8.0		39*	20
Batch number: 13288162401A	Sample number(s): 7224851 BKG: 7224851										
14a Moisture Content by 160.3						6.2		6.2		1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13280SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7224840	105	110	101
7224841	95	95	102
7224843	88	92	100
7224844	88	96	97
7224845	88	95	100
7224846	91	98	100

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423924
Reported: 10/17/13 at 03:17 PM

Surrogate Quality Control

7224847	90	98	102
7224848	90	95	101
7224849	92	96	103
7224850	87	95	99
7224851	92	98	102
7224852	91	98	101
7224853	88	95	97
Blank	88	94	102
LCS	91	99	104
MS	90	95	101
MSD	89	97	102
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13280A20A

	Trifluorotoluene-F
7224842	93
Blank	91
LCS	97
LCSD	96
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13281A16A

	Trifluorotoluene-F
7224841	81
7224844	73
7224845	82
7224846	77
7224847	79
7224848	82
7224850	79
7224851	81
7224853	77
Blank	102
LCS	86
MS	85
MSD	93
Limits:	50-142

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132830013A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7224840	100	91
7224841	104	95
7224843	110	101
7224844	109	90
7224845	109	100
7224846	114	107
7224847	112	106

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423924
Reported: 10/17/13 at 03:17 PM

Surrogate Quality Control

7224848	116	108
7224849	113	96
7224850	109	97
7224851	115	112
7224852	114	109
7224853	111	113
Blank	115	117
LCS	112	117
LCSD	117	120
MS	99	92
MSD	101	90
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132880004A

	Chlorobenzene	Orthoterphenyl
7224840	96	97
7224841	107	105
7224843	100	98
7224844	97	84
7224845	91	79
7224846	88	85
7224847	108	102
7224848	94	90
7224849	91	91
7224850	91	81
7224851	95	90
7224852	99	97
7224853	102	99
Blank	83	76
LCS	105	105
LCSD	94	96
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13283005

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7224840	76	82	82	82	82	83
7224843	58	58	61	68	69	80
7224849	74	73	73	76	76	124
7224852	32	34	36	41	41	45
Blank	65	60	66	74	72	80
OPR	74	65	66	75	76	141
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7224840	82	83	78	81	82	82
7224843	86	75	83	65	67	77
7224849	89	99	118	79	72	79
7224852	52	41	47	38	41	45

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1423924
Reported: 10/17/13 at 03:17 PM

Surrogate Quality Control

Blank	92	75	77	66	73	79
OPR	97	81	78	70	75	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7224840	82	82	78	79	80	
7224843	78	84	97	50	60	
7224849	80	95	121	68	73	
7224852	45	49	54	29	35	
Blank	77	84	90	56	63	
OPR	81	91	95	62	68	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Cp#1423924 Sample# 7224840-53

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 10/3/2013
CarrierName: FedEx
AirbillNo: 796835323652

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131003-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-502-SA5D-SB-0.0-0.5	10/3/13 08:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-502-SA5D-SB-0.0-0.5	10/3/13 08:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-502-SA5D-SB-6.5-7.5	10/3/13 08:50	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-502-SA5D-SB-6.5-7.5	10/3/13 08:50	SO	None	2 - Encore	10 day																				X											
TB-100313	10/3/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											
SL-508-SA5D-SB-0.0-0.5	10/3/13 09:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-508-SA5D-SB-0.0-0.5	10/3/13 09:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-508-SA5D-SB-4.0-5.0	10/3/13 09:35	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-508-SA5D-SB-4.0-5.0	10/3/13 09:35	SO	None	2 - Encore	10 day																				X											
SL-508-SA5D-SB-9.0-10.0	10/3/13 09:45	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-508-SA5D-SB-9.0-10.0	10/3/13 09:45	SO	None	2 - Encore	10 day																				X											
SL-508-SA5D-SB-14.0-15.0	10/3/13 09:55	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-508-SA5D-SB-14.0-15.0	10/3/13 09:55	SO	None	2 - Encore	10 day																				X											
SL-508-SA5D-SB-19.0-20.0	10/3/13 10:05	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-508-SA5D-SB-19.0-20.0	10/3/13 10:05	SO	None	2 - Encore	10 day																				X											
SL-508-SA5D-SB-23.0-24.0	10/3/13 10:15	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-508-SA5D-SB-23.0-24.0	10/3/13 10:15	SO	None	2 - Encore	10 day																				X											
SL-507-SA5D-SB-4.0-5.0	10/3/13 12:40	SO	None	2 - Encore	10 day																				X											
SL-507-SA5D-SB-10.5-11.5	10/3/13 12:50	SO	None	2 - Encore	10 day																				X											
SL-608-SA5D-SB-4.0-5.0	10/3/13 13:50	SO	None	2 - Encore	10 day																				X											

Rec by Brandy Barch ELLE 10.4.13 910

acct#13013 Crp#1423924 sample#7224840-53

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 10/3/2013
CarrierName: FedEx
AirbillNo: 796835323652

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131003-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-507-SA5D-SB-0.0-0.5	10/3/13 12:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-507-SA5D-SB-0.0-0.5	10/3/13 12:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-507-SA5D-SB-4.0-5.0	10/3/13 12:40	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-507-SA5D-SB-10.5-11.5	10/3/13 12:50	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-608-SA5D-SB-0.0-0.5	10/3/13 13:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-608-SA5D-SB-0.0-0.5	10/3/13 13:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-608-SA5D-SB-4.0-5.0	10/3/13 13:50	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Tony Myers	10/3/2013	1100									
									Brandy Bair	10-4-13	910

acct# 13013 Gp# 1423924 sample# 7224840-53

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 10/3/2013
CarrierName: FedEx
AirbillNo: 796835323652

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131003-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Coeter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Staff Myers	10/3/2013	1600									
									Burr/Hr	10.4.13	910

COC Rev 2

COC 20131003-01, Page 2 of 2

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C#1423924

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 10.4.13

Time of Receipt: 910

Source Code: SO-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	4.3	TB	WI	Y	B	
2	↓	1.0	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Rec 1 Jar for SL508SASD-SB 9.0-10.0
Time = 955

Unpacker Signature/Emp#: Brandy Bard 2299 **Date/Time:** 10.4.13 949

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH123

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 22, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 10/08/2013
Group Number: 1424500
SDG: PH123
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-100713 Water	7228020
SL-567-SA5D-SB-0.0-0.5 Soil	7228021
SL-567-SA5D-SB-3.5-4.5 Soil	7228022
SL-575-SA5D-SB-0.0-0.5 Soil	7228023
SL-575-SA5D-SB-3.0-4.0 Soil	7228024
SL-593-SA5D-SB-0.0-0.5 Soil	7228025
SL-593-SA5D-SB-3.5-4.5 Soil	7228026

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-100713 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7228020
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 08:00

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB123 SDG#: PH123-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13290A20A	10/17/2013 11:17	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13290A20A	10/17/2013 11:17	Laura M Krieger	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228021
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 09:50 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH123-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	17	U	17	7.0	10
12969	Acenaphthylene	208-96-8	17	U	17	3.5	10
12969	Anthracene	120-12-7	17	U	17	3.5	10
12969	Benzo(a)anthracene	56-55-3	34		17	7.0	10
12969	Benzo(a)pyrene	50-32-8	32		17	7.0	10
12969	Benzo(b)fluoranthene	205-99-2	46		17	7.0	10
12969	Benzo(e)pyrene	192-97-2	180	U	180	35	10
12969	Benzo(g,h,i)perylene	191-24-2	20		17	7.0	10
12969	Benzo(k)fluoranthene	207-08-9	22		17	7.0	10
12969	Butylbenzylphthalate	85-68-7	190	U	190	63	10
12969	Di-n-butylphthalate	84-74-2	190	U	190	63	10
12969	Chrysene	218-01-9	49		17	3.5	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	7.0	10
12969	Diethylphthalate	84-66-2	190	U	190	63	10
12969	Dimethylphthalate	131-11-3	190	U	190	63	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	63	10
12969	Fluoranthene	206-44-0	60		17	7.0	10
12969	Fluorene	86-73-7	17	U	17	7.0	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19		17	7.0	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	7.0	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	7.0	10
12969	Naphthalene	91-20-3	17	U	17	7.0	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	7.0	10
12969	Di-n-octylphthalate	117-84-0	190	U	190	63	10
12969	Phenanthrene	85-01-8	30		17	7.0	10
12969	Pyrene	129-00-0	58		17	7.0	10
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	94	U	94	46	1
10401	2,4-DB	94-82-6	18	U	18	6.5	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.4	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.4	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.86	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.86	U	0.86	0.18	1
10590	Alpha BHC	319-84-6	0.86	U	0.86	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.86	U	0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.85	1
10590	p,p-DDE	72-55-9	0.86	J	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.1	J	1.8	0.36	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228021
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 09:50 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH123-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	1.4	U	1.4	1.4	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.86	U	0.86	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.86	U	0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.86	U	0.86	0.18	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
Reporting limits were raised due to interference from the sample matrix.							
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	23		18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.9	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	21		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	33		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,200		41.3	7.45	1
06944	Antimony	7440-36-0	4.13	U	4.13	0.765	1
06935	Arsenic	7440-38-2	3.70	J	4.13	0.723	1
06946	Barium	7440-39-3	128		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.665	J	1.03	0.0692	1
07914	Boron	7440-42-8	13.7		10.3	0.868	1
06949	Cadmium	7440-43-9	0.701	J	1.03	0.0785	1
01650	Calcium	7440-70-2	19,300		20.7	3.45	1
06951	Chromium	7440-47-3	30.5		3.10	0.165	1
06952	Cobalt	7440-48-4	8.84		1.03	0.102	1
06953	Copper	7440-50-8	22.0		2.07	0.300	1
01654	Iron	7439-89-6	29,300		82.7	7.48	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228021
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 09:50 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH123-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	10.5	3.10	0.517	1
01656	Lithium	7439-93-2	27.0	4.1	0.35	1
01657	Magnesium	7439-95-4	7,670	10.3	1.73	1
06958	Manganese	7439-96-5	361	1.03	0.0858	1
06960	Molybdenum	7439-98-7	0.600 J	2.07	0.176	1
06961	Nickel	7440-02-0	20.2	2.07	0.134	1
10145	Phosphorus	7723-14-0	561	10.3	2.99	1
01662	Potassium	7440-09-7	4,960	103	8.62	1
01667	Sodium	7440-23-5	127	103	17.3	1
06969	Tin	7440-31-5	2.34 J	10.3	0.227	1
06970	Titanium	7440-32-6	914	1.03	0.176	1
06971	Vanadium	7440-62-2	58.5	1.03	0.134	1
06972	Zinc	7440-66-6	74.4	4.13	0.207	1
10146	Zirconium	7440-67-7	8.22	5.17	0.868	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.401 J	0.413	0.103	2
06142	Silver	7440-22-4	0.0788 J	0.207	0.0269	2
06144	Strontium	7440-24-6	60.1	0.413	0.0703	2
06145	Thallium	7440-28-0	0.376	0.207	0.0310	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0267	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.42	0.0100	0.0100	1
	The pH was measured in water at 21.3 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228021
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 09:50 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH123-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.165	1
11031	12378-PeCDD	40321-76-4	0.260	JQ	5.07	0.154	1
11031	123478-HxCDD	39227-28-6	0.151	JQ	5.07	0.0966	1
11031	123678-HxCDD	57653-85-7	0.248	J	5.07	0.0968	1
11031	123789-HxCDD	19408-74-3	0.0938	JQ	5.07	0.0908	1
11031	1234678-HpCDD	35822-46-9	5.88	B	5.07	0.128	1
11031	OCDD	3268-87-9	57.4	B	10.1	0.110	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.204	1
11031	12378-PeCDF	57117-41-6	1.54	JB	5.07	0.126	1
11031	23478-PeCDF	57117-31-4	0.237	JQ	5.07	0.117	1
11031	123478-HxCDF	70648-26-9	0.126	JQ	5.07	0.0998	1
11031	123678-HxCDF	57117-44-9	0.275	JBQ	5.07	0.0919	1
11031	123789-HxCDF	72918-21-9	0.357	J	5.07	0.102	1
11031	234678-HxCDF	60851-34-5	0.262	J	5.07	0.0937	1
11031	1234678-HpCDF	67562-39-4	1.15	JB	5.07	0.0717	1
11031	1234789-HpCDF	55673-89-7	0.118	J	5.07	0.0910	1
11031	OCDF	39001-02-0	2.28	JB	10.1	0.104	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.222				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	82	26 - 138
13C12-OCDF	92	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228021
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 09:50 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH123-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228021
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 09:50 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH123-02

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13291SLJ026	10/22/2013 06:31	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	2	13291SLJ026	10/20/2013 15:20	Wanda F Oswald	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132820019A	10/12/2013 00:34	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132810021A	10/14/2013 21:05	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/17/2013 02:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132810021A	10/09/2013 10:00	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132820019A	10/10/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 20:26	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13283005	10/14/2013 22:20	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13283005	10/10/2013 10:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/15/2013 07:45	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228021
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 09:50 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH123-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 14:39	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:34	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:34	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/15/2013 08:27	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:34	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:40	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13281039402S	10/08/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228022
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 10:20 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56735 SDG#: PH123-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	0.88	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	9.6	J	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.0	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.0	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.77
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	39	U	39	13	1
10401	Dalapon	75-99-0	98	U	98	48	1
10401	2,4-DB	94-82-6	18	U	18	6.7	1
10401	Dicamba	1918-00-9	13	U	13	4.3	1
10401	Dinoseb	88-85-7	26	U	26	9.8	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.8	1
10401	MCPA	94-74-6	2,700	U	2,700	820	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	810	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.89	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.81	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228022
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 10:20 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56735 SDG#: PH123-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	0.83	J	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	9.3		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	21		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,000		42.5	7.66	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.786	1
06935	Arsenic	7440-38-2	4.61		4.25	0.744	1
06946	Barium	7440-39-3	89.9		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.682	J	1.06	0.0712	1
07914	Boron	7440-42-8	14.8		10.6	0.892	1
06949	Cadmium	7440-43-9	0.507	J	1.06	0.0807	1
01650	Calcium	7440-70-2	78,900		42.5	7.10	2
06951	Chromium	7440-47-3	28.3		3.19	0.170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228022
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 10:20 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56735 SDG#: PH123-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	8.55		1.06	0.105	1
06953	Copper	7440-50-8	19.4		2.12	0.308	1
01654	Iron	7439-89-6	30,700		85.0	7.69	2
06955	Lead	7439-92-1	9.83		3.19	0.531	1
01656	Lithium	7439-93-2	24.1		4.2	0.36	1
01657	Magnesium	7439-95-4	7,320		10.6	1.77	1
06958	Manganese	7439-96-5	362		1.06	0.0882	1
06960	Molybdenum	7439-98-7	2.12	U	2.12	0.181	1
06961	Nickel	7440-02-0	17.2		2.12	0.138	1
10145	Phosphorus	7723-14-0	517		10.6	3.07	1
01662	Potassium	7440-09-7	4,820		106	8.86	1
01667	Sodium	7440-23-5	152		106	17.7	1
06969	Tin	7440-31-5	2.39	J	10.6	0.234	1
06970	Titanium	7440-32-6	803		1.06	0.181	1
06971	Vanadium	7440-62-2	52.7		1.06	0.138	1
06972	Zinc	7440-66-6	70.5		4.25	0.212	1
10146	Zirconium	7440-67-7	6.27		5.31	0.892	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.638		0.425	0.106	2
06142	Silver	7440-22-4	0.0421	J	0.212	0.0276	2
06144	Strontium	7440-24-6	164		1.06	0.181	5
06145	Thallium	7440-28-0	0.370		0.212	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0274		0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.12		0.0100	0.0100	1
	The pH was measured in water at 20.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228022
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 10:20 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56735 SDG#: PH123-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13291SLJ026	10/22/2013 04:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13291SLJ026	10/20/2013 15:20	Wanda F Oswald	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16B	10/15/2013 17:33	Laura M Krieger	25.77
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201328132682	10/08/2013 19:25	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201328132682	10/08/2013 19:25	Lisa J Cooke	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132820019A	10/11/2013 20:10	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132810021A	10/14/2013 21:20	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132830013A	10/17/2013 04:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132830013A	10/11/2013 05:10	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132810021A	10/09/2013 10:00	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132820019A	10/10/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 19:01	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132810637001	10/15/2013 07:50	Deborah A Krady	2
06951	Chromium	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132810637001	10/15/2013 07:50	Deborah A Krady	2
06955	Lead	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132810637001	10/14/2013 14:43	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132810637001B	10/14/2013 08:37	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132810637001A	10/14/2013 08:37	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132810637001A	10/15/2013 08:29	Choon Y Tian	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228022
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 10:20 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56735 SDG#: PH123-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132810637001A	10/14/2013 08:37	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132810638001	10/10/2013 07:42	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132810637001	10/09/2013 10:20	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132810638001	10/09/2013 14:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13281039402S	10/08/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228023
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 08:30 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57500 SDG#: PH123-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.0	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.4	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.0	J	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	0.90	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	0.81	J	1.7	0.68	1
12969	Naphthalene	91-20-3	1.1	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.71	J	1.7	0.68	1
12969	Pyrene	129-00-0	0.71	J	1.7	0.68	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	460	U	460	220	5
10401	2,4-DB	94-82-6	17	U	17	6.3	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	24	U	24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.1	1
10401	MCPA	94-74-6	2,500	U	2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	2,500	U	2,500	760	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.83	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.76	1
	Reporting limits were raised due to interference from the sample matrix.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228023
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 08:30 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57500 SDG#: PH123-04

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13291SLJ026	10/22/2013 07:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13291SLJ026	10/20/2013 15:20	Wanda F Oswald	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132820019A	10/12/2013 01:27	Melissa McDermott	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132820019A	10/14/2013 19:18	Melissa McDermott	5
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132820019A	10/10/2013 09:00	David S Schrum	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228024
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 09:00 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57530 SDG#: PH123-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.49	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	94	U	94	46	1
10401	2,4-DB	94-82-6	18	U	18	6.5	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.4	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.4	1
10401	MCPA	94-74-6	2,600	U	2,600	800	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	790	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.86	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.79	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA5D-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228024
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 09:00 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57530 SDG#: PH123-05

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13291SLJ026	10/22/2013 07:37	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13291SLJ026	10/20/2013 15:20	Wanda F Oswald	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132820019A	10/11/2013 20:36	Melissa McDermott	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132820019A	10/10/2013 09:00	David S Schrum	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228025
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 12:40 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59300 SDG#: PH123-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	0.74	0.51	0.41	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.3 C.	n.a.	6.17	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.0	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13290290201A	10/17/2013 23:06	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13290290201A	10/17/2013 07:20	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13281039402S	10/08/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA5D-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7228026
LL Group # 1424500
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/07/2013 13:00 by VC

Submitted: 10/08/2013 09:10
Reported: 10/22/2013 13:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59335 SDG#: PH123-07*

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	3.4	0.54	0.43	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.4 C.		n.a.	7.16	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	8.3	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13290290201A	10/18/2013 00:27	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13290290201A	10/17/2013 07:20	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13281039402S	10/08/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13283162401B	10/11/2013 00:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424500
Reported: 10/22/13 at 01:10 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13291SLJ026	Sample number(s): 7228021-7228024									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	104		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	101		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	100		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	104		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	100		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	106		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	96		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	102		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	105		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	102		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	92		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	101		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	99		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	102		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	76		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	100		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	98		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	95		79-112		
Batch number: 13281A16B	Sample number(s): 7228022									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	78		67-119		
Batch number: 13290A20A	Sample number(s): 7228020									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	109	75-135	2	30
Batch number: 132820019A	Sample number(s): 7228021-7228024									
2,4-D	36	U	36.	12	ug/kg	104		59-122		
Dalapon	90	U	90.	44	ug/kg	89		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	111		54-131		
Dicamba	12	U	12.	4.0	ug/kg	88		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	34		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	124		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	96		56-133		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	98		54-134		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424500
Reported: 10/22/13 at 01:10 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	112		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	113		63-130		
Batch number: 132810021A	Sample number(s): 7228021-7228022									
Aldrin	0.83	U	0.83	0.17	ug/kg	86		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	90		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	92		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	89		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	93		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	94		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	92		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	92		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	94		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	93		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	95		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	97		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	91		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	92		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	90		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	87		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	93		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	92		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132830013A	Sample number(s): 7228021-7228022									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	82	80	62-87	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	102		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	113		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132880004A	Sample number(s): 7228021-7228022									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	103	94	70-123	9	20
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	105	98	75-128	7	20
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	105	97	64-134	8	20
EFH (C30-C40)	10	U	10.	4.0	mg/kg	78	79	65-128	1	20
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	87	80	49-107	8	20
Batch number: 132810637001	Sample number(s): 7228021-7228022									
Aluminum	9.86	J	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	101		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	99		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	91		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	100		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424500
Reported: 10/22/13 at 01:10 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Calcium	12.9	J	20.0	3.34	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	108		80-120		
Iron	3.84	J	40.0	3.62	mg/kg	104		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	102		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	105		80-120		
Magnesium	2.49	J	10.0	1.67	mg/kg	103		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	101		80-120		
Potassium	100	U	100.	8.34	mg/kg	102		80-120		
Sodium	100	U	100.	16.7	mg/kg	102		80-120		
Tin	1.41	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	0.656	J	4.00	0.200	mg/kg	101		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132810637001A	Sample number(s): 7228021-7228022									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	102		80-120		
Batch number: 132810637001B	Sample number(s): 7228021-7228022									
Selenium	0.400	U	0.400	0.100	mg/kg	111		80-120		
Batch number: 132810638001	Sample number(s): 7228021-7228022									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	106		85-120		
Batch number: 13290290201A	Sample number(s): 7228025-7228026									
1a Anions by 300.0 - Fluoride	0.50	U	0.50	0.40	mg/kg	95		90-110		
Batch number: 13281039402S	Sample number(s): 7228021-7228022,7228025-7228026									
15a pH by 9045D						100		95-105		
Batch number: 13283162401B	Sample number(s): 7228021-7228026									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13283005	Sample number(s): 7228021									
2378-TCDD	1.00	U	1.00	0.140	ng/kg	87		67-158		
12378-PeCDD	5.00	U	5.00	0.115	ng/kg	96		70-142		
123478-HxCDD	5.00	U	5.00	0.0593	ng/kg	101		70-164		
123678-HxCDD	5.00	U	5.00	0.0617	ng/kg	99		76-134		
123789-HxCDD	5.00	U	5.00	0.0661	ng/kg	93		64-162		
1234678-HpCDD	0.0753	J	5.00	0.0723	ng/kg	93		70-140		
OCDD	0.215	J	10.0	0.0473	ng/kg	97		78-144		
2378-TCDF	1.00	U	1.00	0.137	ng/kg	94		75-158		
12378-PeCDF	0.0800	J	5.00	0.0711	ng/kg	95		80-134		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424500
Reported: 10/22/13 at 01:10 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
23478-PeCDF	5.00	U	5.00	0.0701	ng/kg	95		68-160		
123478-HxCDF	5.00	U	5.00	0.0561	ng/kg	98		72-134		
123678-HxCDF	0.0948	J	5.00	0.0516	ng/kg	98		84-130		
123789-HxCDF	5.00	U	5.00	0.0600	ng/kg	84		78-130		
234678-HxCDF	5.00	U	5.00	0.0489	ng/kg	95		70-156		
1234678-HpCDF	0.0423	J	5.00	0.0263	ng/kg	93		82-122		
1234789-HpCDF	5.00	U	5.00	0.0422	ng/kg	96		78-138		
OCDF	0.137	J	10.0	0.0908	ng/kg	98		63-170		
TEQ WHO 2005 - EDLx0.0	U				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13291SLJ026	Sample number(s): 7228021-7228024 UNSPK: 7228022								
Acenaphthene	98	97	48-127	2	30				
Acenaphthylene	104	102	49-121	2	30				
Anthracene	92	92	52-126	0	30				
Benzo(a)anthracene	98	99	44-143	1	30				
Benzo(a)pyrene	97	100	44-140	3	30				
Benzo(b)fluoranthene	89	114	26-142	24	30				
Benzo(e)pyrene	88	88	70-130	0	30				
Benzo(g,h,i)perylene	90	90	33-141	1	30				
Benzo(k)fluoranthene	108	103	54-142	5	30				
Butylbenzylphthalate	85	84	49-151	1	30				
Di-n-butylphthalate	107	104	52-147	2	30				
Chrysene	95	97	29-148	2	30				
Dibenz(a,h)anthracene	97	97	20-137	1	30				
Diethylphthalate	107	103	43-145	4	30				
Dimethylphthalate	103	88	58-129	16	30				
Bis(2-Ethylhexyl)phthalate	104	106	39-167	2	30				
Fluoranthene	96	97	40-148	0	30				
Fluorene	101	98	51-137	4	30				
Indeno(1,2,3-cd)pyrene	95	96	17-136	1	30				
1-Methylnaphthalene	115	104	50-131	10	30				
2-Methylnaphthalene	113	101	35-152	12	30				
Naphthalene	105	98	31-148	6	30				
N-Nitrosodimethylamine	75	74	48-113	1	30				
Di-n-octylphthalate	109	111	52-162	2	30				
Phenanthrene	110	107	29-142	3	30				
Pyrene	88	89	26-143	2	30				
Batch number: 13281A16B	Sample number(s): 7228022 UNSPK: P218895								
11a TPH by EPA 8015B GRO	87	94	69-123	9	30				
Batch number: 132820019A	Sample number(s): 7228021-7228024 UNSPK: P220653								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424500
Reported: 10/22/13 at 01:10 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2,4-D	99	101	42-143	2	35				
Dalapon	70	70	16-98	0	50				
2,4-DB	107	113	10-179	5	50				
Dicamba	95	93	55-133	1	50				
Dinoseb	34	44	10-52	25	35				
2,4-DP (Dichlorprop)	119	120	32-171	1	50				
MCPA	90	94	23-169	5	50				
MCPP (Mecoprop)	92	93	24-164	2	50				
2,4,5-T	104	111	12-172	7	35				
2,4,5-TP	105	106	10-142	1	35				
Batch number: 132810021A	Sample number(s): 7228021-7228022 UNSPK: P222763								
Aldrin	85	80	16-126	6	50				
Alpha BHC	85	79	14-140	6	50				
Beta BHC	90	85	42-133	5	50				
Gamma BHC - Lindane	85	78	30-137	8	50				
p,p-DDD	90	86	43-149	4	50				
p,p-DDE	92	85	35-152	7	50				
p,p-DDT	89	84	12-193	5	50				
Delta BHC	89	82	13-153	6	50				
Dieldrin	90	84	41-153	6	50				
Endosulfan I	88	83	26-146	5	50				
Endosulfan II	93	87	34-141	5	50				
Endosulfan Sulfate	94	90	10-181	4	50				
Endrin	88	82	30-152	6	50				
Endrin Aldehyde	88	83	23-138	5	50				
Endrin Ketone	86	82	30-148	5	50				
Heptachlor	84	77	16-152	7	50				
Heptachlor Epoxide	89	83	33-144	6	50				
Methoxychlor	88	86	41-161	1	50				
Batch number: 132830013A	Sample number(s): 7228021-7228022 UNSPK: P224840								
PCB-1016	85	82	41-135	3	50				
PCB-1260	86	84	40-134	2	50				
Batch number: 132810637001	Sample number(s): 7228021-7228022 UNSPK: P222779 BKG: P222779								
Aluminum	2134 (2)	1672 (2)	75-125	8	20	8,800	9,900	12	20
Antimony	58*	50*	75-125	17	20	4.00 U	3.88 U	0 (1)	20
Arsenic	103	95	75-125	7	20	3.94 J	4.24	7 (1)	20
Barium	105	97	75-125	7	20	60.6	66.6	9	20
Beryllium	101	96	75-125	6	20	0.403 J	0.413 J	2 (1)	20
Boron	91	88	75-125	6	20	6.15 J	6.11 J	1 (1)	20
Cadmium	96	93	75-125	5	20	0.212 J	0.254 J	18 (1)	20
Calcium	-7 (2)	-181 (2)	75-125	10	20	7,360	7,550	3	20
Chromium	119	104	75-125	9	20	14.2	17.3	19 (1)	20
Cobalt	97	93	75-125	6	20	3.83	4.41	14 (1)	20
Copper	111	104	75-125	6	20	9.16	10.1	10 (1)	20
Iron	2130 (2)	574 (2)	75-125	9	20	15,500	17,200	10	20
Lead	99	95	75-125	5	20	3.29	3.91	17 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424500
Reported: 10/22/13 at 01:10 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Lithium	106	100	75-125	6	20	26.9		30.2		11	20
Magnesium	560 (2)	327 (2)	75-125	9	20	4,340		4,900		12	20
Manganese	158 (2)	105 (2)	75-125	10	20	221		250		12	20
Molybdenum	99	96	75-125	5	20	0.267	J	0.290	J	8 (1)	20
Nickel	99	94	75-125	6	20	7.11		8.40		17 (1)	20
Phosphorus	298*	38*	75-125	48*	20	371		362		3	20
Potassium	136*	105	75-125	9	20	2,500		2,760		10	20
Sodium	102	98	75-125	5	20	108		126		16 (1)	20
Tin	91	89	75-125	5	20	2.56	J	2.58	J	1 (1)	20
Titanium	525 (2)	340 (2)	75-125	15	20	808		896		10	20
Vanadium	116	104	75-125	8	20	26.8		29.8		10	20
Zinc	105	93	75-125	7	20	47.4		51.2		8	20
Zirconium	102	99	75-125	5	20	2.30	J	3.36	J	37* (1)	20
Batch number: 132810637001A	Sample number(s): 7228021-7228022 UNSPK: P222779 BKG: P222779										
Silver	111	110	75-125	3	20	0.200	U	0.194	U	0 (1)	20
Strontium	42*	263*	75-125	57*	20	18.0		18.2		1	20
Thallium	107	102	75-125	4	20	0.241		0.257		7 (1)	20
Batch number: 132810637001B	Sample number(s): 7228021-7228022 UNSPK: P222779 BKG: P222779										
Selenium	109	111	75-125	0	20	0.400	U	0.388	U	0 (1)	20
Batch number: 132810638001	Sample number(s): 7228021-7228022 UNSPK: P222779 BKG: P222779										
3a Mercury 7471A	111	106	65-135	4	20	0.0158	U	0.0160	U	0 (1)	20
Batch number: 13290290201A	Sample number(s): 7228025-7228026 UNSPK: 7228025 BKG: 7228025										
1a Anions by 300.0 - Fluoride	14*		80-120			0.72		0.65		10 (1)	20
Batch number: 13281039402S	Sample number(s): 7228021-7228022,7228025-7228026 BKG: 7228021										
15a pH by 9045D						7.42		7.44		0	3
Batch number: 13283162401B	Sample number(s): 7228021-7228026 BKG: P220658										
14a Moisture Content by 160.3						15.5		16.1		4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13291SLJ026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7228021	91	97	109
7228022	82	92	103
7228023	78	85	99
7228024	85	83	103
Blank	89	93	101

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424500
Reported: 10/22/13 at 01:10 PM

Surrogate Quality Control

LCS	92	98	105
MS	87	98	107
MSD	85	97	105
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13281A16B

	Trifluorotoluene-F
7228022	89
Blank	97
LCS	86
MS	85
MSD	93
Limits:	50-142

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13290A20A

	Trifluorotoluene-F
7228020	95
Blank	95
LCS	101
LCSD	101
Limits:	63-135

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132810021A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7228021	77	89
7228022	77	82
Blank	85	94
LCS	90	99
MS	87	94
MSD	80	90
Limits:	50-130	20-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132820019A

	2,4-Dichlorophenylacetic acid
7228021	87
7228022	77
7228023	89
7228024	92
Blank	73
LCS	97
MS	93
MSD	95

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424500
Reported: 10/22/13 at 01:10 PM

Surrogate Quality Control

Limits: 50-150

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132830013A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7228021	110	105
7228022	114	109
Blank	115	117
LCS	112	117
LCSD	117	120
MS	99	92
MSD	101	90
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132880004A

	Chlorobenzene	Orthoterphenyl
7228021	104	103
7228022	88	90
Blank	83	76
LCS	105	105
LCSD	94	96
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13283005

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7228021	72	68	65	71	69	83
Blank	65	60	66	74	72	80
OPR	74	65	66	75	76	141
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7228021	83	82	92	69	65	72
Blank	92	75	77	66	73	79
OPR	97	81	78	70	75	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7228021	72	86	95	67	70
Blank	77	84	90	56	63
OPR	81	91	95	62	68
Limits:	28-130	23-140	17-157	24-169	24-185

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Quality Control Summary

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Reported: 10/22/13 at 01:10 PM

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13013 1424500 7228020-26

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 10/7/2013
CarrierName: FedEx
AirbillNo: 796855827002

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131007-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-100713	10/7/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-567-SA5D-SB-0.0-0.5	10/7/13 09:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X	X			X											
SL-567-SA5D-SB-0.0-0.5	10/7/13 09:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-567-SA5D-SB-3.5-4.5	10/7/13 10:20	SO	None	2 - SS-Sleeve	10 day	X	X					X			X						X	X			X											
SL-567-SA5D-SB-3.5-4.5	10/7/13 10:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-567-SA5D-SB-3.5-4.5	10/7/13 10:20	SO	None	2 - Encore	10 day																			X												
SL-575-SA5D-SB-0.0-0.5	10/7/13 08:30	SO	None	1 - SS-Sleeve	10 day							X									X															
SL-575-SA5D-SB-3.0-4.0	10/7/13 09:00	SO	None	1 - SS-Sleeve	10 day							X									X															
SL-593-SA5D-SB-0.0-0.5	10/7/13 12:40	SO	None	1 - SS-Sleeve	10 day				X																											
SL-593-SA5D-SB-0.0-0.5	10/7/13 12:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-593-SA5D-SB-3.5-4.5	10/7/13 13:00	SO	None	1 - SS-Sleeve	10 day				X																											
SL-593-SA5D-SB-3.5-4.5	10/7/13 13:00	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
S. Myers	10/07/2013	1000									
									CEshler	10/8/13	~~0925~~ 0910

ATLO 10/8/13

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Environmental Sample Administration Receipt Documentation Log

1424500

Client/Project: CDM Smith

Date of Receipt: 10/8/13

Time of Receipt: 0910

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.0	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 3647 **Date/Time:** 10/8/13 0940

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH124

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

October 23, 2013

Project: SSFL Phase 3 Sampling

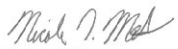
Submittal Date: 10/09/2013
Group Number: 1424887
SDG: PH124
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB-100813 Water	7229585
TB-100813 Water	7229586
SL-561-SA5D-SB-0.0-0.5 Soil	7229587
SL-561-SA5D-SB-4.0-5.0 Soil	7229588
SL-561-SA5D-SB-9.0-10.0 Soil	7229589
SL-602-SA5D-SB-0.0-0.5 Soil	7229590
SL-602-SA5D-SB-4.0-5.0 Soil	7229591
SL-602-SA5D-SB-9.0-10.0 Soil	7229592

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,



Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: EB-100813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7229585
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 14:00 by PH

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

124EB SDG#: PH124-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.052	U	0.052	0.010	1
12971	Acenaphthylene	208-96-8	0.052	U	0.052	0.010	1
12971	Anthracene	120-12-7	0.052	U	0.052	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.052	U	0.052	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.052	U	0.052	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.052	U	0.052	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.052	U	0.052	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.052	U	0.052	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.052	U	0.052	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.052	1
12971	Di-n-butylphthalate	84-74-2	0.17	J	1.0	0.052	1
12971	Chrysene	218-01-9	0.052	U	0.052	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.052	U	0.052	0.010	1
12971	Diethylphthalate	84-66-2	0.29	J	1.0	0.052	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.052	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.13	J	1.0	0.052	1
12971	Fluoranthene	206-44-0	0.052	U	0.052	0.010	1
12971	Fluorene	86-73-7	0.052	U	0.052	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.052	U	0.052	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.052	U	0.052	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.052	U	0.052	0.010	1
12971	Naphthalene	91-20-3	0.052	U	0.052	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.052	U	0.052	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.052	1
12971	Phenanthrene	85-01-8	0.052	U	0.052	0.031	1
12971	Pyrene	129-00-0	0.052	U	0.052	0.010	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	
10407	2,4-D	94-75-7	0.48	U	0.48	0.15	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.95	U	0.95	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.076	1
10407	Dinoseb	88-85-7	0.48	U	0.48	0.11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.48	U	0.48	0.15	1
10407	MCPA	94-74-6	190	U	190	48	1
10407	MCPP	93-65-2	190	U	190	48	1
10407	2,4,5-T	93-76-5	0.048	U	0.048	0.014	1
10407	2,4,5-TP	93-72-1	0.048	U	0.048	0.0095	1
Pesticides/PCBs	**SW-846 8081B**		ug/l		ug/l	ug/l	
10589	Aldrin	309-00-2	0.0084	U	0.0084	0.0017	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-100813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7229585
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 14:00 by PH

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

124EB SDG#: PH124-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Alpha BHC	319-84-6	0.0084	U	0.0084	0.0025	1
10589	Beta BHC	319-85-7	0.0084	U	0.0084	0.0028	1
10589	Gamma BHC - Lindane	58-89-9	0.0084	U	0.0084	0.0017	1
10589	Chlordane	57-74-9	0.42	U	0.42	0.13	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0042	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0042	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0044	1
10589	Delta BHC	319-86-8	0.0084	U	0.0084	0.0028	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0044	1
10589	Endosulfan I	959-98-8	0.0084	U	0.0084	0.0036	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0049	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0068	1
10589	Endrin Aldehyde	7421-93-4	0.084	U	0.084	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0042	1
10589	Heptachlor	76-44-8	0.0084	U	0.0084	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0084	U	0.0084	0.0019	1
10589	Methoxychlor	72-43-5	0.084	U	0.084	0.025	1
10589	Mirex	2385-85-5	0.042	U	0.042	0.0084	1
10589	Toxaphene	8001-35-2	2.5	U	2.5	0.84	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.42	U	0.42	0.084	1
13092	Aroclor 5442	12642-23-8	0.42	U	0.42	0.084	1
13092	Aroclor 5460	11126-42-4	0.42	U	0.42	0.092	1
13092	PCB-1016	12674-11-2	0.42	U	0.42	0.084	1
13092	PCB-1221	11104-28-2	0.42	U	0.42	0.084	1
13092	PCB-1232	11141-16-5	0.42	U	0.42	0.17	1
13092	PCB-1242	53469-21-9	0.42	U	0.42	0.084	1
13092	PCB-1248	12672-29-6	0.42	U	0.42	0.084	1
13092	PCB-1254	11097-69-1	0.42	U	0.42	0.084	1
13092	PCB-1260	11096-82-5	0.42	U	0.42	0.13	1
13092	PCB-1262	37324-23-5	0.42	U	0.42	0.17	1
13092	PCB-1268	11100-14-4	0.42	U	0.42	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C15-C20)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C21-C30)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C30 - C40)	n.a.	0.48	U	0.48	0.096	1
10365	EFH (C8-C11)	n.a.	0.096	U	0.096	0.048	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-100813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7229585
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 14:00 by PH

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

124EB SDG#: PH124-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.0085 J	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.0487 J	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	
01504	1b Anions by 300.0 - Fluoride	16984-48-8	0.10 U	0.10	0.080	1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.5	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-100813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7229585
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 14:00 by PH

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

124EB SDG#: PH124-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.93	U	1.93	0.352	1
10915	12378-PeCDD	40321-76-4	9.67	U	9.67	0.243	1
10915	123478-HxCDD	39227-28-6	0.378	JBQ	9.67	0.161	1
10915	123678-HxCDD	57653-85-7	0.472	JBQ	9.67	0.173	1
10915	123789-HxCDD	19408-74-3	0.382	JBQ	9.67	0.156	1
10915	1234678-HpCDD	35822-46-9	0.806	JBQ	9.67	0.170	1
10915	OCDD	3268-87-9	1.70	JB	19.3	0.201	1
10915	2378-TCDF	51207-31-9	1.93	U	1.93	0.298	1
10915	12378-PeCDF	57117-41-6	0.774	JBQ	9.67	0.138	1
10915	23478-PeCDF	57117-31-4	0.455	JB	9.67	0.124	1
10915	123478-HxCDF	70648-26-9	0.564	JBQ	9.67	0.124	1
10915	123678-HxCDF	57117-44-9	0.596	JBQ	9.67	0.121	1
10915	123789-HxCDF	72918-21-9	0.575	JBQ	9.67	0.128	1
10915	234678-HxCDF	60851-34-5	0.603	JBQ	9.67	0.120	1
10915	1234678-HpCDF	67562-39-4	0.770	JB	9.67	0.0795	1
10915	1234789-HpCDF	55673-89-7	0.514	JB	9.67	0.0880	1
10915	OCDF	39001-02-0	1.54	JB	19.3	0.232	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.150				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	89	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	89	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	87	26 - 138
13C12-OCDF	86	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB-100813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7229585
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 14:00 by PH

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

124EB SDG#: PH124-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB-100813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7229585
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 14:00 by PH

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

124EB SDG#: PH124-01EB

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13285WAB026	10/14/2013 20:24	Catherine E Bachman	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13285WAB026	10/13/2013 17:30	Seth A Farrier	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13290A20A	10/17/2013 11:38	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13290A20A	10/17/2013 11:38	Laura M Krieger	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132820007A	10/10/2013 20:22	Melissa McDermott	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132870007A	10/15/2013 11:51	Lisa A Reinert	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132870008A	10/17/2013 06:13	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132870008A	10/14/2013 17:00	JoElla L Rice	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132870007A	10/14/2013 17:00	JoElla L Rice	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132820007A	10/09/2013 20:30	Elaine F Stoltzfus	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132870020A	10/16/2013 07:18	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132870020A	10/15/2013 10:25	Denise L Trimby	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13287004	10/17/2013 00:24	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13287004	10/15/2013 09:45	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07044	Antimony	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07035	Arsenic	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07046	Barium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07047	Beryllium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
08014	Boron	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07049	Cadmium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
01750	Calcium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07051	Chromium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07052	Cobalt	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07053	Copper	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
01754	Iron	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07055	Lead	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
01756	Lithium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
01757	Magnesium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07058	Manganese	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07060	Molybdenum	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07061	Nickel	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-100813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7229585
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 14:00 by PH

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

124EB SDG#: PH124-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10143	Phosphorus	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
01762	Potassium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
01767	Sodium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07069	Tin	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07070	Titanium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07071	Vanadium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
07072	Zinc	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
10144	Zirconium	SW-846 6010C	1	132900635001	10/18/2013 20:35	John W Yanzuk II	1
06041	Selenium	SW-846 6020A	1	132900639001B	10/20/2013 02:56	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	132900639001A	10/20/2013 02:56	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	132900639001A	10/20/2013 02:56	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	132900639001A	10/20/2013 02:56	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	132845713016	10/13/2013 12:09	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132900635001	10/17/2013 23:50	Annamaria Stipkovits	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132900639001	10/17/2013 23:50	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132845713016	10/12/2013 14:00	Damary Valentin	1
01504	1b Anions by 300.0 - Fluoride	EPA 300.0	2	13285655901C	10/14/2013 10:54	Christopher D Meeks	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13282987301B	10/09/2013 13:13	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13283011101A	10/10/2013 16:04	Susan A Engle	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-100813 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7229586
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 08:00

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

124TB SDG#: PH124-02TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13290A20A	10/17/2013 12:00	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13290A20A	10/17/2013 12:00	Laura M Krieger	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229587
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 08:40 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56100 SDG#: PH124-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	0.42	J	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.4	J	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.4	J	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	3.5		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.4	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	27		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	3.3		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.4	J	19	6.3	1
12969	Fluoranthene	206-44-0	3.4		1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.2	J	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.2	J	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	2.3		1.8	0.70	1
12969	Naphthalene	91-20-3	4.2		1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	2.9		1.8	0.70	1
12969	Pyrene	129-00-0	2.6		1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.7		5.3	2.1	1
12952	EFH (C21-C30)	n.a.	19		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	42		11	4.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229587
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 08:40 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56100 SDG#: PH124-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,900		41.2	7.43	1
06944	Antimony	7440-36-0	4.12	U	4.12	0.763	1
06935	Arsenic	7440-38-2	4.71		4.12	0.722	1
06946	Barium	7440-39-3	116		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.993	J	1.03	0.0691	1
07914	Boron	7440-42-8	5.60	J	10.3	0.866	1
06949	Cadmium	7440-43-9	1.03	U	1.03	0.0783	1
01650	Calcium	7440-70-2	8,370		20.6	3.44	1
06951	Chromium	7440-47-3	39.0		3.09	0.165	1
06952	Cobalt	7440-48-4	10.3		1.03	0.102	1
06953	Copper	7440-50-8	28.3		2.06	0.299	1
01654	Iron	7439-89-6	36,400		206	18.7	5
06955	Lead	7439-92-1	14.9		3.09	0.515	1
01656	Lithium	7439-93-2	25.4		4.1	0.35	1
01657	Magnesium	7439-95-4	7,990		10.3	1.72	1
06958	Manganese	7439-96-5	438		1.03	0.0856	1
06960	Molybdenum	7439-98-7	1.21	J	2.06	0.175	1
06961	Nickel	7440-02-0	21.4		2.06	0.134	1
10145	Phosphorus	7723-14-0	754		10.3	2.98	1
01662	Potassium	7440-09-7	6,950		103	8.60	1
01667	Sodium	7440-23-5	83.7	J	103	17.2	1
06969	Tin	7440-31-5	3.12	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,240		1.03	0.175	1
06971	Vanadium	7440-62-2	69.3		1.03	0.134	1
06972	Zinc	7440-66-6	88.1		4.12	0.206	1
10146	Zirconium	7440-67-7	3.09	J	5.15	0.866	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.401	J	0.412	0.103	2
06142	Silver	7440-22-4	0.0551	J	0.206	0.0268	2
06144	Strontium	7440-24-6	35.1		0.412	0.0701	2
06145	Thallium	7440-28-0	0.419		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0220		0.0166	0.0099	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	0.56		0.52	0.42	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.46		0.0100	0.0100	1
	The pH was measured in water at 20.7 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229587
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 08:40 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56100 SDG#: PH124-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	4.9	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229587
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 08:40 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56100 SDG#: PH124-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.158	1
11031	12378-PeCDD	40321-76-4	5.16	U	5.16	0.117	1
11031	123478-HxCDD	39227-28-6	0.116	JQ	5.16	0.0799	1
11031	123678-HxCDD	57653-85-7	0.163	JQ	5.16	0.0840	1
11031	123789-HxCDD	19408-74-3	0.219	JQ	5.16	0.0817	1
11031	1234678-HpCDD	35822-46-9	3.81	JB	5.16	0.141	1
11031	OCDD	3268-87-9	35.4	B	10.3	0.0812	1
11031	2378-TCDF	51207-31-9	0.230	JQ	1.03	0.189	1
11031	12378-PeCDF	57117-41-6	5.16	U	5.16	0.101	1
11031	23478-PeCDF	57117-31-4	5.16	U	5.16	0.102	1
11031	123478-HxCDF	70648-26-9	0.116	JBQ	5.16	0.0762	1
11031	123678-HxCDF	57117-44-9	0.0913	JQ	5.16	0.0688	1
11031	123789-HxCDF	72918-21-9	5.16	U	5.16	0.0820	1
11031	234678-HxCDF	60851-34-5	0.179	JB	5.16	0.0649	1
11031	1234678-HpCDF	67562-39-4	0.629	JB	5.16	0.0505	1
11031	1234789-HpCDF	55673-89-7	0.149	JBQ	5.16	0.0769	1
11031	OCDF	39001-02-0	1.28	JBQ	10.3	0.0939	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0730				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	56	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	61	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229587
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 08:40 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56100 SDG#: PH124-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229587
LL Group # 1424887
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3201 Jermantown Road
Suite 400
Fairfax VA 22030

56100 SDG#: PH124-03

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13291SLJ026	10/22/2013 08:10	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13291SLJ026	10/20/2013 15:20	Wanda F Oswald	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132880005A	10/17/2013 07:45	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132880005A	10/15/2013 18:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 20:05	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132880004A	10/15/2013 18:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13287003	10/17/2013 15:37	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13287003	10/15/2013 11:30	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06944	Antimony	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06946	Barium	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
07914	Boron	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
01650	Calcium	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06951	Chromium	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06953	Copper	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
01654	Iron	SW-846 6010C	1	132900637001	10/19/2013 20:12	John P Hook	5
06955	Lead	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
01656	Lithium	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06958	Manganese	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06961	Nickel	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132900637001	10/20/2013 22:23	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
01667	Sodium	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06969	Tin	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06970	Titanium	SW-846 6010C	1	132900637001	10/20/2013 22:23	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132900637001	10/20/2013 22:23	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132900637001	10/19/2013 19:34	John P Hook	1
06141	Selenium	SW-846 6020A	1	132900637001B	10/20/2013 14:11	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132900637001A	10/20/2013 14:11	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132900637001A	10/20/2013 14:11	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132900637001A	10/20/2013 14:11	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229587
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 08:40 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56100 SDG#: PH124-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132900638002	10/18/2013 09:16	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132900637001	10/17/2013 22:44	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132900638002	10/18/2013 02:00	Annamaria Stipkovits	1
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13290290201A	10/18/2013 00:43	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13290290201A	10/17/2013 07:20	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13282039401A	10/09/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401B	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229588
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 09:00 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56140 SDG#: PH124-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.54	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	0.75	J	1.8	0.73	1
12969	Naphthalene	91-20-3	0.93	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.37
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229588
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 09:00 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56140 SDG#: PH124-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.1	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	12		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,900		43.0	7.75	1
06944	Antimony	7440-36-0	4.30	U	4.30	0.795	1
06935	Arsenic	7440-38-2	4.81		4.30	0.752	1
06946	Barium	7440-39-3	129		1.07	0.0355	1
06947	Beryllium	7440-41-7	1.02	J	1.07	0.0720	1
07914	Boron	7440-42-8	2.19	J	10.7	0.903	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0817	1
01650	Calcium	7440-70-2	16,600		21.5	3.59	1
06951	Chromium	7440-47-3	38.1		3.22	0.172	1
06952	Cobalt	7440-48-4	10.8		1.07	0.106	1
06953	Copper	7440-50-8	26.4		2.15	0.312	1
01654	Iron	7439-89-6	37,800		215	19.5	5
06955	Lead	7439-92-1	9.25		3.22	0.537	1
01656	Lithium	7439-93-2	27.3		4.3	0.37	1
01657	Magnesium	7439-95-4	7,760		10.7	1.80	1
06958	Manganese	7439-96-5	420		1.07	0.0892	1
06960	Molybdenum	7439-98-7	0.270	J	2.15	0.183	1
06961	Nickel	7440-02-0	22.1		2.15	0.140	1
10145	Phosphorus	7723-14-0	502		10.7	3.11	1
01662	Potassium	7440-09-7	4,590		107	8.97	1
01667	Sodium	7440-23-5	86.2	J	107	18.0	1
06969	Tin	7440-31-5	3.09	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,190		1.07	0.183	1
06971	Vanadium	7440-62-2	70.7		1.07	0.140	1
06972	Zinc	7440-66-6	82.0		4.30	0.215	1
10146	Zirconium	7440-67-7	2.58	J	5.37	0.903	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.297	J	0.430	0.107	2
06142	Silver	7440-22-4	0.0563	J	0.215	0.0279	2
06144	Strontium	7440-24-6	45.7		0.430	0.0731	2
06145	Thallium	7440-28-0	0.376		0.215	0.0322	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175	U	0.0175	0.0105	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	1.4		0.54	0.43	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229588
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 09:00 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56140 SDG#: PH124-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 21.2 C.	n.a.	7.76	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	8.8	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13291SLJ026	10/22/2013 08:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13291SLJ026	10/20/2013 15:20	Wanda F Oswald	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16B	10/15/2013 16:17	Laura M Krieger	24.37
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201328232695	10/09/2013 12:55	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201328232695	10/09/2013 12:56	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132880005A	10/17/2013 08:40	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132880005A	10/15/2013 18:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 19:44	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06944	Antimony	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06946	Barium	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
07914	Boron	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
01650	Calcium	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06951	Chromium	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06953	Copper	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
01654	Iron	SW-846 6010C	1	132900637001	10/19/2013 20:35	John P Hook	5
06955	Lead	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
01656	Lithium	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229588
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 09:00 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56140 SDG#: PH124-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06961	Nickel	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132900637001	10/20/2013 22:49	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
01667	Sodium	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06969	Tin	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06970	Titanium	SW-846 6010C	1	132900637001	10/20/2013 22:49	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132900637001	10/20/2013 22:49	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132900637001	10/19/2013 19:57	John P Hook	1
06141	Selenium	SW-846 6020A	1	132900637001B	10/20/2013 14:29	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132900637001A	10/20/2013 14:29	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132900637001A	10/20/2013 14:29	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132900637001A	10/20/2013 14:29	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132900638002	10/18/2013 09:26	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132900637001	10/17/2013 22:44	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132900638002	10/18/2013 02:00	Annamaria Stipkovits	1
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13290290201A	10/18/2013 01:00	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13290290201A	10/17/2013 07:20	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13282039401A	10/09/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401B	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229589
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 10:10 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56190 SDG#: PH124-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	0.45	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.0	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.65
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229589
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 10:10 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56190 SDG#: PH124-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,200		42.6	7.68	1
06944	Antimony	7440-36-0	4.26	U	4.26	0.788	1
06935	Arsenic	7440-38-2	5.23		4.26	0.745	1
06946	Barium	7440-39-3	123		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.910	J	1.06	0.0713	1
07914	Boron	7440-42-8	3.77	J	10.6	0.894	1
06949	Cadmium	7440-43-9	0.0979	J	1.06	0.0809	1
01650	Calcium	7440-70-2	21,300		21.3	3.56	1
06951	Chromium	7440-47-3	38.9		3.19	0.170	1
06952	Cobalt	7440-48-4	10.4		1.06	0.105	1
06953	Copper	7440-50-8	24.8		2.13	0.309	1
01654	Iron	7439-89-6	35,300		213	19.3	5
06955	Lead	7439-92-1	9.31		3.19	0.532	1
01656	Lithium	7439-93-2	27.6		4.3	0.36	1
01657	Magnesium	7439-95-4	7,060		10.6	1.78	1
06958	Manganese	7439-96-5	455		1.06	0.0884	1
06960	Molybdenum	7439-98-7	0.353	J	2.13	0.181	1
06961	Nickel	7440-02-0	22.2		2.13	0.138	1
10145	Phosphorus	7723-14-0	370		10.6	3.08	1
01662	Potassium	7440-09-7	3,990		106	8.88	1
01667	Sodium	7440-23-5	119		106	17.8	1
06969	Tin	7440-31-5	2.94	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,320		1.06	0.181	1
06971	Vanadium	7440-62-2	67.5		1.06	0.138	1
06972	Zinc	7440-66-6	72.5		4.26	0.213	1
10146	Zirconium	7440-67-7	3.30	J	5.32	0.894	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.257	J	0.426	0.106	2
06142	Silver	7440-22-4	0.0428	J	0.213	0.0277	2
06144	Strontium	7440-24-6	52.3		0.426	0.0724	2
06145	Thallium	7440-28-0	0.375		0.213	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0178	U	0.0178	0.0107	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	3.1		0.54	0.43	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229589
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 10:10 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56190 SDG#: PH124-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 21.3 C.	n.a.	7.85	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	7.0	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13291SLJ026	10/22/2013 09:15	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13291SLJ026	10/20/2013 15:20	Wanda F Oswald	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13281A16B	10/15/2013 16:55	Laura M Krieger	26.65
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201328232695	10/09/2013 12:56	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201328232695	10/09/2013 12:57	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132880005A	10/17/2013 08:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132880005A	10/15/2013 18:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132880004A	10/16/2013 19:23	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132880004A	10/15/2013 18:30	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06944	Antimony	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06946	Barium	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
07914	Boron	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
01650	Calcium	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06951	Chromium	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06953	Copper	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
01654	Iron	SW-846 6010C	1	132900637001	10/19/2013 20:38	John P Hook	5
06955	Lead	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
01656	Lithium	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229589
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 10:10 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56190 SDG#: PH124-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06961	Nickel	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132900637001	10/20/2013 22:53	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
01667	Sodium	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06969	Tin	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06970	Titanium	SW-846 6010C	1	132900637001	10/20/2013 22:53	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132900637001	10/20/2013 22:53	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132900637001	10/19/2013 20:01	John P Hook	1
06141	Selenium	SW-846 6020A	1	132900637001B	10/20/2013 14:31	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132900637001A	10/20/2013 14:31	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132900637001A	10/20/2013 14:31	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132900637001A	10/20/2013 14:31	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132900638002	10/18/2013 09:28	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132900637001	10/17/2013 22:44	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132900638002	10/18/2013 02:00	Annamaria Stipkovits	1
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13290290201A	10/18/2013 01:16	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13290290201A	10/17/2013 07:20	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13282039401A	10/09/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401B	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229590
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 12:20 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60200 SDG#: PH124-06

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	0.73	0.51	0.41	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.2 C.		n.a.	7.48	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	3.3	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13290290201A	10/18/2013 01:32	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13290290201A	10/17/2013 07:20	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13282039401A	10/09/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401B	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229591
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 12:50 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60240 SDG#: PH124-07

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride		16984-48-8	1.5	0.55	0.44	1
		SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21 C.		n.a.	7.68	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	9.4	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13290290201A	10/18/2013 01:48	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13290290201A	10/17/2013 07:20	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13282039401A	10/09/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401B	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7229592
LL Group # 1424887
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 10/08/2013 13:50 by VC

Submitted: 10/09/2013 09:10
Reported: 10/23/2013 16:49

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60290 SDG#: PH124-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	1a Anions by 300.0 - Fluoride	16984-48-8	4.0	0.55	0.44	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.1 C.	n.a.	7.87	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	9.0	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	1a Anions by 300.0 - Fluoride	EPA 300.0	1	13290290201A	10/18/2013 02:04	Sandra J Miller	1
01352	1a Anions by 300.0 - Extract.	EPA 300.0	1	13290290201A	10/17/2013 07:20	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13282039401A	10/09/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13284162401B	10/11/2013 22:14	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424887
Reported: 10/23/13 at 04:49 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13285WAB026	Sample number(s): 7229585									
Acenaphthene	0.050	U	0.050	0.010	ug/l	102	101	77-118	1	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	109	108	80-123	1	30
Anthracene	0.050	U	0.050	0.010	ug/l	102	102	78-123	0	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	107	107	73-127	0	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	102	103	72-120	1	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	108	108	79-136	0	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	98	98	70-130	1	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	108	109	64-130	0	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	108	108	73-131	0	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	90	89	40-138	1	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	102	102	64-141	1	30
Chrysene	0.050	U	0.050	0.010	ug/l	100	100	76-125	0	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	107	108	58-131	1	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	105	104	64-128	1	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	91	90	23-139	0	30
Bis(2-Ethylhexyl)phthalate	0.083	J	1.0	0.050	ug/l	96	98	70-143	2	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	104	102	79-124	1	30
Fluorene	0.050	U	0.050	0.010	ug/l	100	101	74-115	0	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	107	109	62-130	1	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	115	115	80-126	0	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	115	114	81-124	1	30
Naphthalene	0.050	U	0.050	0.030	ug/l	104	104	75-120	0	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	91	90	36-120	1	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	124	126	57-145	1	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	99	99	75-120	1	30
Pyrene	0.050	U	0.050	0.010	ug/l	104	104	71-130	0	30
Batch number: 13291SLJ026	Sample number(s): 7229587-7229589									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	104		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	101		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	100		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	104		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	100		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	106		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	96		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	102		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	105		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	102		85-122		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424887
Reported: 10/23/13 at 04:49 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	92		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	101		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	99		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	102		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	76		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	100		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	98		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	95		79-112		
Batch number: 13281A16B	Sample number(s): 7229588-7229589									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	78		67-119		
Batch number: 13290A20A	Sample number(s): 7229585-7229586									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	109	75-135	2	30
Batch number: 132820007A	Sample number(s): 7229585									
2,4-D	0.50	U	0.50	0.16	ug/l	118	126	68-155	6	30
Dalapon	1.3	U	1.3	0.25	ug/l	81	96	25-119	17	30
2,4-DB	1.0	U	1.0	0.30	ug/l	117	123	50-163	5	30
Dicamba	0.30	U	0.30	0.080	ug/l	110	109	64-163	1	30
Dinoseb	0.50	U	0.50	0.12	ug/l	238*	238*	16-163	0	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	132	130	89-162	2	30
MCPA	200 U		200.	50	ug/l	96	105	68-154	9	30
MCPP	200 U		200.	50	ug/l	111	120	46-173	8	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	119	122	71-174	2	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	118	122	58-155	3	30
Batch number: 132870007A	Sample number(s): 7229585									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	78	88	45-125	12	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	86	92	51-139	6	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	85	91	57-127	6	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	84	88	57-133	5	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	79	89	55-145	12	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	78	92	58-130	17	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	77	87	45-140	12	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	84	90	52-133	7	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	79	88	60-135	11	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	76	87	56-128	13	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	80	89	53-123	10	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	83	90	51-130	8	30
Endrin	0.016	U	0.016	0.0065	ug/l	79	88	43-139	10	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	80	86	50-122	7	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	77	82	51-133	6	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	79	87	48-130	10	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	80	89	65-128	10	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	79	86	40-150	9	30
Mirex	0.040	U	0.040	0.0080	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132870008A	Sample number(s): 7229585									

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424887
Reported: 10/23/13 at 04:49 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	61	58	35-84	5	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	93	91	67-117	2	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	100	97	67-128	3	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132880005A	Sample number(s): 7229587-7229589									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	81	82	62-87	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	106		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	113		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132870020A	Sample number(s): 7229585									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	90	92	70-130	3	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	97	102	70-130	5	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	94	98	70-130	5	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	77	74	70-130	4	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	69*	70	70-130	1	30
Batch number: 132880004A	Sample number(s): 7229587-7229589									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	103	94	70-123	9	20
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	105	98	75-128	7	20
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	105	97	64-134	8	20
EFH (C30-C40)	10	U	10.	4.0	mg/kg	78	79	65-128	1	20
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	87	80	49-107	8	20
Batch number: 132845713016	Sample number(s): 7229585									
3b Mercury 7470A	0.00020	U	0.00020	0.00006 0	mg/l	102	101	90-115	1	20
Batch number: 132900635001	Sample number(s): 7229585									
Aluminum	0.0833	J	0.400	0.0828	mg/l	105	102	90-112	3	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	100	100	88-111	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	100	101	90-113	1	20
Barium	0.0100	U	0.0100	0.00033	mg/l	102	102	90-110	1	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	99	98	90-111	1	20
Boron	0.0099	J	0.100	0.0084	mg/l	94	93	90-110	1	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	100	101	90-112	1	20
Calcium	0.175	J	0.400	0.0334	mg/l	105	103	90-112	2	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	100	100	90-110	0	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	102	103	90-110	0	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424887
Reported: 10/23/13 at 04:49 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Copper	0.0200 U	0.0200	0.0027	mg/l	107	106	90-112	1	20
Iron	0.400 U	0.400	0.0430	mg/l	102	101	90-112	1	20
Lead	0.0300 U	0.0300	0.0047	mg/l	103	104	88-110	1	20
Lithium	0.0400 U	0.0400	0.0047	mg/l	103	101	90-110	2	20
Magnesium	0.0196 J	0.200	0.0167	mg/l	102	101	89-110	1	20
Manganese	0.0100 U	0.0100	0.00083	mg/l	102	101	90-110	1	20
Molybdenum	0.0200 U	0.0200	0.0017	mg/l	103	104	90-110	1	20
Nickel	0.0200 U	0.0200	0.0015	mg/l	104	104	90-111	0	20
Phosphorus	0.200 U	0.200	0.0418	mg/l	101	101	90-110	0	20
Potassium	1.00 U	1.00	0.0980	mg/l	101	100	90-110	1	20
Sodium	2.00 U	2.00	0.167	mg/l	102	100	87-114	1	20
Tin	0.0400 U	0.0400	0.0029	mg/l	99	99	90-110	1	20
Titanium	0.0200 U	0.0200	0.0017	mg/l	104	104	90-113	0	20
Vanadium	0.0100 U	0.0100	0.0020	mg/l	98	97	90-110	1	20
Zinc	0.0086 J	0.0400	0.0020	mg/l	102	101	90-110	1	20
Zirconium	0.100 U	0.100	0.0084	mg/l	103	102	90-110	1	20
Batch number: 132900637001	Sample number(s): 7229587-7229589								
Aluminum	40.0 U	40.0	7.21	mg/kg	105		80-120		
Antimony	4.00 U	4.00	0.740	mg/kg	107		80-120		
Arsenic	4.00 U	4.00	0.700	mg/kg	103		80-120		
Barium	1.00 U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00 U	1.00	0.0670	mg/kg	102		80-120		
Boron	10.0 U	10.0	0.840	mg/kg	96		80-120		
Cadmium	1.00 U	1.00	0.0760	mg/kg	105		80-120		
Calcium	3.41 J	20.0	3.34	mg/kg	105		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	106		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	106		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	110		80-120		
Iron	40.0 U	40.0	3.62	mg/kg	104		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	109		80-120		
Lithium	4.0 U	4.0	0.34	mg/kg	105		80-120		
Magnesium	10.0 U	10.0	1.67	mg/kg	103		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	106		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00 U	2.00	0.130	mg/kg	108		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	105		80-120		
Potassium	10.0 J	100.	8.34	mg/kg	105		80-120		
Sodium	100 U	100.	16.7	mg/kg	103		80-120		
Tin	1.49 J	10.0	0.220	mg/kg	105		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	106		80-120		
Vanadium	1.00 U	1.00	0.130	mg/kg	104		80-120		
Zinc	4.00 U	4.00	0.200	mg/kg	108		80-120		
Zirconium	5.00 U	5.00	0.840	mg/kg	105		80-120		
Batch number: 132900637001A	Sample number(s): 7229587-7229589								
Silver	0.200 U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400 U	0.400	0.0680	mg/kg	110		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	103		80-120		
Batch number: 132900637001B	Sample number(s): 7229587-7229589								
Selenium	0.400 U	0.400	0.100	mg/kg	111		80-120		
Batch number: 132900638002	Sample number(s): 7229587-7229589								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	104		85-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424887
Reported: 10/23/13 at 04:49 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132900639001A	Sample number(s): 7229585								
Silver	0.0010 U	0.0010	0.00011	mg/l	106	104	90-115	2	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	104	103	90-110	1	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	109	104	90-115	5	20
Batch number: 132900639001B	Sample number(s): 7229585								
Selenium	0.0040 U	0.0040	0.00050	mg/l	106	103	90-120	3	20
Batch number: 13282987301B	Sample number(s): 7229585								
2b Chromium VI by EPA 7199	10.0 U	10.0	5.0	ug/l	92	109	90-110	16	20
Batch number: 13285655901C	Sample number(s): 7229585								
1b Anions by 300.0 - Fluoride	0.10 U	0.10	0.080	mg/l	101	99	90-110	2	20
Batch number: 13290290201A	Sample number(s): 7229587-7229592								
1a Anions by 300.0 - Fluoride	0.50 U	0.50	0.40	mg/kg	95		90-110		
Batch number: 13282039401A	Sample number(s): 7229587-7229592								
15a pH by 9045D					99		95-105		
Batch number: 13283011101A	Sample number(s): 7229585								
28b pH (9040B and 9040C)					100		99-103		
Batch number: 13284162401B	Sample number(s): 7229587-7229592								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13287003	Sample number(s): 7229587								
2378-TCDD	1.00 U	1.00	0.132	ng/kg	87		67-158		
12378-PeCDD	5.00 U	5.00	0.102	ng/kg	95		70-142		
123478-HxCDD	5.00 U	5.00	0.0544	ng/kg	96		70-164		
123678-HxCDD	5.00 U	5.00	0.0572	ng/kg	95		76-134		
123789-HxCDD	5.00 U	5.00	0.0588	ng/kg	96		64-162		
1234678-HpCDD	0.0612 J	5.00	0.0581	ng/kg	94		70-140		
OCDD	0.214 J	10.0	0.0444	ng/kg	97		78-144		
2378-TCDF	1.00 U	1.00	0.106	ng/kg	95		75-158		
12378-PeCDF	5.00 U	5.00	0.0679	ng/kg	93		80-134		
23478-PeCDF	5.00 U	5.00	0.0634	ng/kg	93		68-160		
123478-HxCDF	0.0571 J	5.00	0.0462	ng/kg	97		72-134		
123678-HxCDF	5.00 U	5.00	0.0432	ng/kg	98		84-130		
123789-HxCDF	5.00 U	5.00	0.0511	ng/kg	94		78-130		
234678-HxCDF	0.0492 J	5.00	0.0409	ng/kg	97		70-156		
1234678-HpCDF	0.0498 J	5.00	0.0255	ng/kg	95		82-122		
1234789-HpCDF	0.101 J	5.00	0.0411	ng/kg	95		78-138		
OCDF	0.191 J	10.0	0.0746	ng/kg	96		63-170		
Batch number: 13287004	Sample number(s): 7229585								
2378-TCDD	2.00 U	2.00	0.488	pg/l	97		60-150		
12378-PeCDD	0.426 J	10.0	0.295	pg/l	99		60-150		
123478-HxCDD	0.696 J	10.0	0.186	pg/l	97		60-150		
123678-HxCDD	0.399 J	10.0	0.198	pg/l	100		60-150		
123789-HxCDD	0.472 J	10.0	0.186	pg/l	98		60-150		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424887
Reported: 10/23/13 at 04:49 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
1234678-HpCDD	0.857	J	10.0	0.226	pg/l	94		60-150		
OCDD	1.75	J	20.0	0.238	pg/l	94		60-150		
2378-TCDF	0.412	J	2.00	0.301	pg/l	95		60-150		
12378-PeCDF	0.841	J	10.0	0.158	pg/l	96		60-150		
23478-PeCDF	0.625	J	10.0	0.141	pg/l	96		60-150		
123478-HxCDF	0.643	J	10.0	0.164	pg/l	98		60-150		
123678-HxCDF	0.462	J	10.0	0.163	pg/l	97		60-150		
123789-HxCDF	0.653	J	10.0	0.161	pg/l	99		60-150		
234678-HxCDF	0.519	J	10.0	0.159	pg/l	98		60-150		
1234678-HpCDF	0.818	J	10.0	0.115	pg/l	98		60-150		
1234789-HpCDF	0.760	J	10.0	0.128	pg/l	97		60-150		
OCDF	1.79	J	20.0	0.283	pg/l	96		60-150		
Batch number: 13287003	Sample number(s): 7229587									
TEQ WHO 2005 - EDLx0.0	0.000600				ng/kg					
Batch number: 13287004	Sample number(s): 7229585									
TEQ WHO 2005 - EDLx0.0	0.239				pg/l					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13291SLJ026	Sample number(s): 7229587-7229589 UNSPK: P228022								
Acenaphthene	98	97	48-127	2	30				
Acenaphthylene	104	102	49-121	2	30				
Anthracene	92	92	52-126	0	30				
Benzo(a)anthracene	98	99	44-143	1	30				
Benzo(a)pyrene	97	100	44-140	3	30				
Benzo(b)fluoranthene	89	114	26-142	24	30				
Benzo(e)pyrene	88	88	70-130	0	30				
Benzo(g,h,i)perylene	90	90	33-141	1	30				
Benzo(k)fluoranthene	108	103	54-142	5	30				
Butylbenzylphthalate	85	84	49-151	1	30				
Di-n-butylphthalate	107	104	52-147	2	30				
Chrysene	95	97	29-148	2	30				
Dibenz(a,h)anthracene	97	97	20-137	1	30				
Diethylphthalate	107	103	43-145	4	30				
Dimethylphthalate	103	88	58-129	16	30				
Bis(2-Ethylhexyl)phthalate	104	106	39-167	2	30				
Fluoranthene	96	97	40-148	0	30				
Fluorene	101	98	51-137	4	30				
Indeno(1,2,3-cd)pyrene	95	96	17-136	1	30				
1-Methylnaphthalene	115	104	50-131	10	30				
2-Methylnaphthalene	113	101	35-152	12	30				
Naphthalene	105	98	31-148	6	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424887
Reported: 10/23/13 at 04:49 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
N-Nitrosodimethylamine	75	74	48-113	1	30				
Di-n-octylphthalate	109	111	52-162	2	30				
Phenanthrene	110	107	29-142	3	30				
Pyrene	88	89	26-143	2	30				
Batch number: 13281A16B	Sample number(s): 7229588-7229589 UNSPK: P218895								
11a TPH by EPA 8015B GRO	87	94	69-123	9	30				
Batch number: 132880005A	Sample number(s): 7229587-7229589 UNSPK: 7229587								
PCB-1016	103	94	41-135	10	50				
PCB-1260	110	100	40-134	10	50				
Batch number: 132900637001	Sample number(s): 7229587-7229589 UNSPK: 7229587 BKG: 7229587								
Aluminum	4351 (2)	5460 (2)	75-125	6	20	25,600	26,300	3	20
Antimony	57*	60*	75-125	5	20	3.92 U	3.92 U	0 (1)	20
Arsenic	99	106	75-125	5	20	4.48	5.14	14 (1)	20
Barium	97	100	75-125	2	20	110	111	0	20
Beryllium	103	106	75-125	2	20	0.944 J	0.951 J	1 (1)	20
Boron	91	94	75-125	3	20	5.32 J	5.31 J	0 (1)	20
Cadmium	96	97	75-125	1	20	0.980 U	0.109 J	200* (1)	20
Calcium	82 (2)	149 (2)	75-125	3	20	7,960	7,910	1	20
Chromium	673*	134*	75-125	91*	20	37.1	37.9	2	20
Cobalt	96	96	75-125	1	20	9.78	10.1	3	20
Copper	111	119	75-125	4	20	27.0	27.1	1	20
Iron	1046 (2)	2202 (2)	75-125	3	20	34,700	34,400	1	20
Lead	91	95	75-125	2	20	14.2	13.3	6 (1)	20
Lithium	103	105	75-125	2	20	24.2	24.7	2	20
Magnesium	404 (2)	534 (2)	75-125	3	20	7,590	7,660	1	20
Manganese	107 (2)	157 (2)	75-125	5	20	416	422	1	20
Molybdenum	93	95	75-125	2	20	1.15 J	0.511 J	77* (1)	20
Nickel	188*	98	75-125	49*	20	20.4	20.9	2	20
Phosphorus	40 (2)	57 (2)	75-125	2	20	717	663	8	20
Potassium	147 (2)	186 (2)	75-125	5	20	6,610	6,600	0	20
Sodium	97	99	75-125	1	20	79.6 J	78.9 J	1 (1)	20
Tin	90	91	75-125	1	20	2.97 J	2.98 J	0 (1)	20
Titanium	488 (2)	698 (2)	75-125	12	20	1,180	1,230	4	20
Vanadium	125	136*	75-125	4	20	65.9	67.1	2	20
Zinc	100	106	75-125	2	20	83.8	83.3	1	20
Zirconium	86	85	75-125	1	20	2.94 J	3.58 J	19 (1)	20
Batch number: 132900637001A	Sample number(s): 7229587-7229589 UNSPK: 7229587 BKG: 7229587								
Silver	108	109	75-125	1	20	0.0524 J	0.0555 J	6 (1)	20
Strontium	62 (2)	72 (2)	75-125	2	20	33.3	32.3	3	20
Thallium	93	105	75-125	6	20	0.398	0.366	8 (1)	20
Batch number: 132900637001B	Sample number(s): 7229587-7229589 UNSPK: 7229587 BKG: 7229587								
Selenium	98	102	75-125	3	20	0.381 J	0.389 J	2 (1)	20
Batch number: 132900638002	Sample number(s): 7229587-7229589 UNSPK: 7229587 BKG: 7229587								
3a Mercury 7471A	105	104	65-135	1	20	0.0210	0.0147 J	35* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424887
Reported: 10/23/13 at 04:49 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13290290201A	Sample number(s): 7229587-7229592 UNSPK: P228025 BKG: P228025								
1a Anions by 300.0 - Fluoride	14*		80-120			0.72	0.65	10 (1)	20
Batch number: 13282039401A	Sample number(s): 7229587-7229592 BKG: 7229587								
15a pH by 9045D						7.46	7.48	0	3
Batch number: 13283011101A	Sample number(s): 7229585 BKG: P228213								
28b pH (9040B and 9040C)						8.5	8.6	1	3
Batch number: 13284162401B	Sample number(s): 7229587-7229592 BKG: P224851								
14a Moisture Content by 160.3						5.4	8.0	39*	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13285WAB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7229585	94	108	101
Blank	105	124	109
LCS	98	112	105
LCSD	97	111	105
Limits:	44-137	62-141	51-136

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13291SLJ026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7229587	82	84	96
7229588	87	93	102
7229589	92	98	109
Blank	89	93	101
LCS	92	98	105
MS	87	98	107
MSD	85	97	105
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13281A16B

	Trifluorotoluene-F

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424887
Reported: 10/23/13 at 04:49 PM

Surrogate Quality Control

7229588	76	
7229589	83	
Blank	97	
LCS	86	
MS	85	
MSD	93	
Limits:	50-142	

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13290A20A

	Trifluorotoluene-F
7229585	96
7229586	94
Blank	95
LCS	101
LCSD	101
Limits:	63-135

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 132820007A

	2,4-Dichlorophenylacetic acid
7229585	99
Blank	105
LCS	105
LCSD	112
Limits:	50-150

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132870007A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7229585	81	65
Blank	86	83
LCS	82	54
LCSD	89	77
Limits:	60-140	20-120

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132870008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7229585	109	86
Blank	108	104
LCS	98	76
LCSD	97	80
Limits:	45-120	45-120

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424887
Reported: 10/23/13 at 04:49 PM

Surrogate Quality Control

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132880005A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7229587	113	105
7229588	112	123*
7229589	116	116
Blank	121*	130*
LCS	117	121*
LCSD	121*	137*
MS	115	116
MSD	102	109
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132870020A

	Chlorobenzene	Orthoterphenyl
7229585	86	81
Blank	100	85
LCS	94	80
LCSD	99	84
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132880004A

	Chlorobenzene	Orthoterphenyl
7229587	89	92
7229588	93	93
7229589	101	102
Blank	83	76
LCS	105	105
LCSD	94	96
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13287003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7229587	56	61	64	71	73	77
Blank	73	70	74	90	86	94
OPR	65	72	68	78	86	97
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7229587	86	72	76	71	71	80
Blank	116	94	101	80	89	96
OPR	122	139	134	79	92	99
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1424887
Reported: 10/23/13 at 04:49 PM

Surrogate Quality Control

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7229587	80	82	87	52	61
Blank	97	116	123	62	74
OPR	100	142	162	55	72
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13287004

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7229585	83	89	83	84	84	86
Blank	67	71	70	70	70	77
OPR	74	80	84	80	81	87
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7229585	85	87	86	89	85	86
Blank	73	72	73	70	72	72
OPR	81	84	80	81	86	84
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7229585	85	87	89	81	86
Blank	71	74	74	65	69
OPR	84	86	80	73	79
Limits:	28-130	23-140	17-157	24-169	24-185

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SSFL Phase 3 Chain of Custody

13013 1424887 7229585-92

CDM Smith

DateShipped: 10/8/2013
CarrierName: FedEx
AirbillNo: 796865496962

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131008-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	1,4 Dioxane 8260 SIM	VOCs 8260	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB-100813	10/8/13 14:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB-100813	10/8/13 14:00	WQ	None	3 - 250 mL Amber	10 day							X			X							X														
EB-100813	10/8/13 14:00	WQ	None	4 - 1 L Amber	10 day									X							X															
EB-100813	10/8/13 14:00	WQ	None	4 - 250 mL Poly	10 day				X										X	X																
EB-100813	10/8/13 14:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											
EB-100813	10/8/13 14:00	WQ	HCl	2 - 1 L Amber	10 day																					X										

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stuart Myers	10/8/2013	16000							Brian Mc	10/9/13	910

COC Rev 2

COC 20131008-01, Page 1 of 1

13013 1424887- 7229585-92

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 10/8/2013
CarrierName: FedEx
AirbillNo: 796865496962

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131008-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331.	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-100813	10/8/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											
SL-561-SA5D-SB-0.0-0.5	10/8/13 08:40	SO	None	2 - SS-Sleeve	10 day	X	X		X			X		X	X											X										
SL-561-SA5D-SB-0.0-0.5	10/8/13 08:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-561-SA5D-SB-4.0-5.0	10/8/13 09:00	SO	None	2 - SS-Sleeve	10 day	X	X		X			X			X											X										
SL-561-SA5D-SB-4.0-5.0	10/8/13 09:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-561-SA5D-SB-4.0-5.0	10/8/13 09:00	SO	None	2 - Encore	10 day																				X											
SL-561-SA5D-SB-9.0-10.0	10/8/13 10:10	SO	None	2 - SS-Sleeve	10 day	X	X		X			X			X											X										
SL-561-SA5D-SB-9.0-10.0	10/8/13 10:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-561-SA5D-SB-9.0-10.0	10/8/13 10:10	SO	None	2 - Encore	10 day																				X											
SL-602-SA5D-SB-0.0-0.5	10/8/13 12:20	SO	None	1 - SS-Sleeve	10 day				X																											
SL-602-SA5D-SB-0.0-0.5	10/8/13 12:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-602-SA5D-SB-4.0-5.0	10/8/13 12:50	SO	None	1 - SS-Sleeve	10 day				X																											
SL-602-SA5D-SB-4.0-5.0	10/8/13 12:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-602-SA5D-SB-9.0-10.0	10/8/13 13:50	SO	None	1 - SS-Sleeve	10 day				X																											
SL-602-SA5D-SB-9.0-10.0	10/8/13 13:50	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Skye Mupel	10/08/2013	1600									
									Kim Mk	10-9-13	910

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Environmental Sample Administration Receipt Documentation Log

1424887

Client/Project: CDM

Date of Receipt: 10.9.13

Time of Receipt: 910

Source Code: SO-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DH46	1.0	TB	WI	Y	B	
2	↓	2.2	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Rec 1 Amber broken for EB-100813 (TPH-EFH)

Unpacker Signature/Emp#: Brianely Bury 2299 **Date/Time:** 10.9.13 954

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH127

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 09, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 11/13/2013
Group Number: 1433661
SDG: PH127
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB1-111213 Water	7275661
SL-560-SA5D-SB-0.0-0.5 Soil	7275662
SL-560-SA5D-SB-4.0-5.0 Soil	7275663
SL-560-SA5D-SB-4.0-5.0MS Soil	7275664
SL-560-SA5D-SB-4.0-5.0MSD Soil	7275665
SL-560-SA5D-SB-4.0-5.0SS Soil	7275666
SL-560-SA5D-SB-4.0-5.0IS Soil	7275667
SL-560-SA5D-SB-4.0-5.0PDS Soil	7275668
SL-560-SA5D-SB-4.0-5.0DUP Soil	7275669
SL-560-SA5D-SB-7.0-8.0 Soil	7275670
SL-860-SA5D-SB-4.0-5.0 Soil	7275671
SL-549-SA5D-SB-0.0-0.5 Soil	7275672
SL-549-SA5D-SB-4.0-5.0 Soil	7275673
SL-549-SA5D-SB-11.0-12.0 Soil	7275674
TB1-111213 Water	7275675

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/l		ug/l	ug/l	
10461	Acenaphthene	83-32-9	0.5	U	0.5	0.1	1
10461	Acenaphthylene	208-96-8	0.5	U	0.5	0.1	1
10461	Aniline	62-53-3	1	U	1	0.5	1
10461	Anthracene	120-12-7	0.5	U	0.5	0.1	1
10461	Benzidine	92-87-5	61	U	61	20	1
10461	Benzo(a)anthracene	56-55-3	0.5	U	0.5	0.1	1
10461	Benzo(a)pyrene	50-32-8	0.5	U	0.5	0.1	1
10461	Benzo(b)fluoranthene	205-99-2	0.5	U	0.5	0.1	1
10461	Benzo(g,h,i)perylene	191-24-2	0.5	U	0.5	0.1	1
10461	Benzo(k)fluoranthene	207-08-9	0.5	U	0.5	0.1	1
10461	Benzoic acid	65-85-0	15	U	15	6	1
10461	Benzyl alcohol	100-51-6	15	U	15	5	1
10461	1,1'-Biphenyl	92-52-4	1	U	1	0.5	1
10461	4-Bromophenyl-phenylether	101-55-3	1	U	1	0.5	1
10461	Butylbenzylphthalate	85-68-7	5	U	5	2	1
10461	Di-n-butylphthalate	84-74-2	5	U	5	2	1
10461	Carbazole	86-74-8	1	U	1	0.5	1
10461	4-Chloro-3-methylphenol	59-50-7	1	U	1	0.5	1
10461	4-Chloroaniline	106-47-8	1	U	1	0.5	1
10461	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	0.5	1
10461	bis(2-Chloroethyl)ether	111-44-4	1	U	1	0.5	1
10461	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10461	2-Chloronaphthalene	91-58-7	1	U	1	0.4	1
10461	2-Chlorophenol	95-57-8	1	U	1	0.5	1
10461	4-Chlorophenyl-phenylether	7005-72-3	1	U	1	0.5	1
10461	Chrysene	218-01-9	0.5	U	0.5	0.1	1
10461	Dibenz(a,h)anthracene	53-70-3	0.5	U	0.5	0.1	1
10461	Dibenzofuran	132-64-9	1	U	1	0.5	1
10461	1,2-Dichlorobenzene	95-50-1	1	U	1	0.5	1
10461	1,3-Dichlorobenzene	541-73-1	1	U	1	0.5	1
10461	1,4-Dichlorobenzene	106-46-7	1	U	1	0.5	1
10461	3,3'-Dichlorobenzidine	91-94-1	5	U	5	2	1
10461	2,4-Dichlorophenol	120-83-2	1	U	1	0.5	1
10461	2,6-Dichlorophenol	87-65-0	1	U	1	0.5	1
10461	Diethylphthalate	84-66-2	5	U	5	2	1
10461	2,4-Dimethylphenol	105-67-9	1	U	1	0.5	1
10461	3,5-Dimethylphenol	108-68-9	10	U	10	3	1
10461	Dimethylphthalate	131-11-3	5	U	5	2	1
10461	4,6-Dinitro-2-methylphenol	534-52-1	15	U	15	5	1
10461	2,4-Dinitrophenol	51-28-5	31	U	31	10	1
10461	1,2-Diphenylhydrazine	122-66-7	1	U	1	0.5	1
10461	bis(2-Ethylhexyl)phthalate	117-81-7	5	U	5	2	1
10461	Fluoranthene	206-44-0	0.5	U	0.5	0.1	1
10461	Fluorene	86-73-7	0.5	U	0.5	0.1	1
10461	Hexachlorobenzene	118-74-1	0.5	U	0.5	0.1	1
10461	Hexachlorobutadiene	87-68-3	1	U	1	0.5	1
10461	Hexachlorocyclopentadiene	77-47-4	15	U	15	5	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/l		ug/l	ug/l	
10461	Hexachloroethane	67-72-1	5	U	5	1	1
10461	Indeno(1,2,3-cd)pyrene	193-39-5	0.5	U	0.5	0.1	1
10461	Isophorone	78-59-1	1	U	1	0.5	1
10461	1-Methylnaphthalene	90-12-0	0.5	U	0.5	0.1	1
10461	2-Methylnaphthalene	91-57-6	0.5	U	0.5	0.1	1
10461	2-Methylphenol	95-48-7	1	U	1	0.5	1
10461	4-Methylphenol	106-44-5	1	U	1	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10461	Naphthalene	91-20-3	0.5	U	0.5	0.1	1
10461	NDPA as diphenylamine	n.a.	5	U	5	2	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10461	2-Nitroaniline	88-74-4	1	U	1	0.5	1
10461	3-Nitroaniline	99-09-2	1	U	1	0.5	1
10461	4-Nitroaniline	100-01-6	1	U	1	0.5	1
10461	Nitrobenzene	98-95-3	1	U	1	0.5	1
10461	2-Nitrophenol	88-75-5	1	U	1	0.5	1
10461	4-Nitrophenol	100-02-7	31	U	31	10	1
10461	N-Nitrosodimethylamine	62-75-9	5	U	5	2	1
10461	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	0.5	1
10461	N-Nitrosodiphenylamine	86-30-6	1	U	1	0.5	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10461	Di-n-octylphthalate	117-84-0	5	U	5	2	1
10461	Pentachlorophenol	87-86-5	5	U	5	1	1
10461	Phenanthrene	85-01-8	0.5	U	0.5	0.1	1
10461	Phenol	108-95-2	1	U	1	0.5	1
10461	Pyrene	129-00-0	0.5	U	0.5	0.1	1
10461	Pyridine	110-86-1	5	U	5	2	1
10461	1,2,4-Trichlorobenzene	120-82-1	1	U	1	0.5	1
10461	2,4,5-Trichlorophenol	95-95-4	1	U	1	0.5	1
10461	2,4,6-Trichlorophenol	88-06-2	1	U	1	0.5	1
	2,6-Dichlorophenol and 3,5-Dimethylphenol were not spiked into the associated QC. The client was contacted and the data reported.						
GC/MS Semivolatiles SW-846 8270D SIM			ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.19	J	1.0	0.051	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.37	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	1.0	U	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.051	U	0.051	0.010	1
12971	Naphthalene	91-20-3	0.051	U	0.051	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.031	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.50	U	0.50	0.16	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.25	1
10407	2,4-DB	94-82-6	0.99	U	0.99	0.30	1
10407	Dicamba	1918-00-9	0.30	U	0.30	0.079	1
10407	Dinoseb	88-85-7	0.50	U	0.50	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.50	U	0.50	0.16	1
10407	MCPA	94-74-6	200	U	200	50	1
10407	MCPP	93-65-2	200	U	200	50	1
10407	2,4,5-T	93-76-5	0.050	U	0.050	0.015	1
10407	2,4,5-TP	93-72-1	0.050	U	0.050	0.0099	1
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0092	U	0.0092	0.0018	1
10589	Alpha BHC	319-84-6	0.0092	U	0.0092	0.0028	1
10589	Beta BHC	319-85-7	0.0092	U	0.0092	0.0031	1
10589	Gamma BHC - Lindane	58-89-9	0.0092	U	0.0092	0.0018	1
10589	Chlordane	57-74-9	0.46	U	0.46	0.15	1
10589	p,p-DDD	72-54-8	0.018	U	0.018	0.0046	1
10589	p,p-DDE	72-55-9	0.018	U	0.018	0.0046	1
10589	p,p-DDT	50-29-3	0.018	U	0.018	0.0048	1
10589	Delta BHC	319-86-8	0.0092	U	0.0092	0.0031	1
10589	Dieldrin	60-57-1	0.018	U	0.018	0.0049	1
10589	Endosulfan I	959-98-8	0.0092	U	0.0092	0.0039	1
10589	Endosulfan II	33213-65-9	0.018	U	0.018	0.014	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Endosulfan Sulfate	1031-07-8	0.018	U	0.018	0.0053	1
10589	Endrin	72-20-8	0.018	U	0.018	0.0074	1
10589	Endrin Aldehyde	7421-93-4	0.092	U	0.092	0.018	1
10589	Endrin Ketone	53494-70-5	0.018	U	0.018	0.0046	1
10589	Heptachlor	76-44-8	0.0092	U	0.0092	0.0018	1
10589	Heptachlor Epoxide	1024-57-3	0.0092	U	0.0092	0.0021	1
10589	Methoxychlor	72-43-5	0.092	U	0.092	0.028	1
10589	Mirex	2385-85-5	0.046	U	0.046	0.0092	1
10589	Toxaphene	8001-35-2	0.92	U	0.92	0.28	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.46	U	0.46	0.092	1
13092	Aroclor 5442	12642-23-8	0.46	U	0.46	0.092	1
13092	Aroclor 5460	11126-42-4	0.46	U	0.46	0.10	1
13092	PCB-1016	12674-11-2	0.46	U	0.46	0.092	1
13092	PCB-1221	11104-28-2	0.46	U	0.46	0.092	1
13092	PCB-1232	11141-16-5	0.46	U	0.46	0.18	1
13092	PCB-1242	53469-21-9	0.46	U	0.46	0.092	1
13092	PCB-1248	12672-29-6	0.46	U	0.46	0.092	1
13092	PCB-1254	11097-69-1	0.46	U	0.46	0.092	1
13092	PCB-1260	11096-82-5	0.46	U	0.46	0.14	1
13092	PCB-1262	37324-23-5	0.46	U	0.46	0.18	1
13092	PCB-1268	11100-14-4	0.46	U	0.46	0.15	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C15-C20)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C21-C30)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.097	1
10365	EFH (C8-C11)	n.a.	0.097	U	0.097	0.049	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.00034	J	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100	U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.0349	J	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300	U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100	U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200	U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400	U	0.400	0.0430	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.0168 J	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 7199**		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.0	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.717	JBQ	1.99	0.522	1
10915	12378-PeCDD	40321-76-4	1.28	JB	9.95	0.390	1
10915	123478-HxCDD	39227-28-6	9.95	U	9.95	0.278	1
10915	123678-HxCDD	57653-85-7	0.661	JBQ	9.95	0.292	1
10915	123789-HxCDD	19408-74-3	9.95	U	9.95	0.275	1
10915	1234678-HpCDD	35822-46-9	1.00	JBQ	9.95	0.342	1
10915	OCDD	3268-87-9	0.851	JBQ	19.9	0.366	1
10915	2378-TCDF	51207-31-9	1.99	U	1.99	0.362	1
10915	12378-PeCDF	57117-41-6	0.895	JBQ	9.95	0.230	1
10915	23478-PeCDF	57117-31-4	0.345	JBQ	9.95	0.211	1
10915	123478-HxCDF	70648-26-9	0.641	JBQ	9.95	0.229	1
10915	123678-HxCDF	57117-44-9	0.622	JBQ	9.95	0.219	1
10915	123789-HxCDF	72918-21-9	0.756	JBQ	9.95	0.244	1
10915	234678-HxCDF	60851-34-5	0.664	JBQ	9.95	0.217	1
10915	1234678-HpCDF	67562-39-4	0.885	JBQ	9.95	0.113	1
10915	1234789-HpCDF	55673-89-7	0.846	JBQ	9.95	0.133	1
10915	OCDF	39001-02-0	1.81	JBQ	19.9	0.461	1
D/F Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	1.28				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	93	26 - 152
13C12-123678-HxCDF	93	26 - 123
13C12-234678-HxCDF	89	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	77	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10461	8b SVOCs by EPA 8270D	SW-846 8270D	1	13322WAB026	11/25/2013 00:40	Catherine E Bachman	1
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322WAA026	11/23/2013 15:58	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13322WAA026	11/18/2013 15:00	Seth A Farrier	1
11010	8270D BNA Extraction	SW-846 3510C	1	13322WAB026	11/18/2013 15:00	Seth A Farrier	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13318B94A	11/15/2013 12:55	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13318B94A	11/15/2013 12:55	Marie D Beamenderfer	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	133200033A	11/20/2013 14:31	Melissa McDermott	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	133220007A	11/19/2013 20:01	Jamie L Brillhart	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	133220008A	11/20/2013 14:51	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	133220008A	11/18/2013 15:00	Seth A Farrier	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	133220007A	11/18/2013 15:00	Seth A Farrier	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	133200033A	11/18/2013 09:30	William H Saadeh	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133220028A	11/19/2013 16:15	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	133220028A	11/19/2013 02:30	Sherry L Morrow	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13323002	11/22/2013 12:24	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13323002	11/19/2013 09:30	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07044	Antimony	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07035	Arsenic	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07046	Barium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07047	Beryllium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
08014	Boron	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07049	Cadmium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01750	Calcium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07051	Chromium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07052	Cobalt	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07053	Copper	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01754	Iron	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07055	Lead	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01756	Lithium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01757	Magnesium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07058	Manganese	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07060	Molybdenum	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07061	Nickel	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01762	Potassium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01767	Sodium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07069	Tin	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07070	Titanium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07071	Vanadium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07072	Zinc	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
10144	Zirconium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
06041	Selenium	SW-846 6020A	1	133240639002B	11/22/2013 22:22	John P Hook	1
06042	Silver	SW-846 6020A	1	133240639002A	11/22/2013 22:22	John P Hook	1
06044	Strontium	SW-846 6020A	1	133240639002A	11/22/2013 22:22	John P Hook	1
06045	Thallium	SW-846 6020A	1	133240639002A	11/22/2013 22:22	John P Hook	1
00259	3b Mercury 7470A	SW-846 7470A	1	133255713006	11/22/2013 06:37	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	133240635002	11/21/2013 11:55	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	133240639002	11/21/2013 12:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133245713003	11/20/2013 16:45	Nelli S Markaryan	1
05713	WW SW846 Hg Digest	SW-846 7470A	2	133255713006	11/21/2013 16:40	Nelli S Markaryan	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	2	13317987301B	11/13/2013 13:23	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13318002201A	11/14/2013 11:23	Michele L Graham	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	19	U	19	4	1
10726	Acenaphthylene	208-96-8	19	U	19	4	1
10726	Aniline	62-53-3	370	U	370	190	1
10726	Anthracene	120-12-7	19	U	19	4	1
10726	Benzidine	92-87-5	1,900	U	1,900	780	1
10726	Benzo(a)anthracene	56-55-3	19	U	19	4	1
10726	Benzo(a)pyrene	50-32-8	19	U	19	4	1
10726	Benzo(b)fluoranthene	205-99-2	19	U	19	4	1
10726	Benzo(g,h,i)perylene	191-24-2	19	U	19	4	1
10726	Benzo(k)fluoranthene	207-08-9	19	U	19	4	1
10726	Benzoic acid	65-85-0	560	U	560	190	1
10726	Benzyl alcohol	100-51-6	370	U	370	190	1
10726	1,1'-Biphenyl	92-52-4	37	U	37	19	1
10726	4-Bromophenyl-phenylether	101-55-3	37	U	37	19	1
10726	Butylbenzylphthalate	85-68-7	190	U	190	74	1
10726	Di-n-butylphthalate	84-74-2	190	U	190	74	1
10726	Carbazole	86-74-8	37	U	37	19	1
10726	4-Chloro-3-methylphenol	59-50-7	37	U	37	19	1
10726	4-Chloroaniline	106-47-8	37	U	37	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	37	U	37	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	37	U	37	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	37	U	37	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	37	U	37	8	1
10726	2-Chlorophenol	95-57-8	37	U	37	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	19	1
10726	Chrysene	218-01-9	19	U	19	4	1
10726	Dibenz(a,h)anthracene	53-70-3	19	U	19	4	1
10726	Dibenzofuran	132-64-9	37	U	37	19	1
10726	1,2-Dichlorobenzene	95-50-1	37	U	37	19	1
10726	1,3-Dichlorobenzene	541-73-1	37	U	37	19	1
10726	1,4-Dichlorobenzene	106-46-7	37	U	37	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	370	U	370	110	1
10726	2,4-Dichlorophenol	120-83-2	37	U	37	19	1
10726	2,6-Dichlorophenol	87-65-0	37	U	37	19	1
10726	Diethylphthalate	84-66-2	190	U	190	74	1
10726	2,4-Dimethylphenol	105-67-9	37	U	37	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	37	1
10726	Dimethylphthalate	131-11-3	190	U	190	74	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	560	U	560	190	1
10726	2,4-Dinitrophenol	51-28-5	740	U	740	340	1
10726	1,2-Diphenylhydrazine	122-66-7	37	U	37	19	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	74	1
10726	Fluoranthene	206-44-0	19	U	19	4	1
10726	Fluorene	86-73-7	19	U	19	4	1
10726	Hexachlorobenzene	118-74-1	19	U	19	4	1
10726	Hexachlorobutadiene	87-68-3	37	U	37	19	1
10726	Hexachlorocyclopentadiene	77-47-4	560	U	560	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	190	U	190	37	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	4	1
10726	Isophorone	78-59-1	37	U	37	19	1
10726	1-Methylnaphthalene	90-12-0	19	U	19	4	1
10726	2-Methylnaphthalene	91-57-6	19	U	19	4	1
10726	2-Methylphenol	95-48-7	37	U	37	19	1
10726	4-Methylphenol	106-44-5	37	U	37	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	19	U	19	4	1
10726	NDPA as diphenylamine	n.a.	190	U	190	37	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	37	U	37	19	1
10726	3-Nitroaniline	99-09-2	190	U	190	74	1
10726	4-Nitroaniline	100-01-6	190	U	190	74	1
10726	Nitrobenzene	98-95-3	37	U	37	19	1
10726	2-Nitrophenol	88-75-5	37	U	37	19	1
10726	4-Nitrophenol	100-02-7	560	U	560	190	1
10726	N-Nitrosodimethylamine	62-75-9	190	U	190	74	1
10726	N-Nitroso-di-n-propylamine	621-64-7	37	U	37	19	1
10726	N-Nitrosodiphenylamine	86-30-6	37	U	37	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	190	U	190	74	1
10726	Pentachlorophenol	87-86-5	190	U	190	37	1
10726	Phenanthrene	85-01-8	19	U	19	4	1
10726	Phenol	108-95-2	37	U	37	19	1
10726	Pyrene	129-00-0	19	U	19	4	1
10726	Pyridine	110-86-1	190	U	190	74	1
10726	1,2,4-Trichlorobenzene	120-82-1	37	U	37	19	1
10726	2,4,5-Trichlorophenol	95-95-4	37	U	37	19	1
10726	2,4,6-Trichlorophenol	88-06-2	37	U	37	19	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	100	U	100	49	1
10401	2,4-DB	94-82-6	19	U	19	6.9	1
10401	Dicamba	1918-00-9	13	U	13	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	850	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	840	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.92	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.84	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.6	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	35,900		43.4	7.82	1
06944	Antimony	7440-36-0	4.34	U	4.34	0.803	1
06935	Arsenic	7440-38-2	9.70		4.34	0.759	1
06946	Barium	7440-39-3	156		1.08	0.0358	1
06947	Beryllium	7440-41-7	1.36		1.08	0.0727	1
07914	Boron	7440-42-8	8.20	J	10.8	0.911	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0824	1
01650	Calcium	7440-70-2	6,910		21.7	3.62	1
06951	Chromium	7440-47-3	42.4		3.25	0.174	1
06952	Cobalt	7440-48-4	10.4		1.08	0.107	1
06953	Copper	7440-50-8	14.9		2.17	0.315	1
01654	Iron	7439-89-6	39,300		86.8	7.85	2
06955	Lead	7439-92-1	12.2		3.25	0.542	1
01656	Lithium	7439-93-2	31.5		4.3	0.37	1
01657	Magnesium	7439-95-4	8,150		10.8	1.81	1
06958	Manganese	7439-96-5	487		1.08	0.0900	1
06960	Molybdenum	7439-98-7	0.227	J	2.17	0.184	1
06961	Nickel	7440-02-0	24.4		2.17	0.141	1
10145	Phosphorus	7723-14-0	308		10.8	3.14	1
01662	Potassium	7440-09-7	4,120		108	9.05	1
01667	Sodium	7440-23-5	128		108	18.1	1
06969	Tin	7440-31-5	3.29	J	10.8	0.239	1
06970	Titanium	7440-32-6	1,430		1.08	0.184	1
06971	Vanadium	7440-62-2	80.0		1.08	0.141	1
06972	Zinc	7440-66-6	81.7		4.34	0.217	1
10146	Zirconium	7440-67-7	8.71		5.42	0.911	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.231	J	0.434	0.108	2
06142	Silver	7440-22-4	0.0568	J	0.217	0.0282	2
06144	Strontium	7440-24-6	36.4		0.434	0.0738	2
06145	Thallium	7440-28-0	0.421		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184	U	0.0184	0.0111	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.55		0.45	0.16	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.34		0.0100	0.0100	1
	The pH was measured in water at 19 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.07 U	1.07	0.0539	1
11031	12378-PeCDD	40321-76-4	0.0938 JBQ	5.34	0.0493	1
11031	123478-HxCDD	39227-28-6	5.34 U	5.34	0.0320	1
11031	123678-HxCDD	57653-85-7	0.129 JBQ	5.34	0.0344	1
11031	123789-HxCDD	19408-74-3	0.145 JB	5.34	0.0330	1
11031	1234678-HpCDD	35822-46-9	0.230 JBQ	5.34	0.0342	1
11031	OCDD	3268-87-9	0.895 JB	10.7	0.0447	1
11031	2378-TCDF	51207-31-9	1.07 U	1.07	0.0555	1
11031	12378-PeCDF	57117-41-6	0.129 JBQ	5.34	0.0287	1
11031	23478-PeCDF	57117-31-4	0.0461 JBQ	5.34	0.0322	1
11031	123478-HxCDF	70648-26-9	0.0548 JBQ	5.34	0.0265	1
11031	123678-HxCDF	57117-44-9	0.0729 JB	5.34	0.0209	1
11031	123789-HxCDF	72918-21-9	0.298 JBQ	5.34	0.0316	1
11031	234678-HxCDF	60851-34-5	0.102 JBQ	5.34	0.0241	1
11031	1234678-HpCDF	67562-39-4	0.0577 JBQ	5.34	0.0125	1
11031	1234789-HpCDF	55673-89-7	0.136 JBQ	5.34	0.0364	1
11031	OCDF	39001-02-0	0.413 JB	10.7	0.0826	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0221			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	93	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	124	28 - 143
13C12-1234789-HpCDF	46	26 - 138
13C12-OCDF	34	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/24/2013 22:28	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 05:09	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 16:45	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 20:55	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 16:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/24/2013 18:32	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/23/2013 09:21	Eric L Eby	2
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 14:56	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:56	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:56	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:56	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:00	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13322243201A	11/19/2013 17:08	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	18	U	18	3	1
10726	Acenaphthylene	208-96-8	18	U	18	3	1
10726	Aniline	62-53-3	340	U	340	170	1
10726	Anthracene	120-12-7	18	U	18	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	720	1
10726	Benzo(a)anthracene	56-55-3	18	U	18	3	1
10726	Benzo(a)pyrene	50-32-8	18	U	18	3	1
10726	Benzo(b)fluoranthene	205-99-2	18	U	18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	18	U	18	3	1
10726	Benzo(k)fluoranthene	207-08-9	18	U	18	3	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	340	U	340	170	1
10726	1,1'-Biphenyl	92-52-4	34	U	34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	34	U	34	17	1
10726	Butylbenzylphthalate	85-68-7	170	U	170	69	1
10726	Di-n-butylphthalate	84-74-2	170	U	170	69	1
10726	Carbazole	86-74-8	34	U	34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	34	U	34	17	1
10726	4-Chloroaniline	106-47-8	34	U	34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	34	U	34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	34	U	34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	34	U	34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	34	U	34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	17	1
10726	Chrysene	218-01-9	18	U	18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	18	U	18	3	1
10726	Dibenzofuran	132-64-9	34	U	34	17	1
10726	1,2-Dichlorobenzene	95-50-1	34	U	34	17	1
10726	1,3-Dichlorobenzene	541-73-1	34	U	34	17	1
10726	1,4-Dichlorobenzene	106-46-7	34	U	34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	340	U	340	100	1
10726	2,4-Dichlorophenol	120-83-2	34	U	34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	170	U	170	69	1
10726	2,4-Dimethylphenol	105-67-9	34	U	34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	Dimethylphthalate	131-11-3	170	U	170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	680	U	680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	34	U	34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	69	1
10726	Fluoranthene	206-44-0	18	U	18	3	1
10726	Fluorene	86-73-7	18	U	18	3	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	34	U	34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	170	U	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	3	1
10726	Isophorone	78-59-1	34	U	34	17	1
10726	1-Methylnaphthalene	90-12-0	18	U	18	3	1
10726	2-Methylnaphthalene	91-57-6	18	U	18	3	1
10726	2-Methylphenol	95-48-7	34	U	34	17	1
10726	4-Methylphenol	106-44-5	34	U	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	18	U	18	3	1
10726	NDPA as diphenylamine	n.a.	170	U	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	34	U	34	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	34	U	34	17	1
10726	2-Nitrophenol	88-75-5	34	U	34	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitrosodimethylamine	62-75-9	170	U	170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	34	U	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	34	U	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	170	U	170	69	1
10726	Pentachlorophenol	87-86-5	180	U	180	34	1
10726	Phenanthrene	85-01-8	18	U	18	3	1
10726	Phenol	108-95-2	34	U	34	17	1
10726	Pyrene	129-00-0	18	U	18	3	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	34	U	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	34	U	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	34	U	34	17	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.4	J	1.1	0.2	26.04
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	93	U	93	45	1
10401	2,4-DB	94-82-6	18	U	18	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	770	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.77	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.5	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,400		40.1	7.22	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.741	1
06935	Arsenic	7440-38-2	5.64		4.01	0.701	1
06946	Barium	7440-39-3	61.7		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.668	J	1.00	0.0671	1
07914	Boron	7440-42-8	1.90	J	10.0	0.842	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0761	1
01650	Calcium	7440-70-2	2,270		20.0	3.35	1
06951	Chromium	7440-47-3	16.4		3.01	0.160	1
06952	Cobalt	7440-48-4	3.18		1.00	0.0992	1
06953	Copper	7440-50-8	5.94		2.00	0.291	1
01654	Iron	7439-89-6	21,200		40.1	3.63	1
06955	Lead	7439-92-1	6.33		3.01	0.501	1
01656	Lithium	7439-93-2	12.7		4.0	0.34	1
01657	Magnesium	7439-95-4	3,520		10.0	1.67	1
06958	Manganese	7439-96-5	148		1.00	0.0832	1
06960	Molybdenum	7439-98-7	0.261	J	2.00	0.170	1
06961	Nickel	7440-02-0	8.12		2.00	0.130	1
10145	Phosphorus	7723-14-0	134		10.0	2.90	1
01662	Potassium	7440-09-7	2,100		100	8.36	1
01667	Sodium	7440-23-5	132		100	16.7	1
06969	Tin	7440-31-5	2.97	J	10.0	0.220	1
06970	Titanium	7440-32-6	989		1.00	0.170	1
06971	Vanadium	7440-62-2	33.1		1.00	0.130	1
06972	Zinc	7440-66-6	45.6		4.01	0.200	1
10146	Zirconium	7440-67-7	4.11	J	5.01	0.842	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.401	U	0.401	0.100	2
06142	Silver	7440-22-4	0.200	U	0.200	0.0261	2
06144	Strontium	7440-24-6	13.2		0.401	0.0681	2
06145	Thallium	7440-28-0	0.224		0.200	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.33	J	0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.40		0.0100	0.0100	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
	The pH was measured in water at 19.3 C.					
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	3.1	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/24/2013 22:51	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 03:32	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 19:57	Laura M Krieger	26.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:36	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:36	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 17:11	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 21:14	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 16:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 14:42	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:42	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:42	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:42	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:02	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13322243201A	11/19/2013 17:15	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403B	11/13/2013 23:00	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Acenaphthene	83-32-9	1,700		18	3	1
10726	Acenaphthylene	208-96-8	1,800		18	3	1
10726	Aniline	62-53-3	1,000		340	170	1
10726	Anthracene	120-12-7	1,700		18	3	1
10726	Benzidine	92-87-5	3,800		1,700	720	1
10726	Benzo(a)anthracene	56-55-3	1,700		18	3	1
10726	Benzo(a)pyrene	50-32-8	1,800		18	3	1
10726	Benzo(b)fluoranthene	205-99-2	1,800		18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	1,800		18	3	1
10726	Benzo(k)fluoranthene	207-08-9	1,700		18	3	1
10726	Benzoic acid	65-85-0	1,800		520	170	1
10726	Benzyl alcohol	100-51-6	1,600		340	170	1
10726	1,1'-Biphenyl	92-52-4	1,600		34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	1,700		34	17	1
10726	Butylbenzylphthalate	85-68-7	1,800		170	69	1
10726	Di-n-butylphthalate	84-74-2	1,800		170	69	1
10726	Carbazole	86-74-8	1,700		34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	1,800		34	17	1
10726	4-Chloroaniline	106-47-8	910		34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,200		34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,400		34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,400		34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	2,100		34	7	1
10726	2-Chlorophenol	95-57-8	1,600		34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,800		34	17	1
10726	Chrysene	218-01-9	1,600		18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	1,800		18	3	1
10726	Dibenzofuran	132-64-9	1,700		34	17	1
10726	1,2-Dichlorobenzene	95-50-1	1,500		34	17	1
10726	1,3-Dichlorobenzene	541-73-1	1,500		34	17	1
10726	1,4-Dichlorobenzene	106-46-7	1,500		34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	860		340	100	1
10726	2,4-Dichlorophenol	120-83-2	1,800		34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	1,800		170	69	1
10726	2,4-Dimethylphenol	105-67-9	1,800		34	17	1
10726	3,5-Dimethylphenol	108-68-9	1,700		170	34	1
10726	Dimethylphthalate	131-11-3	1,700		170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,500		520	170	1
10726	2,4-Dinitrophenol	51-28-5	2,600		680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	1,800		34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,700		180	69	1
10726	Fluoranthene	206-44-0	1,700		18	3	1
10726	Fluorene	86-73-7	1,700		18	3	1
10726	Hexachlorobenzene	118-74-1	1,800		18	3	1
10726	Hexachlorobutadiene	87-68-3	1,800		34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	4,100		520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg	ug/kg	ug/kg	
10726	Hexachloroethane	67-72-1	1,500	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,800	18	3	1
10726	Isophorone	78-59-1	1,800	34	17	1
10726	1-Methylnaphthalene	90-12-0	1,800	18	3	1
10726	2-Methylnaphthalene	91-57-6	1,600	18	3	1
10726	2-Methylphenol	95-48-7	1,500	34	17	1
10726	4-Methylphenol	106-44-5	1,400	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10726	Naphthalene	91-20-3	1,600	18	3	1
10726	NDPA as diphenylamine	n.a.	1,700	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	2-Nitroaniline	88-74-4	1,700	34	17	1
10726	3-Nitroaniline	99-09-2	1,600	170	69	1
10726	4-Nitroaniline	100-01-6	1,200	170	69	1
10726	Nitrobenzene	98-95-3	1,800	34	17	1
10726	2-Nitrophenol	88-75-5	1,700	34	17	1
10726	4-Nitrophenol	100-02-7	1,700	520	170	1
10726	N-Nitrosodimethylamine	62-75-9	1,200	170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,500	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	1,700	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	Di-n-octylphthalate	117-84-0	1,800	170	69	1
10726	Pentachlorophenol	87-86-5	1,300	180	34	1
10726	Phenanthrene	85-01-8	1,700	18	3	1
10726	Phenol	108-95-2	1,400	34	17	1
10726	Pyrene	129-00-0	1,700	18	3	1
10726	Pyridine	110-86-1	1,000	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	1,800	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	1,700	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	1,700	34	17	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	36	1.7	0.69	1
12969	Acenaphthylene	208-96-8	35	1.7	0.34	1
12969	Anthracene	120-12-7	35	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	35	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	34	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	36	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	32	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	31	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	36	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	40	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	40	19	6.2	1
12969	Chrysene	218-01-9	35	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	33	1.7	0.69	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	38		19	6.2	1
12969	Dimethylphthalate	131-11-3	36		19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	42		19	6.2	1
12969	Fluoranthene	206-44-0	35		1.7	0.69	1
12969	Fluorene	86-73-7	35		1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	32		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	35		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	34		1.7	0.69	1
12969	Naphthalene	91-20-3	34		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	32		1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	40		19	6.2	1
12969	Phenanthrene	85-01-8	34		1.7	0.69	1
12969	Pyrene	129-00-0	34		1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.9		1.0	0.2	25.1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	100		37	12	1
10401	Dalapon	75-99-0	160		93	45	1
10401	2,4-DB	94-82-6	99		18	6.4	1
10401	Dicamba	1918-00-9	8.1	J	12	4.1	1
10401	Dinoseb	88-85-7	39		25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	110		18	9.3	1
10401	MCPA	94-74-6	8,300		2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	8,300		2,600	770	1
10401	2,4,5-T	93-76-5	9.3		1.8	0.85	1
10401	2,4,5-TP	93-72-1	9.3		1.8	0.77	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	160		17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	160		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.3	J	5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	6.7		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	11		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	11		10	4.1	1
12952	EFH (C8-C11)	n.a.	3.6	J	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		41.3	7.44	1
06944	Antimony	7440-36-0	32.0		4.13	0.764	1
06935	Arsenic	7440-38-2	19.9		4.13	0.722	1
06946	Barium	7440-39-3	273		1.03	0.0341	1
06947	Beryllium	7440-41-7	5.87		1.03	0.0691	1
07914	Boron	7440-42-8	205		10.3	0.867	1
06949	Cadmium	7440-43-9	4.98		1.03	0.0784	1
01650	Calcium	7440-70-2	2,810		20.6	3.45	1
06951	Chromium	7440-47-3	34.6		3.10	0.165	1
06952	Cobalt	7440-48-4	53.7		1.03	0.102	1
06953	Copper	7440-50-8	29.9		2.06	0.299	1
01654	Iron	7439-89-6	19,400		41.3	3.74	1
06955	Lead	7439-92-1	19.9		3.10	0.516	1
01656	Lithium	7439-93-2	117		4.1	0.35	1
01657	Magnesium	7439-95-4	3,920		10.3	1.72	1
06958	Manganese	7439-96-5	212		1.03	0.0857	1
06960	Molybdenum	7439-98-7	197		2.06	0.175	1
06961	Nickel	7440-02-0	58.2		2.06	0.134	1
10145	Phosphorus	7723-14-0	402		10.3	2.98	1
01662	Potassium	7440-09-7	3,770		103	8.61	1
01667	Sodium	7440-23-5	1,120		103	17.2	1
06969	Tin	7440-31-5	376		10.3	0.227	1
06970	Titanium	7440-32-6	1,260		1.03	0.175	1
06971	Vanadium	7440-62-2	82.4		1.03	0.134	1
06972	Zinc	7440-66-6	102		4.13	0.206	1
10146	Zirconium	7440-67-7	105		5.16	0.867	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.34		0.413	0.103	2
06142	Silver	7440-22-4	11.5		0.206	0.0268	2
06144	Strontium	7440-24-6	22.7		0.413	0.0702	2
06145	Thallium	7440-28-0	0.666		0.206	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.180		0.0168	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/24/2013 23:15	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 04:04	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 20:35	Laura M Krieger	25.1
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:37	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:37	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 17:38	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 21:32	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 17:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/27/2013 09:43	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:49	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:49	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:49	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:08	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Acenaphthene	83-32-9	1,700		18	3	1
10726	Acenaphthylene	208-96-8	1,900		18	3	1
10726	Aniline	62-53-3	1,200		340	170	1
10726	Anthracene	120-12-7	1,800		18	3	1
10726	Benzidine	92-87-5	3,900		1,700	720	1
10726	Benzo(a)anthracene	56-55-3	1,600		18	3	1
10726	Benzo(a)pyrene	50-32-8	1,800		18	3	1
10726	Benzo(b)fluoranthene	205-99-2	1,900		18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	1,700		18	3	1
10726	Benzo(k)fluoranthene	207-08-9	1,700		18	3	1
10726	Benzoic acid	65-85-0	2,100		520	170	1
10726	Benzyl alcohol	100-51-6	1,700		340	170	1
10726	1,1'-Biphenyl	92-52-4	1,600		34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	1,800		34	17	1
10726	Butylbenzylphthalate	85-68-7	1,700		170	69	1
10726	Di-n-butylphthalate	84-74-2	1,800		170	69	1
10726	Carbazole	86-74-8	1,700		34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	1,900		34	17	1
10726	4-Chloroaniline	106-47-8	1,100		34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,300		34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,600		34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,600		34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	2,200		34	7	1
10726	2-Chlorophenol	95-57-8	1,800		34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,800		34	17	1
10726	Chrysene	218-01-9	1,600		18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	1,700		18	3	1
10726	Dibenzofuran	132-64-9	1,800		34	17	1
10726	1,2-Dichlorobenzene	95-50-1	1,700		34	17	1
10726	1,3-Dichlorobenzene	541-73-1	1,600		34	17	1
10726	1,4-Dichlorobenzene	106-46-7	1,600		34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	560		340	100	1
10726	2,4-Dichlorophenol	120-83-2	1,900		34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	1,800		170	69	1
10726	2,4-Dimethylphenol	105-67-9	1,900		34	17	1
10726	3,5-Dimethylphenol	108-68-9	1,800		170	34	1
10726	Dimethylphthalate	131-11-3	1,800		170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,500		520	170	1
10726	2,4-Dinitrophenol	51-28-5	2,400		680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	1,800		34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,800		180	69	1
10726	Fluoranthene	206-44-0	1,700		18	3	1
10726	Fluorene	86-73-7	1,800		18	3	1
10726	Hexachlorobenzene	118-74-1	1,800		18	3	1
10726	Hexachlorobutadiene	87-68-3	1,800		34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	4,100		520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg	ug/kg	ug/kg	
10726	Hexachloroethane	67-72-1	1,700	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,700	18	3	1
10726	Isophorone	78-59-1	1,800	34	17	1
10726	1-Methylnaphthalene	90-12-0	1,900	18	3	1
10726	2-Methylnaphthalene	91-57-6	1,700	18	3	1
10726	2-Methylphenol	95-48-7	1,700	34	17	1
10726	4-Methylphenol	106-44-5	1,600	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10726	Naphthalene	91-20-3	1,700	18	3	1
10726	NDPA as diphenylamine	n.a.	1,800	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	2-Nitroaniline	88-74-4	1,800	34	17	1
10726	3-Nitroaniline	99-09-2	1,800	170	69	1
10726	4-Nitroaniline	100-01-6	1,200	170	69	1
10726	Nitrobenzene	98-95-3	1,900	34	17	1
10726	2-Nitrophenol	88-75-5	1,800	34	17	1
10726	4-Nitrophenol	100-02-7	1,900	520	170	1
10726	N-Nitrosodimethylamine	62-75-9	1,500	170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,700	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	1,800	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	Di-n-octylphthalate	117-84-0	1,900	170	69	1
10726	Pentachlorophenol	87-86-5	1,300	180	34	1
10726	Phenanthrene	85-01-8	1,700	18	3	1
10726	Phenol	108-95-2	1,600	34	17	1
10726	Pyrene	129-00-0	1,700	18	3	1
10726	Pyridine	110-86-1	1,200	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	1,800	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	1,700	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	1,800	34	17	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	35	1.7	0.69	1
12969	Acenaphthylene	208-96-8	35	1.7	0.34	1
12969	Anthracene	120-12-7	35	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	35	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	34	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	35	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	31	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	30	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	36	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	41	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	41	19	6.2	1
12969	Chrysene	218-01-9	34	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	32	1.7	0.69	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	36		19	6.2	1
12969	Dimethylphthalate	131-11-3	35		19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	43		19	6.2	1
12969	Fluoranthene	206-44-0	34		1.7	0.69	1
12969	Fluorene	86-73-7	34		1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	32		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	34		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	33		1.7	0.69	1
12969	Naphthalene	91-20-3	33		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	31		1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	39		19	6.2	1
12969	Phenanthrene	85-01-8	33		1.7	0.69	1
12969	Pyrene	129-00-0	34		1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.4		1.0	0.2	24.46
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	99		37	12	1
10401	Dalapon	75-99-0	160		93	45	1
10401	2,4-DB	94-82-6	98		18	6.4	1
10401	Dicamba	1918-00-9	7.7	J	12	4.1	1
10401	Dinoseb	88-85-7	37		25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	110		18	9.3	1
10401	MCPA	94-74-6	8,000		2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	7,900		2,600	770	1
10401	2,4,5-T	93-76-5	9.4		1.8	0.85	1
10401	2,4,5-TP	93-72-1	9.2		1.8	0.77	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	160		17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	160		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.1	J	5.1	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	6.4		5.1	2.1	1
12952	EFH (C21-C30)	n.a.	11		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	12		10	4.1	1
12952	EFH (C8-C11)	n.a.	3.5	J	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,300		39.7	7.15	1
06944	Antimony	7440-36-0	23.6		3.97	0.734	1
06935	Arsenic	7440-38-2	24.8		3.97	0.695	1
06946	Barium	7440-39-3	289		0.992	0.0327	1
06947	Beryllium	7440-41-7	6.08		0.992	0.0665	1
07914	Boron	7440-42-8	198		9.92	0.834	1
06949	Cadmium	7440-43-9	4.62		0.992	0.0754	1
01650	Calcium	7440-70-2	5,410		19.8	3.31	1
06951	Chromium	7440-47-3	44.9		2.98	0.159	1
06952	Cobalt	7440-48-4	52.3		0.992	0.0982	1
06953	Copper	7440-50-8	37.4		1.98	0.288	1
01654	Iron	7439-89-6	30,800		79.4	7.18	2
06955	Lead	7439-92-1	25.3		2.98	0.496	1
01656	Lithium	7439-93-2	118		4.0	0.34	1
01657	Magnesium	7439-95-4	5,770		9.92	1.66	1
06958	Manganese	7439-96-5	243		0.992	0.0824	1
06960	Molybdenum	7439-98-7	186		1.98	0.169	1
06961	Nickel	7440-02-0	61.1		1.98	0.129	1
10145	Phosphorus	7723-14-0	270		9.92	2.87	1
01662	Potassium	7440-09-7	4,000		99.2	8.28	1
01667	Sodium	7440-23-5	1,160		99.2	16.6	1
06969	Tin	7440-31-5	350		9.92	0.218	1
06970	Titanium	7440-32-6	1,430		0.992	0.169	1
06971	Vanadium	7440-62-2	98.7		0.992	0.129	1
06972	Zinc	7440-66-6	118		3.97	0.198	1
10146	Zirconium	7440-67-7	102		4.96	0.834	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.29		0.397	0.0992	2
06142	Silver	7440-22-4	10.2		0.198	0.0258	2
06144	Strontium	7440-24-6	32.0		0.397	0.0675	2
06145	Thallium	7440-28-0	0.785		0.198	0.0298	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.174		0.0164	0.0099	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/24/2013 23:39	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 04:37	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 21:12	Laura M Krieger	24.46
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:37	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:37	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 18:04	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 21:51	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 17:37	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/23/2013 09:17	Eric L Eby	2
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/27/2013 09:45	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:51	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:51	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:51	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:10	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0SS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275666
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03SS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	40.6	2.0	0.72	5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13322243201A	11/19/2013 17:37	Clinton M Wilson	5
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0IS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275667
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03IS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	842	41.0	14.3	100
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13322243201A	11/19/2013 18:05	Clinton M Wilson	100
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0PDS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275668
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03PDS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	45.0	4.2	1.5	10
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13322243201A	11/19/2013 18:12	Clinton M Wilson	10
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275669
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,400		40.5	7.29	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.749	1
06935	Arsenic	7440-38-2	5.14		4.05	0.708	1
06946	Barium	7440-39-3	61.5		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.640	J	1.01	0.0678	1
07914	Boron	7440-42-8	1.78	J	10.1	0.850	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0769	1
01650	Calcium	7440-70-2	2,230		20.2	3.38	1
06951	Chromium	7440-47-3	16.3		3.04	0.162	1
06952	Cobalt	7440-48-4	3.29		1.01	0.100	1
06953	Copper	7440-50-8	5.79		2.02	0.293	1
01654	Iron	7439-89-6	20,800		40.5	3.66	1
06955	Lead	7439-92-1	5.97		3.04	0.506	1
01656	Lithium	7439-93-2	12.8		4.0	0.34	1
01657	Magnesium	7439-95-4	3,510		10.1	1.69	1
06958	Manganese	7439-96-5	154		1.01	0.0840	1
06960	Molybdenum	7439-98-7	2.02	U	2.02	0.172	1
06961	Nickel	7440-02-0	8.18		2.02	0.132	1
10145	Phosphorus	7723-14-0	135		10.1	2.92	1
01662	Potassium	7440-09-7	2,210		101	8.44	1
01667	Sodium	7440-23-5	135		101	16.9	1
06969	Tin	7440-31-5	3.01	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,020		1.01	0.172	1
06971	Vanadium	7440-62-2	32.5		1.01	0.132	1
06972	Zinc	7440-66-6	44.7		4.05	0.202	1
10146	Zirconium	7440-67-7	4.58	J	5.06	0.850	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.405	U	0.405	0.101	2
06142	Silver	7440-22-4	0.202	U	0.202	0.0263	2
06144	Strontium	7440-24-6	14.3		0.405	0.0688	2
06145	Thallium	7440-28-0	0.243		0.202	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.32	J	0.40	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.46		0.0100	0.0100	1
	The pH was measured in water at 19.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	3.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275669
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 14:46	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:46	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:46	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:46	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:06	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275669
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13322243201A	11/19/2013 18:26	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403B	11/13/2013 23:00	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	18	U	18	3	1
10726	Acenaphthylene	208-96-8	18	U	18	3	1
10726	Aniline	62-53-3	340	U	340	170	1
10726	Anthracene	120-12-7	18	U	18	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	720	1
10726	Benzo(a)anthracene	56-55-3	18	U	18	3	1
10726	Benzo(a)pyrene	50-32-8	18	U	18	3	1
10726	Benzo(b)fluoranthene	205-99-2	18	U	18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	18	U	18	3	1
10726	Benzo(k)fluoranthene	207-08-9	18	U	18	3	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	340	U	340	170	1
10726	1,1'-Biphenyl	92-52-4	34	U	34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	34	U	34	17	1
10726	Butylbenzylphthalate	85-68-7	170	U	170	69	1
10726	Di-n-butylphthalate	84-74-2	170	U	170	69	1
10726	Carbazole	86-74-8	34	U	34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	34	U	34	17	1
10726	4-Chloroaniline	106-47-8	34	U	34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	34	U	34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	34	U	34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	34	U	34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	34	U	34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	17	1
10726	Chrysene	218-01-9	18	U	18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	18	U	18	3	1
10726	Dibenzofuran	132-64-9	34	U	34	17	1
10726	1,2-Dichlorobenzene	95-50-1	34	U	34	17	1
10726	1,3-Dichlorobenzene	541-73-1	34	U	34	17	1
10726	1,4-Dichlorobenzene	106-46-7	34	U	34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	340	U	340	100	1
10726	2,4-Dichlorophenol	120-83-2	34	U	34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	170	U	170	69	1
10726	2,4-Dimethylphenol	105-67-9	34	U	34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	Dimethylphthalate	131-11-3	170	U	170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	680	U	680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	34	U	34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	69	1
10726	Fluoranthene	206-44-0	18	U	18	3	1
10726	Fluorene	86-73-7	18	U	18	3	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	34	U	34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	170	U	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	3	1
10726	Isophorone	78-59-1	34	U	34	17	1
10726	1-Methylnaphthalene	90-12-0	18	U	18	3	1
10726	2-Methylnaphthalene	91-57-6	18	U	18	3	1
10726	2-Methylphenol	95-48-7	34	U	34	17	1
10726	4-Methylphenol	106-44-5	34	U	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	18	U	18	3	1
10726	NDPA as diphenylamine	n.a.	170	U	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	34	U	34	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	34	U	34	17	1
10726	2-Nitrophenol	88-75-5	34	U	34	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitrosodimethylamine	62-75-9	170	U	170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	34	U	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	34	U	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	170	U	170	69	1
10726	Pentachlorophenol	87-86-5	180	U	180	34	1
10726	Phenanthrene	85-01-8	18	U	18	3	1
10726	Phenol	108-95-2	34	U	34	17	1
10726	Pyrene	129-00-0	18	U	18	3	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	34	U	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	34	U	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	34	U	34	17	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.3	J	1	0.2	23.72
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	93	U	93	46	1
10401	2,4-DB	94-82-6	18	U	18	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,700		39.8	7.17	1
06944	Antimony	7440-36-0	3.98	U	3.98	0.736	1
06935	Arsenic	7440-38-2	5.76		3.98	0.696	1
06946	Barium	7440-39-3	44.7		0.994	0.0328	1
06947	Beryllium	7440-41-7	0.601	J	0.994	0.0666	1
07914	Boron	7440-42-8	1.76	J	9.94	0.835	1
06949	Cadmium	7440-43-9	0.994	U	0.994	0.0756	1
01650	Calcium	7440-70-2	2,420		19.9	3.32	1
06951	Chromium	7440-47-3	19.4		2.98	0.159	1
06952	Cobalt	7440-48-4	2.42		0.994	0.0984	1
06953	Copper	7440-50-8	8.67		1.99	0.288	1
01654	Iron	7439-89-6	15,700		39.8	3.60	1
06955	Lead	7439-92-1	6.10		2.98	0.497	1
01656	Lithium	7439-93-2	8.8		4.0	0.34	1
01657	Magnesium	7439-95-4	2,770		9.94	1.66	1
06958	Manganese	7439-96-5	103		0.994	0.0825	1
06960	Molybdenum	7439-98-7	0.213	J	1.99	0.169	1
06961	Nickel	7440-02-0	8.56		1.99	0.129	1
10145	Phosphorus	7723-14-0	169		9.94	2.87	1
01662	Potassium	7440-09-7	1,400		99.4	8.29	1
01667	Sodium	7440-23-5	150		99.4	16.6	1
06969	Tin	7440-31-5	2.36	J	9.94	0.219	1
06970	Titanium	7440-32-6	655		0.994	0.169	1
06971	Vanadium	7440-62-2	28.1		0.994	0.129	1
06972	Zinc	7440-66-6	35.2		3.98	0.199	1
10146	Zirconium	7440-67-7	3.30	J	4.97	0.835	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.398	U	0.398	0.0994	2
06142	Silver	7440-22-4	0.199	U	0.199	0.0259	2
06144	Strontium	7440-24-6	11.4		0.398	0.0676	2
06145	Thallium	7440-28-0	0.245		0.199	0.0298	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.32	J	0.41	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.22		0.0100	0.0100	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
	The pH was measured in water at 19 C.					
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	3.3	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/25/2013 00:03	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 05:42	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 17:26	Laura M Krieger	23.72
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:38	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:38	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 18:31	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 22:09	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 17:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 14:58	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:58	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:58	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:58	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:12	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13322243201A	11/19/2013 18:40	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	18	U	18	3	1
10726	Acenaphthylene	208-96-8	18	U	18	3	1
10726	Aniline	62-53-3	350	U	350	170	1
10726	Anthracene	120-12-7	18	U	18	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	730	1
10726	Benzo(a)anthracene	56-55-3	18	U	18	3	1
10726	Benzo(a)pyrene	50-32-8	18	U	18	3	1
10726	Benzo(b)fluoranthene	205-99-2	18	U	18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	18	U	18	3	1
10726	Benzo(k)fluoranthene	207-08-9	18	U	18	3	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	350	U	350	170	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	17	1
10726	Butylbenzylphthalate	85-68-7	170	U	170	69	1
10726	Di-n-butylphthalate	84-74-2	170	U	170	69	1
10726	Carbazole	86-74-8	35	U	35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	17	1
10726	4-Chloroaniline	106-47-8	35	U	35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	17	1
10726	Chrysene	218-01-9	18	U	18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	18	U	18	3	1
10726	Dibenzofuran	132-64-9	35	U	35	17	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	17	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	17	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	100	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	17	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	17	1
10726	Diethylphthalate	84-66-2	170	U	170	69	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	Dimethylphthalate	131-11-3	170	U	170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	690	U	690	310	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	69	1
10726	Fluoranthene	206-44-0	18	U	18	3	1
10726	Fluorene	86-73-7	18	U	18	3	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	170	U	170	35	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	3	1
10726	Isophorone	78-59-1	35	U	35	17	1
10726	1-Methylnaphthalene	90-12-0	18	U	18	3	1
10726	2-Methylnaphthalene	91-57-6	18	U	18	3	1
10726	2-Methylphenol	95-48-7	35	U	35	17	1
10726	4-Methylphenol	106-44-5	35	U	35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	18	U	18	3	1
10726	NDPA as diphenylamine	n.a.	170	U	170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	35	U	35	17	1
10726	2-Nitrophenol	88-75-5	35	U	35	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitrosodimethylamine	62-75-9	170	U	170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	170	U	170	69	1
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenanthrene	85-01-8	18	U	18	3	1
10726	Phenol	108-95-2	35	U	35	17	1
10726	Pyrene	129-00-0	18	U	18	3	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	17	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.7
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	94	U	94	46	1
10401	2,4-DB	94-82-6	18	U	18	6.5	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.4	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.4	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,300		40.1	7.22	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.741	1
06935	Arsenic	7440-38-2	5.98		4.01	0.701	1
06946	Barium	7440-39-3	61.3		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.618	J	1.00	0.0671	1
07914	Boron	7440-42-8	1.94	J	10.0	0.841	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0761	1
01650	Calcium	7440-70-2	2,770		20.0	3.35	1
06951	Chromium	7440-47-3	18.2		3.00	0.160	1
06952	Cobalt	7440-48-4	3.53		1.00	0.0992	1
06953	Copper	7440-50-8	6.97		2.00	0.290	1
01654	Iron	7439-89-6	21,400		40.1	3.63	1
06955	Lead	7439-92-1	6.82		3.00	0.501	1
01656	Lithium	7439-93-2	12.5		4.0	0.34	1
01657	Magnesium	7439-95-4	3,760		10.0	1.67	1
06958	Manganese	7439-96-5	160		1.00	0.0831	1
06960	Molybdenum	7439-98-7	2.00	U	2.00	0.170	1
06961	Nickel	7440-02-0	9.08		2.00	0.130	1
10145	Phosphorus	7723-14-0	198		10.0	2.89	1
01662	Potassium	7440-09-7	2,510		100	8.35	1
01667	Sodium	7440-23-5	136		100	16.7	1
06969	Tin	7440-31-5	2.85	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,070		1.00	0.170	1
06971	Vanadium	7440-62-2	32.7		1.00	0.130	1
06972	Zinc	7440-66-6	49.9		4.01	0.200	1
10146	Zirconium	7440-67-7	3.96	J	5.01	0.841	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.401	U	0.401	0.100	2
06142	Silver	7440-22-4	0.200	U	0.200	0.0260	2
06144	Strontium	7440-24-6	14.4		0.401	0.0681	2
06145	Thallium	7440-28-0	0.291		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.34	J	0.43	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.50		0.0100	0.0100	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
	The pH was measured in water at 18.8 C.					
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	4.0	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/25/2013 00:27	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 06:14	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 18:04	Laura M Krieger	24.7
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:40	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:40	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 18:58	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 22:28	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 18:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 15:05	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 15:05	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 15:05	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 15:05	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:14	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13322243201A	11/19/2013 18:54	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Acenaphthene	83-32-9	18	U	18	4	1
10726	Acenaphthylene	208-96-8	18	U	18	4	1
10726	Aniline	62-53-3	360	U	360	180	1
10726	Anthracene	120-12-7	18	U	18	4	1
10726	Benzidine	92-87-5	1,800	U	1,800	750	1
10726	Benzo(a)anthracene	56-55-3	18	U	18	4	1
10726	Benzo(a)pyrene	50-32-8	18	U	18	4	1
10726	Benzo(b)fluoranthene	205-99-2	18	U	18	4	1
10726	Benzo(g,h,i)perylene	191-24-2	18	U	18	4	1
10726	Benzo(k)fluoranthene	207-08-9	18	U	18	4	1
10726	Benzoic acid	65-85-0	540	U	540	180	1
10726	Benzyl alcohol	100-51-6	360	U	360	180	1
10726	1,1'-Biphenyl	92-52-4	36	U	36	18	1
10726	4-Bromophenyl-phenylether	101-55-3	36	U	36	18	1
10726	Butylbenzylphthalate	85-68-7	180	U	180	72	1
10726	Di-n-butylphthalate	84-74-2	180	U	180	72	1
10726	Carbazole	86-74-8	36	U	36	18	1
10726	4-Chloro-3-methylphenol	59-50-7	36	U	36	18	1
10726	4-Chloroaniline	106-47-8	36	U	36	18	1
10726	bis(2-Chloroethoxy)methane	111-91-1	36	U	36	18	1
10726	bis(2-Chloroethyl)ether	111-44-4	36	U	36	18	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	36	U	36	18	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	35	U	35	8	1
10726	2-Chlorophenol	95-57-8	36	U	36	18	1
10726	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	18	1
10726	Chrysene	218-01-9	18	U	18	4	1
10726	Dibenz(a,h)anthracene	53-70-3	18	U	18	4	1
10726	Dibenzofuran	132-64-9	36	U	36	18	1
10726	1,2-Dichlorobenzene	95-50-1	36	U	36	18	1
10726	1,3-Dichlorobenzene	541-73-1	36	U	36	18	1
10726	1,4-Dichlorobenzene	106-46-7	36	U	36	18	1
10726	3,3'-Dichlorobenzidine	91-94-1	360	U	360	110	1
10726	2,4-Dichlorophenol	120-83-2	36	U	36	18	1
10726	2,6-Dichlorophenol	87-65-0	36	U	36	18	1
10726	Diethylphthalate	84-66-2	180	U	180	72	1
10726	2,4-Dimethylphenol	105-67-9	36	U	36	18	1
10726	3,5-Dimethylphenol	108-68-9	180	U	180	36	1
10726	Dimethylphthalate	131-11-3	180	U	180	72	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	540	U	540	180	1
10726	2,4-Dinitrophenol	51-28-5	710	U	710	320	1
10726	1,2-Diphenylhydrazine	122-66-7	36	U	36	18	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	72	1
10726	Fluoranthene	206-44-0	18	U	18	4	1
10726	Fluorene	86-73-7	18	U	18	4	1
10726	Hexachlorobenzene	118-74-1	18	U	18	4	1
10726	Hexachlorobutadiene	87-68-3	36	U	36	18	1
10726	Hexachlorocyclopentadiene	77-47-4	540	U	540	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	180	U	180	36	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	4	1
10726	Isophorone	78-59-1	36	U	36	18	1
10726	1-Methylnaphthalene	90-12-0	18	U	18	4	1
10726	2-Methylnaphthalene	91-57-6	18	U	18	4	1
10726	2-Methylphenol	95-48-7	36	U	36	18	1
10726	4-Methylphenol	106-44-5	36	U	36	18	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	18	U	18	4	1
10726	NDPA as diphenylamine	n.a.	180	U	180	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	36	U	36	18	1
10726	3-Nitroaniline	99-09-2	180	U	180	72	1
10726	4-Nitroaniline	100-01-6	180	U	180	72	1
10726	Nitrobenzene	98-95-3	36	U	36	18	1
10726	2-Nitrophenol	88-75-5	36	U	36	18	1
10726	4-Nitrophenol	100-02-7	540	U	540	180	1
10726	N-Nitrosodimethylamine	62-75-9	180	U	180	72	1
10726	N-Nitroso-di-n-propylamine	621-64-7	36	U	36	18	1
10726	N-Nitrosodiphenylamine	86-30-6	36	U	36	18	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	180	U	180	72	1
10726	Pentachlorophenol	87-86-5	180	U	180	36	1
10726	Phenanthrene	85-01-8	18	U	18	4	1
10726	Phenol	108-95-2	36	U	36	18	1
10726	Pyrene	129-00-0	18	U	18	4	1
10726	Pyridine	110-86-1	180	U	180	72	1
10726	1,2,4-Trichlorobenzene	120-82-1	36	U	36	18	1
10726	2,4,5-Trichlorophenol	95-95-4	36	U	36	18	1
10726	2,4,6-Trichlorophenol	88-06-2	36	U	36	18	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.1	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	0.49	J	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.3	J	1.8	0.38	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.5	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.7	1
13099	PCB-1260	11096-82-5	18	U	18	4.2	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,000		42.1	7.58	1
06944	Antimony	7440-36-0	4.21	U	4.21	0.778	1
06935	Arsenic	7440-38-2	11.8		4.21	0.736	1
06946	Barium	7440-39-3	111		1.05	0.0347	1
06947	Beryllium	7440-41-7	0.839	J	1.05	0.0705	1
07914	Boron	7440-42-8	3.76	J	10.5	0.884	1
06949	Cadmium	7440-43-9	1.05	U	1.05	0.0799	1
01650	Calcium	7440-70-2	2,800		21.0	3.51	1
06951	Chromium	7440-47-3	27.5		3.16	0.168	1
06952	Cobalt	7440-48-4	6.60		1.05	0.104	1
06953	Copper	7440-50-8	12.5		2.10	0.305	1
01654	Iron	7439-89-6	25,500		42.1	3.81	1
06955	Lead	7439-92-1	8.15		3.16	0.526	1
01656	Lithium	7439-93-2	20.9		4.2	0.36	1
01657	Magnesium	7439-95-4	5,190		10.5	1.76	1
06958	Manganese	7439-96-5	311		1.05	0.0873	1
06960	Molybdenum	7439-98-7	0.429	J	2.10	0.179	1
06961	Nickel	7440-02-0	15.8		2.10	0.137	1
10145	Phosphorus	7723-14-0	318		10.5	3.04	1
01662	Potassium	7440-09-7	4,140		105	8.77	1
01667	Sodium	7440-23-5	88.5	J	105	17.6	1
06969	Tin	7440-31-5	2.91	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,210		1.05	0.179	1
06971	Vanadium	7440-62-2	47.4		1.05	0.137	1
06972	Zinc	7440-66-6	61.4		4.21	0.210	1
10146	Zirconium	7440-67-7	5.26		5.26	0.884	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.234	J	0.421	0.105	2
06142	Silver	7440-22-4	0.0281	J	0.210	0.0274	2
06144	Strontium	7440-24-6	28.4		0.421	0.0715	2
06145	Thallium	7440-28-0	0.372		0.210	0.0316	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175	U	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.92		0.0100	0.0100	1
	The pH was measured in water at 19 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	6.8	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0671	1
11031	12378-PeCDD	40321-76-4	0.148	JBQ	5.28	0.0594	1
11031	123478-HxCDD	39227-28-6	0.0851	JB	5.28	0.0471	1
11031	123678-HxCDD	57653-85-7	0.741	JBQ	5.28	0.0495	1
11031	123789-HxCDD	19408-74-3	1.15	JB	5.28	0.0477	1
11031	1234678-HpCDD	35822-46-9	2.13	JB	5.28	0.0441	1
11031	OCDD	3268-87-9	24.1	B	10.6	0.0369	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0734	1
11031	12378-PeCDF	57117-41-6	0.609	JB	5.28	0.0322	1
11031	23478-PeCDF	57117-31-4	0.108	JBQ	5.28	0.0344	1
11031	123478-HxCDF	70648-26-9	0.0668	JBQ	5.28	0.0389	1
11031	123678-HxCDF	57117-44-9	0.120	JB	5.28	0.0308	1
11031	123789-HxCDF	72918-21-9	1.60	JB	5.28	0.0484	1
11031	234678-HxCDF	60851-34-5	0.114	JBQ	5.28	0.0336	1
11031	1234678-HpCDF	67562-39-4	0.564	JBQ	5.28	0.0153	1
11031	1234789-HpCDF	55673-89-7	0.120	JBQ	5.28	0.0410	1
11031	OCDF	39001-02-0	1.37	JBQ	10.6	0.0897	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.343				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	57	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	59	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	56	29 - 147
13C12-1234678-HpCDF	115	28 - 143
13C12-1234789-HpCDF	45	26 - 138
13C12-OCDF	34	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/25/2013 00:51	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 06:47	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133220016A	11/21/2013 15:49	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 22:46	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133220016A	11/18/2013 18:45	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 19:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/24/2013 19:29	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 15:07	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 15:07	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 15:07	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 15:07	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:20	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	19	U	19	4	1
10726	Acenaphthylene	208-96-8	19	U	19	4	1
10726	Aniline	62-53-3	380	U	380	190	1
10726	Anthracene	120-12-7	19	U	19	4	1
10726	Benzidine	92-87-5	1,900	U	1,900	790	1
10726	Benzo(a)anthracene	56-55-3	19	U	19	4	1
10726	Benzo(a)pyrene	50-32-8	19	U	19	4	1
10726	Benzo(b)fluoranthene	205-99-2	19	U	19	4	1
10726	Benzo(g,h,i)perylene	191-24-2	19	U	19	4	1
10726	Benzo(k)fluoranthene	207-08-9	19	U	19	4	1
10726	Benzoic acid	65-85-0	560	U	560	190	1
10726	Benzyl alcohol	100-51-6	380	U	380	190	1
10726	1,1'-Biphenyl	92-52-4	38	U	38	19	1
10726	4-Bromophenyl-phenylether	101-55-3	38	U	38	19	1
10726	Butylbenzylphthalate	85-68-7	190	U	190	75	1
10726	Di-n-butylphthalate	84-74-2	190	U	190	75	1
10726	Carbazole	86-74-8	38	U	38	19	1
10726	4-Chloro-3-methylphenol	59-50-7	38	U	38	19	1
10726	4-Chloroaniline	106-47-8	38	U	38	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	38	U	38	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	38	U	38	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	38	U	38	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	37	U	37	8	1
10726	2-Chlorophenol	95-57-8	38	U	38	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	19	1
10726	Chrysene	218-01-9	19	U	19	4	1
10726	Dibenz(a,h)anthracene	53-70-3	19	U	19	4	1
10726	Dibenzofuran	132-64-9	38	U	38	19	1
10726	1,2-Dichlorobenzene	95-50-1	38	U	38	19	1
10726	1,3-Dichlorobenzene	541-73-1	38	U	38	19	1
10726	1,4-Dichlorobenzene	106-46-7	38	U	38	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	380	U	380	110	1
10726	2,4-Dichlorophenol	120-83-2	38	U	38	19	1
10726	2,6-Dichlorophenol	87-65-0	38	U	38	19	1
10726	Diethylphthalate	84-66-2	190	U	190	75	1
10726	2,4-Dimethylphenol	105-67-9	38	U	38	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	38	1
10726	Dimethylphthalate	131-11-3	190	U	190	75	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	560	U	560	190	1
10726	2,4-Dinitrophenol	51-28-5	740	U	740	340	1
10726	1,2-Diphenylhydrazine	122-66-7	38	U	38	19	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	75	1
10726	Fluoranthene	206-44-0	19	U	19	4	1
10726	Fluorene	86-73-7	19	U	19	4	1
10726	Hexachlorobenzene	118-74-1	19	U	19	4	1
10726	Hexachlorobutadiene	87-68-3	38	U	38	19	1
10726	Hexachlorocyclopentadiene	77-47-4	560	U	560	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	190	U	190	38	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	4	1
10726	Isophorone	78-59-1	38	U	38	19	1
10726	1-Methylnaphthalene	90-12-0	19	U	19	4	1
10726	2-Methylnaphthalene	91-57-6	19	U	19	4	1
10726	2-Methylphenol	95-48-7	38	U	38	19	1
10726	4-Methylphenol	106-44-5	38	U	38	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	19	U	19	4	1
10726	NDPA as diphenylamine	n.a.	190	U	190	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	38	U	38	19	1
10726	3-Nitroaniline	99-09-2	190	U	190	75	1
10726	4-Nitroaniline	100-01-6	190	U	190	75	1
10726	Nitrobenzene	98-95-3	38	U	38	19	1
10726	2-Nitrophenol	88-75-5	38	U	38	19	1
10726	4-Nitrophenol	100-02-7	560	U	560	190	1
10726	N-Nitrosodimethylamine	62-75-9	190	U	190	75	1
10726	N-Nitroso-di-n-propylamine	621-64-7	38	U	38	19	1
10726	N-Nitrosodiphenylamine	86-30-6	38	U	38	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	190	U	190	75	1
10726	Pentachlorophenol	87-86-5	190	U	190	38	1
10726	Phenanthrene	85-01-8	19	U	19	4	1
10726	Phenol	108-95-2	38	U	38	19	1
10726	Pyrene	129-00-0	19	U	19	4	1
10726	Pyridine	110-86-1	190	U	190	75	1
10726	1,2,4-Trichlorobenzene	120-82-1	38	U	38	19	1
10726	2,4,5-Trichlorophenol	95-95-4	38	U	38	19	1
10726	2,4,6-Trichlorophenol	88-06-2	38	U	38	19	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.93
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.93	U	0.93	0.19	1
10590	Alpha BHC	319-84-6	0.93	U	0.93	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.93	U	0.93	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.93	U	0.93	0.51	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.93	U	0.93	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.68	1
10590	Heptachlor	76-44-8	0.93	U	0.93	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.93	U	0.93	0.19	1
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	37	U	37	11	1
13099	Aroclor 5442	12642-23-8	37	U	37	11	1
13099	Aroclor 5460	11126-42-4	37	U	37	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.7	1
13099	PCB-1221	11104-28-2	19	U	19	5.7	1
13099	PCB-1232	11141-16-5	19	U	19	4.6	1
13099	PCB-1242	53469-21-9	19	U	19	4.6	1
13099	PCB-1248	12672-29-6	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.4	1
13099	PCB-1262	37324-23-5	19	U	19	3.7	1
13099	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,000		43.7	7.88	1
06944	Antimony	7440-36-0	4.37	U	4.37	0.809	1
06935	Arsenic	7440-38-2	13.3		4.37	0.765	1
06946	Barium	7440-39-3	116		1.09	0.0361	1
06947	Beryllium	7440-41-7	0.972	J	1.09	0.0733	1
07914	Boron	7440-42-8	3.24	J	10.9	0.918	1
06949	Cadmium	7440-43-9	1.09	U	1.09	0.0831	1
01650	Calcium	7440-70-2	2,520		21.9	3.65	1
06951	Chromium	7440-47-3	27.9		3.28	0.175	1
06952	Cobalt	7440-48-4	6.54		1.09	0.108	1
06953	Copper	7440-50-8	11.0		2.19	0.317	1
01654	Iron	7439-89-6	26,800		43.7	3.96	1
06955	Lead	7439-92-1	7.86		3.28	0.547	1
01656	Lithium	7439-93-2	23.4		4.4	0.37	1
01657	Magnesium	7439-95-4	5,390		10.9	1.83	1
06958	Manganese	7439-96-5	336		1.09	0.0907	1
06960	Molybdenum	7439-98-7	0.314	J	2.19	0.186	1
06961	Nickel	7440-02-0	17.7		2.19	0.142	1
10145	Phosphorus	7723-14-0	229		10.9	3.16	1
01662	Potassium	7440-09-7	3,450		109	9.12	1
01667	Sodium	7440-23-5	114		109	18.3	1
06969	Tin	7440-31-5	3.16	J	10.9	0.241	1
06970	Titanium	7440-32-6	1,220		1.09	0.186	1
06971	Vanadium	7440-62-2	50.1		1.09	0.142	1
06972	Zinc	7440-66-6	58.8		4.37	0.219	1
10146	Zirconium	7440-67-7	5.84		5.47	0.918	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.123	J	0.437	0.109	2
06142	Silver	7440-22-4	0.0498	J	0.219	0.0284	2
06144	Strontium	7440-24-6	27.3		0.437	0.0743	2
06145	Thallium	7440-28-0	0.368		0.219	0.0328	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173	U	0.0173	0.0104	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 19.2 C.	n.a.	7.31	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	11.2	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0685 JBQ	1.12	0.0422	1
11031	12378-PeCDD	40321-76-4	0.204 JBQ	5.61	0.0416	1
11031	123478-HxCDD	39227-28-6	0.0601 JB	5.61	0.0274	1
11031	123678-HxCDD	57653-85-7	0.136 JBQ	5.61	0.0287	1
11031	123789-HxCDD	19408-74-3	0.0891 JBQ	5.61	0.0280	1
11031	1234678-HpCDD	35822-46-9	0.521 JB	5.61	0.0383	1
11031	OCDD	3268-87-9	4.58 JB	11.2	0.0396	1
11031	2378-TCDF	51207-31-9	0.0495 J	1.12	0.0471	1
11031	12378-PeCDF	57117-41-6	0.223 JBQ	5.61	0.0242	1
11031	23478-PeCDF	57117-31-4	0.153 JBQ	5.61	0.0277	1
11031	123478-HxCDF	70648-26-9	0.107 JBQ	5.61	0.0247	1
11031	123678-HxCDF	57117-44-9	0.100 JB	5.61	0.0196	1
11031	123789-HxCDF	72918-21-9	0.200 JBQ	5.61	0.0305	1
11031	234678-HxCDF	60851-34-5	0.0671 JB	5.61	0.0229	1
11031	1234678-HpCDF	67562-39-4	0.158 JBQ	5.61	0.0109	1
11031	1234789-HpCDF	55673-89-7	0.0547 JBQ	5.61	0.0324	1
11031	OCDF	39001-02-0	0.660 JB	11.2	0.0734	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0345			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	88	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	117	28 - 143
13C12-1234789-HpCDF	45	26 - 138
13C12-OCDF	34	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/25/2013 01:15	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 07:19	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 18:41	Laura M Krieger	21.93
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:41	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:41	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133220016A	11/21/2013 16:34	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 23:05	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133220016A	11/18/2013 18:45	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 19:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/24/2013 20:25	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 15:10	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 15:10	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 15:10	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 15:10	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:22	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	19	U	19	4	1
10726	Acenaphthylene	208-96-8	19	U	19	4	1
10726	Aniline	62-53-3	370	U	370	190	1
10726	Anthracene	120-12-7	19	U	19	4	1
10726	Benzidine	92-87-5	1,800	U	1,800	780	1
10726	Benzo(a)anthracene	56-55-3	19	U	19	4	1
10726	Benzo(a)pyrene	50-32-8	19	U	19	4	1
10726	Benzo(b)fluoranthene	205-99-2	19	U	19	4	1
10726	Benzo(g,h,i)perylene	191-24-2	19	U	19	4	1
10726	Benzo(k)fluoranthene	207-08-9	19	U	19	4	1
10726	Benzoic acid	65-85-0	560	U	560	190	1
10726	Benzyl alcohol	100-51-6	370	U	370	190	1
10726	1,1'-Biphenyl	92-52-4	37	U	37	19	1
10726	4-Bromophenyl-phenylether	101-55-3	37	U	37	19	1
10726	Butylbenzylphthalate	85-68-7	190	U	190	74	1
10726	Di-n-butylphthalate	84-74-2	190	U	190	74	1
10726	Carbazole	86-74-8	37	U	37	19	1
10726	4-Chloro-3-methylphenol	59-50-7	37	U	37	19	1
10726	4-Chloroaniline	106-47-8	37	U	37	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	37	U	37	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	37	U	37	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	37	U	37	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	37	U	37	8	1
10726	2-Chlorophenol	95-57-8	37	U	37	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	19	1
10726	Chrysene	218-01-9	19	U	19	4	1
10726	Dibenz(a,h)anthracene	53-70-3	19	U	19	4	1
10726	Dibenzofuran	132-64-9	37	U	37	19	1
10726	1,2-Dichlorobenzene	95-50-1	37	U	37	19	1
10726	1,3-Dichlorobenzene	541-73-1	37	U	37	19	1
10726	1,4-Dichlorobenzene	106-46-7	37	U	37	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	370	U	370	110	1
10726	2,4-Dichlorophenol	120-83-2	37	U	37	19	1
10726	2,6-Dichlorophenol	87-65-0	37	U	37	19	1
10726	Diethylphthalate	84-66-2	190	U	190	74	1
10726	2,4-Dimethylphenol	105-67-9	37	U	37	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	37	1
10726	Dimethylphthalate	131-11-3	190	U	190	74	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	560	U	560	190	1
10726	2,4-Dinitrophenol	51-28-5	730	U	730	330	1
10726	1,2-Diphenylhydrazine	122-66-7	37	U	37	19	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	74	1
10726	Fluoranthene	206-44-0	19	U	19	4	1
10726	Fluorene	86-73-7	19	U	19	4	1
10726	Hexachlorobenzene	118-74-1	19	U	19	4	1
10726	Hexachlorobutadiene	87-68-3	37	U	37	19	1
10726	Hexachlorocyclopentadiene	77-47-4	560	U	560	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Hexachloroethane	67-72-1	190	U	190	37	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	4	1
10726	Isophorone	78-59-1	37	U	37	19	1
10726	1-Methylnaphthalene	90-12-0	19	U	19	4	1
10726	2-Methylnaphthalene	91-57-6	19	U	19	4	1
10726	2-Methylphenol	95-48-7	37	U	37	19	1
10726	4-Methylphenol	106-44-5	37	U	37	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	19	U	19	4	1
10726	NDPA as diphenylamine	n.a.	190	U	190	37	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	37	U	37	19	1
10726	3-Nitroaniline	99-09-2	190	U	190	74	1
10726	4-Nitroaniline	100-01-6	190	U	190	74	1
10726	Nitrobenzene	98-95-3	37	U	37	19	1
10726	2-Nitrophenol	88-75-5	37	U	37	19	1
10726	4-Nitrophenol	100-02-7	560	U	560	190	1
10726	N-Nitrosodimethylamine	62-75-9	190	U	190	74	1
10726	N-Nitroso-di-n-propylamine	621-64-7	37	U	37	19	1
10726	N-Nitrosodiphenylamine	86-30-6	37	U	37	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	190	U	190	74	1
10726	Pentachlorophenol	87-86-5	190	U	190	37	1
10726	Phenanthrene	85-01-8	19	U	19	4	1
10726	Phenol	108-95-2	37	U	37	19	1
10726	Pyrene	129-00-0	19	U	19	4	1
10726	Pyridine	110-86-1	190	U	190	74	1
10726	1,2,4-Trichlorobenzene	120-82-1	37	U	37	19	1
10726	2,4,5-Trichlorophenol	95-95-4	37	U	37	19	1
10726	2,4,6-Trichlorophenol	88-06-2	37	U	37	19	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.28
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.92	U	0.92	0.19	1
10590	Alpha BHC	319-84-6	0.92	U	0.92	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.92	U	0.92	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.92	U	0.92	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.92	U	0.92	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.92	U	0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.92	U	0.92	0.19	1
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	37	U	37	11	1
13099	Aroclor 5442	12642-23-8	37	U	37	11	1
13099	Aroclor 5460	11126-42-4	37	U	37	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.7	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.7	1
13099	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
	The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and no target analytes were detected, the data is reported.						
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		42.8	7.72	1
06944	Antimony	7440-36-0	4.28	U	4.28	0.792	1
06935	Arsenic	7440-38-2	13.2		4.28	0.750	1
06946	Barium	7440-39-3	70.3		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.793	J	1.07	0.0717	1
07914	Boron	7440-42-8	2.24	J	10.7	0.899	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0814	1
01650	Calcium	7440-70-2	2,100		21.4	3.58	1
06951	Chromium	7440-47-3	20.6		3.21	0.171	1
06952	Cobalt	7440-48-4	3.27		1.07	0.106	1
06953	Copper	7440-50-8	6.19		2.14	0.311	1
01654	Iron	7439-89-6	23,300		42.8	3.88	1
06955	Lead	7439-92-1	7.15		3.21	0.535	1
01656	Lithium	7439-93-2	15.3		4.3	0.36	1
01657	Magnesium	7439-95-4	3,810		10.7	1.79	1
06958	Manganese	7439-96-5	127		1.07	0.0889	1
06960	Molybdenum	7439-98-7	0.262	J	2.14	0.182	1
06961	Nickel	7440-02-0	9.87		2.14	0.139	1
10145	Phosphorus	7723-14-0	101		10.7	3.09	1
01662	Potassium	7440-09-7	1,490		107	8.93	1
01667	Sodium	7440-23-5	125		107	17.9	1
06969	Tin	7440-31-5	2.76	J	10.7	0.236	1
06970	Titanium	7440-32-6	865		1.07	0.182	1
06971	Vanadium	7440-62-2	42.6		1.07	0.139	1
06972	Zinc	7440-66-6	38.4		4.28	0.214	1
10146	Zirconium	7440-67-7	4.10	J	5.35	0.899	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.428	U	0.428	0.107	2
06142	Silver	7440-22-4	0.0425	J	0.214	0.0278	2
06144	Strontium	7440-24-6	19.9		0.428	0.0728	2
06145	Thallium	7440-28-0	0.251		0.214	0.0321	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0124 J	0.0176	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19.2 C.	n.a.	7.31	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	10.2	0.10	0.10	1

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Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
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54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.117 JBQ	1.11	0.0379	1
11031	12378-PeCDD	40321-76-4	0.194 JBQ	5.53	0.0355	1
11031	123478-HxCDD	39227-28-6	0.0704 JB	5.53	0.0236	1
11031	123678-HxCDD	57653-85-7	0.0868 JB	5.53	0.0257	1
11031	123789-HxCDD	19408-74-3	0.0673 JBQ	5.53	0.0231	1
11031	1234678-HpCDD	35822-46-9	0.0901 JBQ	5.53	0.0223	1
11031	OCDD	3268-87-9	0.326 JB	11.1	0.0314	1
11031	2378-TCDF	51207-31-9	0.0622 JQ	1.11	0.0351	1
11031	12378-PeCDF	57117-41-6	0.282 JB	5.53	0.0184	1
11031	23478-PeCDF	57117-31-4	0.251 JBQ	5.53	0.0202	1
11031	123478-HxCDF	70648-26-9	0.143 JBQ	5.53	0.0176	1
11031	123678-HxCDF	57117-44-9	0.117 JBQ	5.53	0.0136	1
11031	123789-HxCDF	72918-21-9	0.115 JBQ	5.53	0.0182	1
11031	234678-HxCDF	60851-34-5	0.0818 JB	5.53	0.0164	1
11031	1234678-HpCDF	67562-39-4	0.0689 JBQ	5.53	0.00802	1
11031	1234789-HpCDF	55673-89-7	0.0647 JBQ	5.53	0.0202	1
11031	OCDF	39001-02-0	0.267 JBQ	11.1	0.0440	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0324			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	91	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	116	28 - 143
13C12-1234789-HpCDF	52	26 - 138
13C12-OCDF	40	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

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54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
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Project Name: SSFL Phase 3 Sampling

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54911 SDG#: PH127-08

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/25/2013 01:38	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 07:51	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 19:19	Laura M Krieger	22.28
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:42	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:43	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133220016A	11/21/2013 16:50	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 23:23	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133220016A	11/18/2013 18:45	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 18:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/25/2013 04:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 15:12	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 15:12	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 15:12	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 15:12	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: TB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275675
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:00 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549TB SDG#: PH127-09TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13318B94A	11/15/2013 13:20	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13318B94A	11/15/2013 13:20	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13322SLE026	Sample number(s): 7275662-7275665,7275670-7275674									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	108		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	104		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	104		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	105		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	110		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	111		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	103		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	105		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	108		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	118		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	103		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	96		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	112		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	102		79-112		
Batch number: 13322WAA026	Sample number(s): 7275661									
Acenaphthene	0.050	U	0.050	0.010	ug/l	105	104	77-118	1	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	108	106	80-123	1	30
Anthracene	0.050	U	0.050	0.010	ug/l	107	106	78-123	1	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	109	104	73-127	5	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	104	93	72-120	11	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	112	105	79-136	7	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	95	85	70-130	11	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	106	87	64-130	20	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	105	97	73-131	8	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	100	96	40-138	4	30
Di-n-butylphthalate	0.057	J	1.0	0.050	ug/l	113	110	64-141	2	30
Chrysene	0.050	U	0.050	0.010	ug/l	105	103	76-125	3	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	104	93	58-131	12	30
Diethylphthalate	0.056	J	1.0	0.050	ug/l	111	108	64-128	3	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	106	102	23-139	4	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	0.096	J	1.0	0.050	ug/l	88	103	70-143	16	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	107	105	79-124	2	30
Fluorene	0.050	U	0.050	0.010	ug/l	104	104	74-115	1	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	106	92	62-130	13	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	109	108	80-126	1	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	108	106	81-124	1	30
Naphthalene	0.050	U	0.050	0.030	ug/l	107	106	75-120	1	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	79	82	36-120	4	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	81	93	57-145	14	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	104	103	75-120	1	30
Pyrene	0.050	U	0.050	0.010	ug/l	107	107	71-130	1	30
Batch number: 13322WAB026	Sample number(s): 7275661									
Acenaphthene	0.5	U	0.5	0.1	ug/l	88	94	69-122	7	30
Acenaphthylene	0.5	U	0.5	0.1	ug/l	103	109	84-125	6	30
Aniline	1	U	1.	0.5	ug/l	73	77	44-101	5	30
Anthracene	0.5	U	0.5	0.1	ug/l	92	98	82-116	6	30
Benzidine	60	U	60.	20	ug/l	46	54	20-82	16	30
Benzo(a)anthracene	0.5	U	0.5	0.1	ug/l	89	92	84-121	3	30
Benzo(a)pyrene	0.5	U	0.5	0.1	ug/l	97	103	82-116	6	30
Benzo(b)fluoranthene	0.5	U	0.5	0.1	ug/l	94	101	82-121	7	30
Benzo(g,h,i)perylene	0.5	U	0.5	0.1	ug/l	90	94	81-121	4	30
Benzo(k)fluoranthene	0.5	U	0.5	0.1	ug/l	97	102	81-122	5	30
Benzoic acid	15	U	15.	6	ug/l	43	49	10-69	13	30
Benzyl alcohol	15	U	15.	5	ug/l	87	90	59-114	3	30
1,1'-Biphenyl	1	U	1.	0.5	ug/l	87	95	60-120	8	30
4-Bromophenyl-phenylether	1	U	1.	0.5	ug/l	85	91	75-115	7	30
Butylbenzylphthalate	5	U	5.	2	ug/l	89	91	70-122	3	30
Di-n-butylphthalate	5	U	5.	2	ug/l	88	95	72-120	8	30
Carbazole	1	U	1.	0.5	ug/l	89	97	70-128	9	30
4-Chloro-3-methylphenol	1	U	1.	0.5	ug/l	94	97	67-131	3	30
4-Chloroaniline	1	U	1.	0.5	ug/l	80	85	46-112	6	30
bis(2-Chloroethoxy)methane	1	U	1.	0.5	ug/l	88	92	65-125	4	30
bis(2-Chloroethyl)ether	1	U	1.	0.5	ug/l	89	93	73-112	5	30
bis(2-Chloroisopropyl)ether	1	U	1.	0.5	ug/l	91	93	67-115	2	30
2-Chloronaphthalene	1	U	1.	0.4	ug/l	91	97	60-138	6	30
2-Chlorophenol	1	U	1.	0.5	ug/l	89	92	76-111	4	30
4-Chlorophenyl-phenylether	1	U	1.	0.5	ug/l	87	94	77-114	7	30
Chrysene	0.5	U	0.5	0.1	ug/l	87	90	81-120	4	30
Dibenz(a,h)anthracene	0.5	U	0.5	0.1	ug/l	97	98	83-124	2	30
Dibenzofuran	1	U	1.	0.5	ug/l	90	95	81-110	6	30
1,2-Dichlorobenzene	1	U	1.	0.5	ug/l	87	89	69-107	2	30
1,3-Dichlorobenzene	1	U	1.	0.5	ug/l	83	87	57-115	5	30
1,4-Dichlorobenzene	1	U	1.	0.5	ug/l	86	89	61-109	3	30
3,3'-Dichlorobenzidine	5	U	5.	2	ug/l	59	65	47-108	11	30
2,4-Dichlorophenol	1	U	1.	0.5	ug/l	91	96	84-114	5	30
2,6-Dichlorophenol	1	U	1.	0.5	ug/l					
Diethylphthalate	5	U	5.	2	ug/l	85	92	60-121	8	30
2,4-Dimethylphenol	1	U	1.	0.5	ug/l	89	94	66-125	6	30
3,5-Dimethylphenol	10	U	10.	3	ug/l					
Dimethylphthalate	5	U	5.	2	ug/l	84	93	50-127	9	30
4,6-Dinitro-2-methylphenol	15	U	15.	5	ug/l	68	73	68-131	7	30
2,4-Dinitrophenol	30	U	30.	10	ug/l	59	62	43-137	5	30
1,2-Diphenylhydrazine	1	U	1.	0.5	ug/l	89	96	68-127	7	30
bis(2-Ethylhexyl)phthalate	5	U	5.	2	ug/l	86	89	78-117	4	30
Fluoranthene	0.5	U	0.5	0.1	ug/l	93	100	71-129	8	30

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluorene	0.5	U	0.5	0.1	ug/l	89	95	71-126	6	30
Hexachlorobenzene	0.5	U	0.5	0.1	ug/l	86	94	74-126	8	30
Hexachlorobutadiene	1	U	1.	0.5	ug/l	86	94	56-119	10	30
Hexachlorocyclopentadiene	15	U	15.	5	ug/l	79	91	21-126	14	30
Hexachloroethane	5	U	5.	1	ug/l	85	89	55-109	4	30
Indeno(1,2,3-cd)pyrene	0.5	U	0.5	0.1	ug/l	95	98	83-121	3	30
Isophorone	1	U	1.	0.5	ug/l	95	99	68-124	4	30
1-Methylnaphthalene	0.5	U	0.5	0.1	ug/l	96	100	83-116	4	30
2-Methylnaphthalene	0.5	U	0.5	0.1	ug/l	86	90	63-120	4	30
2-Methylphenol	1	U	1.	0.5	ug/l	90	91	61-118	1	30
4-Methylphenol	1	U	1.	0.5	ug/l	86	87	54-112	2	30
Naphthalene	0.5	U	0.5	0.1	ug/l	89	93	75-108	5	30
NDPA as diphenylamine	5	U	5.	2	ug/l	85	93	70-130	8	30
2-Nitroaniline	1	U	1.	0.5	ug/l	97	104	84-122	7	30
3-Nitroaniline	1	U	1.	0.5	ug/l	91	100	70-118	8	30
4-Nitroaniline	1	U	1.	0.5	ug/l	78	85	61-110	8	30
Nitrobenzene	1	U	1.	0.5	ug/l	91	96	67-123	4	30
2-Nitrophenol	1	U	1.	0.5	ug/l	88	95	84-118	7	30
4-Nitrophenol	30	U	30.	10	ug/l	54	58	16-91	6	30
N-Nitroso-di-n-propylamine	1	U	1.	0.5	ug/l	91	95	71-117	4	30
N-Nitrosodimethylamine	5	U	5.	2	ug/l	70	72	38-98	2	30
N-Nitrosodiphenylamine	1	U	1.	0.5	ug/l	86	94	80-115	9	30
Di-n-octylphthalate	5	U	5.	2	ug/l	99	104	72-129	5	30
Pentachlorophenol	5	U	5.	1	ug/l	82	87	50-129	6	30
Phenanthrene	0.5	U	0.5	0.1	ug/l	91	97	68-127	6	30
Phenol	1	U	1.	0.5	ug/l	57	58	23-82	2	30
Pyrene	0.5	U	0.5	0.1	ug/l	90	95	81-112	6	30
Pyridine	5	U	5.	2	ug/l	63	64	22-96	2	30
1,2,4-Trichlorobenzene	1	U	1.	0.5	ug/l	88	92	71-112	5	30
2,4,5-Trichlorophenol	1	U	1.	0.5	ug/l	95	103	81-121	8	30
2,4,6-Trichlorophenol	1	U	1.	0.5	ug/l	92	100	84-119	8	30
Batch number: 13325SLA026	Sample number(s): 7275662-7275665,7275670-7275674									
Acenaphthene	17	U	17.	3	ug/kg	99		83-111		
Acenaphthylene	17	U	17.	3	ug/kg	110		83-127		
Aniline	330 U		330.	170	ug/kg	71		43-110		
Anthracene	17	U	17.	3	ug/kg	103		82-118		
Benzidine	1,700 U		1,700.	700	ug/kg	49		25-74		
Benzo(a)anthracene	17	U	17.	3	ug/kg	98		81-117		
Benzo(a)pyrene	17	U	17.	3	ug/kg	105		84-122		
Benzo(b)fluoranthene	17	U	17.	3	ug/kg	112		76-124		
Benzo(g,h,i)perylene	17	U	17.	3	ug/kg	104		77-122		
Benzo(k)fluoranthene	17	U	17.	3	ug/kg	98		80-125		
Benzoic acid	500 U		500.	170	ug/kg	83		41-122		
Benzyl alcohol	330 U		330.	170	ug/kg	97		78-115		
1,1'-Biphenyl	33	U	33.	17	ug/kg	96		76-117		
4-Bromophenyl-phenylether	33	U	33.	17	ug/kg	105		84-120		
Butylbenzylphthalate	170 U		170.	67	ug/kg	100		80-118		
Di-n-butylphthalate	170 U		170.	67	ug/kg	108		84-120		
Carbazole	33	U	33.	17	ug/kg	101		84-119		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Chloro-3-methylphenol	33	U	33.	17	ug/kg	108		80-124		
4-Chloroaniline	33	U	33.	17	ug/kg	49		10-100		
bis(2-Chloroethoxy)methane	33	U	33.	17	ug/kg	75		71-121		
bis(2-Chloroethyl)ether	33	U	33.	17	ug/kg	92		77-115		
bis(2-Chloroisopropyl)ether	33	U	33.	17	ug/kg	93		68-118		
2-Chloronaphthalene	33	U	33.	7	ug/kg	123		56-144		
2-Chlorophenol	33	U	33.	17	ug/kg	102		80-122		
4-Chlorophenyl-phenylether	33	U	33.	17	ug/kg	102		83-115		
Chrysene	17	U	17.	3	ug/kg	93		77-116		
Dibenz(a,h)anthracene	17	U	17.	3	ug/kg	103		81-123		
Dibenzofuran	33	U	33.	17	ug/kg	101		85-115		
1,2-Dichlorobenzene	33	U	33.	17	ug/kg	94		79-112		
1,3-Dichlorobenzene	33	U	33.	17	ug/kg	94		79-113		
1,4-Dichlorobenzene	33	U	33.	17	ug/kg	96		79-112		
3,3'-Dichlorobenzidine	330 U		330.	100	ug/kg	39		10-119		
2,4-Dichlorophenol	33	U	33.	17	ug/kg	109		81-123		
2,6-Dichlorophenol	33	U	33.	17	ug/kg	100	98	77-113	2	30
Diethylphthalate	170 U		170.	67	ug/kg	106		82-113		
2,4-Dimethylphenol	33	U	33.	17	ug/kg	109		83-120		
3,5-Dimethylphenol	170 U		170.	33	ug/kg	108		70-130		
Dimethylphthalate	170 U		170.	67	ug/kg	106		82-113		
4,6-Dinitro-2-methylphenol	500 U		500.	170	ug/kg	92		56-132		
2,4-Dinitrophenol	660 U		660.	300	ug/kg	81		24-136		
1,2-Diphenylhydrazine	33	U	33.	17	ug/kg	109		77-111		
bis(2-Ethylhexyl)phthalate	170 U		170.	67	ug/kg	101		75-124		
Fluoranthene	17	U	17.	3	ug/kg	102		79-123		
Fluorene	17	U	17.	3	ug/kg	101		86-118		
Hexachlorobenzene	17	U	17.	3	ug/kg	106		80-121		
Hexachlorobutadiene	33	U	33.	17	ug/kg	107		76-115		
Hexachlorocyclopentadiene	500 U		500.	170	ug/kg	123		70-138		
Hexachloroethane	170 U		170.	33	ug/kg	100		76-109		
Indeno(1,2,3-cd)pyrene	17	U	17.	3	ug/kg	105		77-122		
Isophorone	33	U	33.	17	ug/kg	105		77-119		
1-Methylnaphthalene	17	U	17.	3	ug/kg	108		77-115		
2-Methylnaphthalene	17	U	17.	3	ug/kg	96		80-114		
2-Methylphenol	33	U	33.	17	ug/kg	99		82-125		
4-Methylphenol	33	U	33.	17	ug/kg	92		73-124		
Naphthalene	17	U	17.	3	ug/kg	98		83-112		
NDPA as diphenylamine	170 U		170.	33	ug/kg	103		70-130		
2-Nitroaniline	33	U	33.	17	ug/kg	101		84-126		
3-Nitroaniline	170 U		170.	67	ug/kg	95		69-122		
4-Nitroaniline	170 U		170.	67	ug/kg	73		51-107		
Nitrobenzene	33	U	33.	17	ug/kg	107		73-118		
2-Nitrophenol	33	U	33.	17	ug/kg	104		83-125		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Nitrophenol	500 U		500.	170	ug/kg	109		55-133		
N-Nitroso-di-n-propylamine	33	U	33.	17	ug/kg	98		70-113		
N-Nitrosodimethylamine	170 U		170.	67	ug/kg	84		67-116		
N-Nitrosodiphenylamine	33	U	33.	17	ug/kg	104		83-118		
Di-n-octylphthalate	170 U		170.	67	ug/kg	109		75-136		
Pentachlorophenol	170 U		170.	33	ug/kg	87		56-132		
Phenanthrene	17	U	17.	3	ug/kg	101		85-116		
Phenol	33	U	33.	17	ug/kg	90		76-124		
Pyrene	17	U	17.	3	ug/kg	97		81-114		
Pyridine	170 U		170.	67	ug/kg	74		45-113		
1,2,4-Trichlorobenzene	33	U	33.	17	ug/kg	105		84-119		
2,4,5-Trichlorophenol	33	U	33.	17	ug/kg	104		86-123		
2,4,6-Trichlorophenol	33	U	33.	17	ug/kg	105		81-123		
Batch number: 13318B94A	Sample number(s): 7275661,7275675									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	109	110	75-135	1	30
Batch number: 13322A16A	Sample number(s): 7275663-7275665,7275670-7275671,7275673-7275674									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	78		67-119		
Batch number: 133200033A	Sample number(s): 7275661									
2,4-D	0.50	U	0.50	0.16	ug/l	102	145	68-155	35*	30
Dalapon	1.3	U	1.3	0.25	ug/l	52	85	25-119	48*	30
2,4-DB	1.0	U	1.0	0.30	ug/l	91	129	50-163	35*	30
Dicamba	0.30	U	0.30	0.080	ug/l	78	108	64-163	33*	30
Dinoseb	0.50	U	0.50	0.12	ug/l	168*	223*	16-163	28	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	106	146	89-162	31*	30
MCPA	200 U		200.	50	ug/l	71	104	68-154	39*	30
MCPP	200 U		200.	50	ug/l	79	142	46-173	57*	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	88	124	71-174	34*	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	88	121	58-155	32*	30
Batch number: 133220036A	Sample number(s): 7275662-7275665,7275670-7275671									
2,4-D	36	U	36.	12	ug/kg	111		59-122		
Dalapon	90	U	90.	44	ug/kg	76		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	111		54-131		
Dicamba	12	U	12.	4.0	ug/kg	95		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	32		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	130		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	91		56-133		
MCPP (Mecoprop)	2,500 U		2,500.	750	ug/kg	94		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	100		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	107		63-130		
Batch number: 133220007A	Sample number(s): 7275661									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	66	70	45-125	5	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	80	83	51-139	3	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Beta BHC	0.0080 U	0.0080	0.0027	ug/l	80	82	57-127	3	30
Gamma BHC - Lindane	0.0080 U	0.0080	0.0016	ug/l	77	79	57-133	3	30
Chlordane	0.40 U	0.40	0.13	ug/l					
p,p-DDD	0.016 U	0.016	0.0040	ug/l	77	81	55-145	5	30
p,p-DDE	0.016 U	0.016	0.0040	ug/l	78	79	58-130	2	30
p,p-DDT	0.016 U	0.016	0.0042	ug/l	78	79	45-140	2	30
Delta BHC	0.0080 U	0.0080	0.0027	ug/l	79	82	52-133	4	30
Dieldrin	0.016 U	0.016	0.0042	ug/l	79	83	60-135	5	30
Endosulfan I	0.0080 U	0.0080	0.0034	ug/l	75	80	56-128	6	30
Endosulfan II	0.016 U	0.016	0.012	ug/l	78	83	53-123	6	30
Endosulfan Sulfate	0.016 U	0.016	0.0046	ug/l	78	79	51-130	1	30
Endrin	0.016 U	0.016	0.0065	ug/l	78	79	43-139	1	30
Endrin Aldehyde	0.080 U	0.080	0.016	ug/l	76	77	50-122	1	20
Endrin Ketone	0.016 U	0.016	0.0040	ug/l	75	80	51-133	6	30
Heptachlor	0.0080 U	0.0080	0.0016	ug/l	72	75	48-130	5	30
Heptachlor Epoxide	0.0080 U	0.0080	0.0018	ug/l	78	82	65-128	4	30
Methoxychlor	0.080 U	0.080	0.024	ug/l	84	86	40-150	3	30
Mirex	0.040 U	0.040	0.0080	ug/l					
Toxaphene	0.80 U	0.80	0.24	ug/l					
Batch number: 133220008A	Sample number(s): 7275661								
Aroclor 5432	0.40 U	0.40	0.080	ug/l					
Aroclor 5442	0.40 U	0.40	0.080	ug/l	74	73	35-84	1	30
Aroclor 5460	0.40 U	0.40	0.088	ug/l					
PCB-1016	0.40 U	0.40	0.080	ug/l	91	99	67-117	9	30
PCB-1221	0.40 U	0.40	0.080	ug/l					
PCB-1232	0.40 U	0.40	0.16	ug/l					
PCB-1242	0.40 U	0.40	0.080	ug/l					
PCB-1248	0.40 U	0.40	0.080	ug/l					
PCB-1254	0.40 U	0.40	0.080	ug/l					
PCB-1260	0.40 U	0.40	0.12	ug/l	85	104	67-128	21	30
PCB-1262	0.40 U	0.40	0.16	ug/l					
PCB-1268	0.40 U	0.40	0.13	ug/l					
Batch number: 133220016A	Sample number(s): 7275672-7275674								
Aldrin	0.83 U	0.83	0.17	ug/kg	102		60-118		
Alpha BHC	0.83 U	0.83	0.17	ug/kg	107		62-128		
Beta BHC	1.9 U	1.9	0.96	ug/kg	108		69-121		
Gamma BHC - Lindane	0.83 U	0.83	0.17	ug/kg	106		64-130		
Chlordane	17 U	17.	4.0	ug/kg					
p,p-DDD	1.7 U	1.7	0.33	ug/kg	117		69-141		
p,p-DDE	1.7 U	1.7	0.33	ug/kg	119		69-130		
p,p-DDT	1.7 U	1.7	0.35	ug/kg	116		64-139		
Delta BHC	0.83 U	0.83	0.45	ug/kg	111		51-141		
Dieldrin	1.7 U	1.7	0.33	ug/kg	114		73-135		
Endosulfan I	0.83 U	0.83	0.22	ug/kg	105		64-130		
Endosulfan II	1.7 U	1.7	0.33	ug/kg	109		68-128		
Endosulfan Sulfate	1.7 U	1.7	0.33	ug/kg	115		71-132		
Endrin	1.7 U	1.7	0.33	ug/kg	112		70-132		
Endrin Aldehyde	1.7 U	1.7	0.33	ug/kg	102		60-120		
Endrin Ketone	1.8 U	1.8	0.60	ug/kg	106		74-127		
Heptachlor	0.83 U	0.83	0.17	ug/kg	107		62-127		
Heptachlor Epoxide	0.83 U	0.83	0.17	ug/kg	111		69-125		
Methoxychlor	6.7 U	6.7	1.7	ug/kg	118		67-136		
Mirex	1.7 U	1.7	0.35	ug/kg					
Toxaphene	33 U	33.	14	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 133240013A	Sample number(s): 7275662-7275665,7275670-7275674									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	82	81	62-87	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	102		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	107		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133220028A	Sample number(s): 7275661									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	76	84	70-130	10	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	84	90	70-130	8	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	82	89	70-130	8	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	45*	56*	70-130	23	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	55*	65*	70-130	16	30
Batch number: 133230031A	Sample number(s): 7275662-7275665,7275670-7275674									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	79		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	82		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	81		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	72		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	67		60-115		
Batch number: 133240635002	Sample number(s): 7275661									
Aluminum	0.400	U	0.400	0.0828	mg/l	103	103	90-112	0	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	106	106	88-111	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	100	100	90-113	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	101	101	90-110	0	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	99	99	90-111	0	20
Boron	0.100	U	0.100	0.0084	mg/l	97	97	90-110	0	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	102	100	90-112	1	20
Calcium	0.400	U	0.400	0.0334	mg/l	101	101	90-112	0	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	101	100	90-110	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	102	101	90-110	1	20
Copper	0.0200	U	0.0200	0.0027	mg/l	102	103	90-112	1	20
Iron	0.400	U	0.400	0.0430	mg/l	103	102	90-112	1	20
Lead	0.0300	U	0.0300	0.0047	mg/l	103	103	88-110	0	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	102	102	90-110	0	20
Magnesium	0.200	U	0.200	0.0167	mg/l	100	101	89-110	1	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	102	102	90-110	0	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	103	103	90-110	0	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	104	103	90-111	1	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	102	101	90-110	0	20
Potassium	1.00	U	1.00	0.0980	mg/l	100	99	90-110	1	20
Sodium	2.00	U	2.00	0.167	mg/l	101	101	87-114	0	20
Tin	0.0400	U	0.0400	0.0029	mg/l	102	101	90-110	0	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	104	103	90-113	0	20
Vanadium	0.0100	U	0.0100	0.0020	mg/l	103	103	90-110	0	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	101	100	90-110	1	20
Zirconium	0.100	U	0.100	0.0084	mg/l	104	104	90-110	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 133240639002A	Sample number(s): 7275661								
Silver	0.0010 U	0.0010	0.00011	mg/l	100	103	90-115	3	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	102	100	90-110	2	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	104	104	90-115	0	20
Batch number: 133240639002B	Sample number(s): 7275661								
Selenium	0.0040 U	0.0040	0.00050	mg/l	98	108	90-120	9	20
Batch number: 133250637003	Sample number(s): 7275662-7275665,7275669-7275674								
Aluminum	19.2 J	40.0	7.21	mg/kg	101		80-120		
Antimony	4.00 U	4.00	0.740	mg/kg	108		80-120		
Arsenic	4.00 U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00 U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00 U	1.00	0.0670	mg/kg	105		80-120		
Boron	10.0 U	10.0	0.840	mg/kg	103		80-120		
Cadmium	1.00 U	1.00	0.0760	mg/kg	105		80-120		
Calcium	22.5	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	103		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	106		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	108		80-120		
Iron	8.11 J	40.0	3.62	mg/kg	102		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	109		80-120		
Lithium	4.0 U	4.0	0.34	mg/kg	105		80-120		
Magnesium	19.6	10.0	1.67	mg/kg	101		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	106		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00 U	2.00	0.130	mg/kg	108		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	107		80-120		
Potassium	100 U	100.	8.34	mg/kg	100		80-120		
Sodium	100 U	100.	16.7	mg/kg	100		80-120		
Tin	1.56 J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	105		80-120		
Vanadium	1.00 U	1.00	0.130	mg/kg	102		80-120		
Zinc	4.00 U	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00 U	5.00	0.840	mg/kg	102		80-120		
Batch number: 133250637003A	Sample number(s): 7275662-7275665,7275669-7275674								
Silver	0.200 U	0.200	0.0260	mg/kg	112		80-120		
Strontium	0.400 U	0.400	0.0680	mg/kg	105		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	105		80-120		
Batch number: 133250637003B	Sample number(s): 7275662-7275665,7275669-7275674								
Selenium	0.400 U	0.400	0.100	mg/kg	113		80-120		
Batch number: 133250638001	Sample number(s): 7275662-7275665,7275669-7275674								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	93		85-120		
Batch number: 133255713006	Sample number(s): 7275661								
3b Mercury 7470A	0.00020 U	0.00020	0.00006 0	mg/l	99	105	90-115	6	20
Batch number: 13317987301B	Sample number(s): 7275661								
2b Chromium VI by EPA 7199	10.0 U	10.0	5.0	ug/l	98	97	90-110	1	20

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13322243201A	Sample number(s): 7275662-7275663,7275666-7275671									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	84		80-120		
Batch number: 13317039403A	Sample number(s): 7275662,7275670-7275674									
15a pH by 9045D						100		95-105		
Batch number: 13317039403B	Sample number(s): 7275663,7275669									
15a pH by 9045D						100		95-105		
Batch number: 13318002201A	Sample number(s): 7275661									
28b pH (9040B and 9040C)						99		93-106		
Batch number: 13323162402A	Sample number(s): 7275662-7275674									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13323002	Sample number(s): 7275661									
2378-TCDD	0.726	J	2.00	0.425	pg/l	112		60-150		
12378-PeCDD	0.830	J	10.0	0.398	pg/l	114		60-150		
123478-HxCDD	0.655	J	10.0	0.238	pg/l	115		60-150		
123678-HxCDD	0.743	J	10.0	0.253	pg/l	118		60-150		
123789-HxCDD	0.571	J	10.0	0.242	pg/l	118		60-150		
1234678-HpCDD	0.616	J	10.0	0.319	pg/l	116		60-150		
OCDD	2.62	J	20.0	0.301	pg/l	117		60-150		
2378-TCDF	2.00	U	2.00	0.302	pg/l	116		60-150		
12378-PeCDF	1.16	J	10.0	0.217	pg/l	120		60-150		
23478-PeCDF	0.618	J	10.0	0.194	pg/l	123		60-150		
123478-HxCDF	0.912	J	10.0	0.187	pg/l	123		60-150		
123678-HxCDF	1.05	J	10.0	0.185	pg/l	125		60-150		
123789-HxCDF	1.12	J	10.0	0.203	pg/l	125		60-150		
234678-HxCDF	1.11	J	10.0	0.182	pg/l	127		60-150		
1234678-HpCDF	0.958	J	10.0	0.0969	pg/l	122		60-150		
1234789-HpCDF	0.986	J	10.0	0.115	pg/l	122		60-150		
OCDF	2.54	J	20.0	0.404	pg/l	122		60-150		
Batch number: 13324003	Sample number(s): 7275662,7275672-7275674									
2378-TCDD	0.0670	J	1.00	0.0645	ng/kg	102		67-158		
12378-PeCDD	0.0804	J	5.00	0.0510	ng/kg	111		70-142		
123478-HxCDD	0.0412	J	5.00	0.0313	ng/kg	110		70-164		
123678-HxCDD	0.0407	J	5.00	0.0321	ng/kg	112		76-134		
123789-HxCDD	0.0742	J	5.00	0.0312	ng/kg	115		64-162		
1234678-HpCDD	0.0721	J	5.00	0.0334	ng/kg	108		70-140		
OCDD	0.213	J	10.0	0.0371	ng/kg	105		78-144		
2378-TCDF	1.00	U	1.00	0.0673	ng/kg	108		75-158		
12378-PeCDF	0.121	J	5.00	0.0308	ng/kg	110		80-134		
23478-PeCDF	0.0714	J	5.00	0.0325	ng/kg	110		68-160		
123478-HxCDF	0.0890	J	5.00	0.0249	ng/kg	109		72-134		
123678-HxCDF	0.0519	J	5.00	0.0221	ng/kg	112		84-130		
123789-HxCDF	0.0575	J	5.00	0.0283	ng/kg	109		78-130		
234678-HxCDF	0.0893	J	5.00	0.0237	ng/kg	112		70-156		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
1234678-HpCDF	0.0746 J	5.00	0.0134	ng/kg	108		82-122		
1234789-HpCDF	0.0711 J	5.00	0.0221	ng/kg	110		78-138		
OCDF	0.233 J	10.0	0.0460	ng/kg	111		63-170		
Batch number: 13323002	Sample number(s): 7275661								
TEQ WHO 2005 - EDLx0.0	0.278			pg/l					
Batch number: 13324003	Sample number(s): 7275662,7275672-7275674								
TEQ WHO 2005 - EDLx0.0	0.00970			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13322SLE026	Sample number(s): 7275662-7275665,7275670-7275674 UNSPK: 7275663								
Acenaphthene	104	102	48-127	2	30				
Acenaphthylene	103	101	49-121	2	30				
Anthracene	102	100	52-126	2	30				
Benzo(a)anthracene	102	102	44-143	0	30				
Benzo(a)pyrene	100	98	44-140	2	30				
Benzo(b)fluoranthene	105	102	26-142	3	30				
Benzo(e)pyrene	92	89	70-130	3	30				
Benzo(g,h,i)perylene	89	86	33-141	3	30				
Benzo(k)fluoranthene	105	104	54-142	1	30				
Butylbenzylphthalate	116	119	49-151	2	30				
Di-n-butylphthalate	117	118	52-147	1	30				
Chrysene	100	98	29-148	3	30				
Dibenz(a,h)anthracene	97	94	20-137	3	30				
Diethylphthalate	111	106	43-145	5	30				
Dimethylphthalate	104	101	58-129	3	30				
Bis(2-Ethylhexyl)phthalate	123	124	39-167	1	30				
Fluoranthene	101	100	40-148	1	30				
Fluorene	101	98	51-137	3	30				
Indeno(1,2,3-cd)pyrene	94	92	17-136	3	30				
1-Methylnaphthalene	102	99	50-131	3	30				
2-Methylnaphthalene	100	97	35-152	2	30				
Naphthalene	99	96	31-148	3	30				
N-Nitrosodimethylamine	94	91	48-113	3	30				
Di-n-octylphthalate	116	114	52-162	2	30				
Phenanthrene	97	97	29-142	0	30				
Pyrene	99	98	26-143	0	30				
Batch number: 13325SLA026	Sample number(s): 7275662-7275665,7275670-7275674 UNSPK: 7275663								
Acenaphthene	96	98	61-128	2	30				
Acenaphthylene	107	109	67-130	2	30				
Aniline	61	70	10-131	14	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Anthracene	98	102	41-142	5	30				
Benzidine	45	45	35-141	2	30				
Benzo(a)anthracene	97	94	32-150	3	30				
Benzo(a)pyrene	103	103	36-151	0	30				
Benzo(b)fluoranthene	105	113	29-150	7	30				
Benzo(g,h,i)perylene	104	100	41-147	4	30				
Benzo(k)fluoranthene	101	97	44-145	4	30				
Benzoic acid	53	60	23-170	13	30				
Benzyl alcohol	93	96	32-145	3	30				
1,1'-Biphenyl	92	95	64-120	3	30				
4-Bromophenyl-phenylether	101	105	66-122	4	30				
Butylbenzylphthalate	103	101	67-126	2	30				
Di-n-butylphthalate	102	105	70-124	3	30				
Carbazole	98	100	63-126	2	30				
4-Chloro-3-methylphenol	103	111	61-131	7	30				
4-Chloroaniline	53	64	11-114	19	30				
bis(2-Chloroethoxy)methane	72	74	58-122	2	30				
bis(2-Chloroethyl)ether	82	91	66-122	10	30				
bis(2-Chloroisopropyl)ether	82	90	50-115	10	30				
2-Chloronaphthalene	124	127	50-140	3	30				
2-Chlorophenol	93	105	71-130	12	30				
4-Chlorophenyl-phenylether	104	107	65-117	3	30				
Chrysene	94	92	28-146	3	30				
Dibenz(a,h)anthracene	103	99	54-142	4	30				
Dibenzofuran	98	102	65-124	4	30				
1,2-Dichlorobenzene	87	97	72-114	11	30				
1,3-Dichlorobenzene	86	94	67-118	10	30				
1,4-Dichlorobenzene	88	95	68-119	9	30				
3,3'-Dichlorobenzidine	50	33	10-143	43*	30				
2,4-Dichlorophenol	106	111	54-135	5	30				
Diethylphthalate	103	107	66-120	4	30				
2,4-Dimethylphenol	106	109	62-132	3	30				
3,5-Dimethylphenol	99	107	70-130	8	30				
Dimethylphthalate	101	105	69-119	4	30				
4,6-Dinitro-2-methylphenol	87	86	10-148	1	30				
2,4-Dinitrophenol	75	69	20-143	8	30				
1,2-Diphenylhydrazine	103	106	51-145	2	30				
bis(2-Ethylhexyl)phthalate	100	102	60-134	2	30				
Fluoranthene	98	101	30-151	3	30				
Fluorene	98	102	55-128	4	30				
Hexachlorobenzene	103	104	46-132	1	30				
Hexachlorobutadiene	105	107	65-125	2	30				
Hexachlorocyclopentadiene	120	118	10-153	1	30				
Hexachloroethane	90	98	24-138	9	30				
Indeno(1,2,3-cd)pyrene	105	101	44-147	3	30				
Isophorone	102	104	68-119	1	30				
1-Methylnaphthalene	103	109	82-115	5	30				
2-Methylnaphthalene	94	98	39-140	4	30				
2-Methylphenol	88	98	62-133	11	30				
4-Methylphenol	80	92	59-132	14	30				
Naphthalene	96	97	44-142	1	30				
NDPA as diphenylamine	99	102	70-130	4	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Nitroaniline	97	102	64-131	5	30				
3-Nitroaniline	95	103	31-145	8	30				
4-Nitroaniline	68	72	30-131	6	30				
Nitrobenzene	103	108	63-125	5	30				
2-Nitrophenol	100	102	45-146	2	30				
4-Nitrophenol	100	109	25-142	8	30				
N-Nitroso-di-n-propylamine	86	97	58-126	13	30				
N-Nitrosodimethylamine	72	85	52-117	16	30				
N-Nitrosodiphenylamine	99	103	59-135	4	30				
Di-n-octylphthalate	107	111	48-155	4	30				
Pentachlorophenol	77	77	23-145	0	30				
Phenanthrene	96	97	34-147	1	30				
Phenol	83	94	61-130	12	30				
Pyrene	97	97	29-148	1	30				
Pyridine	60	67	16-108	11	30				
1,2,4-Trichlorobenzene	103	104	66-116	1	30				
2,4,5-Trichlorophenol	99	100	64-131	1	30				
2,4,6-Trichlorophenol	98	106	60-136	8	30				
Batch number: 13322A16A	Sample number(s): 7275663-7275665,7275670-7275671,7275673-7275674 UNSPK: 7275663								
11a TPH by EPA 8015B GRO	75	72	69-123	6	30				
Batch number: 133220036A	Sample number(s): 7275662-7275665,7275670-7275671 UNSPK: 7275663								
2,4-D	119	115	42-143	3	35				
Dalapon	76	74	16-98	3	50				
2,4-DB	115	114	10-179	1	50				
Dicamba	94	90	55-133	5	50				
Dinoseb	27	25	10-52	5	35				
2,4-DP (Dichlorprop)	132	130	32-171	2	50				
MCPA	96	93	23-169	4	50				
MCPP (Mecoprop)	97	92	24-164	5	50				
2,4,5-T	108	109	12-172	1	35				
2,4,5-TP	108	107	10-142	1	35				
Batch number: 133220016A	Sample number(s): 7275672-7275674 UNSPK: 7275672								
Aldrin	98	98	16-126	0	50				
Alpha BHC	99	97	14-140	2	50				
Beta BHC	104	105	42-133	0	50				
Gamma BHC - Lindane	98	95	30-137	4	50				
p,p-DDD	112	111	43-149	0	50				
p,p-DDE	109	111	35-152	1	50				
p,p-DDT	107	107	12-193	0	50				
Delta BHC	106	105	13-153	1	50				
Dieldrin	106	104	41-153	2	50				
Endosulfan I	98	97	26-146	1	50				
Endosulfan II	103	104	34-141	1	50				
Endosulfan Sulfate	108	110	10-181	1	50				
Endrin	105	104	30-152	1	50				
Endrin Aldehyde	94	97	23-138	3	50				
Endrin Ketone	99	100	30-148	1	50				
Heptachlor	99	97	16-152	1	50				
Heptachlor Epoxide	104	103	33-144	1	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Methoxychlor	113	115	41-161	2	50				
Batch number: 133240013A	Sample number(s): 7275662-7275665,7275670-7275674 UNSPK: 7275663								
PCB-1016	93	93	41-135	0	50				
PCB-1260	96	95	40-134	0	50				
Batch number: 133230031A	Sample number(s): 7275662-7275665,7275670-7275674 UNSPK: 7275663								
EFH (C12-C14)	84	80	49-123	4	20				
EFH (C15-C20)	88	83	49-123	5	20				
EFH (C21-C30)	87	83	49-123	5	20				
EFH (C30-C40)	71	77	49-123	9	20				
EFH (C8-C11)	70	68	49-123	2	20				
Batch number: 133250637003	Sample number(s): 7275662-7275665,7275669-7275674 UNSPK: 7275663 BKG: 7275663								
Aluminum	-117 (2)	2431 (2)	75-125	30*	20	14,000	14,000	0	20
Antimony	62*	48*	75-125	30*	20	3.88 U	3.92 U	0 (1)	20
Arsenic	92	129*	75-125	22*	20	5.47	4.98	9 (1)	20
Barium	103	114	75-125	5	20	59.7	59.6	0	20
Beryllium	101	109	75-125	3	20	0.648 J	0.621 J	4 (1)	20
Boron	98	99	75-125	4	20	1.84 J	1.73 J	6 (1)	20
Cadmium	97	93	75-125	8	20	0.971 U	0.980 U	0 (1)	20
Calcium	131 (2)	792 (2)	75-125	63*	20	2,200	2,160	2	20
Chromium	88	144*	75-125	26*	20	15.8	15.8	0	20
Cobalt	98	99	75-125	3	20	3.08	3.18	3 (1)	20
Copper	93	127*	75-125	23*	20	5.76	5.61	3 (1)	20
Iron	-1719 (2)	9674 (2)	75-125	45*	20	20,600	20,200	2	20
Lead	88	127*	75-125	24*	20	6.13	5.79	6 (1)	20
Lithium	101	106	75-125	1	20	12.3	12.4	1 (1)	20
Magnesium	196 (2)	1134 (2)	75-125	38*	20	3,410	3,400	0	20
Manganese	124	192*	75-125	14	20	143	149	4	20
Molybdenum	95	93	75-125	6	20	0.252 J	1.96 U	200* (1)	20
Nickel	97	107	75-125	5	20	7.87	7.93	1 (1)	20
Phosphorus	260*	137*	75-125	39*	20	130	131	1	20
Potassium	161*	191*	75-125	6	20	2,040	2,140	5	20
Sodium	96	104	75-125	3	20	128	130	2 (1)	20
Tin	90	87	75-125	7	20	2.87 J	2.91 J	1 (1)	20
Titanium	260 (2)	444 (2)	75-125	13	20	958	990	3	20
Vanadium	96	132*	75-125	18	20	32.1	31.5	2	20
Zinc	109	147*	75-125	15	20	44.2	43.3	2	20
Zirconium	98	99	75-125	3	20	3.98 J	4.44 J	11 (1)	20
Batch number: 133250637003A	Sample number(s): 7275662-7275665,7275669-7275674 UNSPK: 7275663 BKG: 7275663								
Silver	111	103	75-125	11	20	0.194 U	0.196 U	0 (1)	20
Strontium	115	236*	75-125	34*	20	12.8	13.8	8	20
Thallium	107	141*	75-125	16	20	0.217	0.236	8 (1)	20
Batch number: 133250637003B	Sample number(s): 7275662-7275665,7275669-7275674 UNSPK: 7275663 BKG: 7275663								
Selenium	114	115	75-125	2	20	0.388 U	0.392 U	0 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 133250638001	Sample number(s): 7275662-7275665,7275669-7275674 UNSPK: 7275663 BKG: 7275663								
3a Mercury 7471A	107	106	65-135	4	20	0.0163 U	0.0162 U	0 (1)	20
Batch number: 13322243201A	Sample number(s): 7275662-7275663,7275666-7275671 UNSPK: 7275663 BKG: 7275663								
2a Chromium VI by EPA 7199	98		75-125			0.32 J	0.31 J	1 (1)	20
Batch number: 13317039403A	Sample number(s): 7275662,7275670-7275674 BKG: P275655								
15a pH by 9045D						8.25	8.22	0	3
Batch number: 13317039403B	Sample number(s): 7275663,7275669 BKG: 7275663								
15a pH by 9045D						7.40	7.46	1	3
Batch number: 13318002201A	Sample number(s): 7275661 BKG: P272295								
28b pH (9040B and 9040C)						8.1	8.1	1	3
Batch number: 13323162402A	Sample number(s): 7275662-7275674 BKG: 7275663								
14a Moisture Content by 160.3						3.1	3.1	2	20
14a Moisture Content by 160.3						3.1	3.1	2	20
14a Moisture Content by 160.3						3.1	3.1	2	20
Batch number: 13324003	Sample number(s): 7275662,7275672-7275674 UNSPK: P275655								
2378-TCDD	101	98	40-135	1	20				
12378-PeCDD	109	111	40-135	6	20				
123478-HxCDD	109	111	40-135	5	20				
123678-HxCDD	109	112	40-135	6	20				
123789-HxCDD	107	110	40-135	7	20				
1234678-HpCDD	89	121	40-135	28*	20				
OCDD	10*	166*	40-135	81*	20				
2378-TCDF	108	106	40-135	2	20				
12378-PeCDF	108	112	40-135	7	20				
23478-PeCDF	109	110	40-135	4	20				
123478-HxCDF	109	113	40-135	7	20				
123678-HxCDF	110	110	40-135	4	20				
123789-HxCDF	109	112	40-135	6	20				
234678-HxCDF	109	112	40-135	6	20				
1234678-HpCDF	106	112	40-135	8	20				
1234789-HpCDF	111	111	40-135	3	20				
OCDF	106	113	40-135	9	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13322SLE026

Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Surrogate Quality Control

7275662	75	76	84
7275663	85	87	92
7275664	88	89	99
7275665	86	87	95
7275670	82	82	92
7275671	80	80	90
7275672	77	74	86
7275673	86	86	96
7275674	80	81	89
Blank	83	82	90
LCS	90	92	101
MS	88	89	99
MSD	86	87	95
Limits:	54-129	59-125	61-125

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13322WAA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7275661	97	94	93
Blank	99	97	93
LCS	106	106	103
LCSD	103	94	101
Limits:	44-137	62-141	51-136

Analysis Name: 8b SVOCs by EPA 8270D
Batch number: 13322WAB026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7275661	47	67	90	86	82	81
Blank	49	68	85	79	79	80
LCS	52	70	87	87	89	83
LCSD	53	72	95	92	96	89
Limits:	20-110	20-110	30-110	40-130	45-130	45-130

Analysis Name: 8a SVOCs by EPA 8270D
Batch number: 13325SLA026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7275662	85	92	97	98	98	110
7275663	86	93	107	96	94	109
7275664	82	89	97	97	95	106
7275665	89	96	105	100	98	107
7275670	89	96	113	96	101	110
7275671	87	94	103	98	97	110
7275672	89	96	99	98	96	106
7275673	87	92	103	98	98	108
7275674	93	100	104	97	98	110
Blank	87	97	112	104	102	114
LCS	93	98	104	102	100	107
LCSD	93	99	111			
MS	82	89	97	97	95	106

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Surrogate Quality Control

MSD	89	96	105	100	98	107
Limits:	25-120	25-130	35-130	40-130	45-130	45-130

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13318B94A

	Trifluorotoluene-F
7275661	87
7275675	88
Blank	84
LCS	94
LCSD	93
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13322A16A

	Trifluorotoluene-F
7275663	85
7275664	96
7275665	89
7275670	69
7275671	86
7275673	83
7275674	92
Blank	103
LCS	94
MS	96
MSD	89
Limits:	50-142

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 133200033A

	2,4-Dichlorophenylacetic acid
7275661	85
Blank	74
LCS	72
LCSD	97
Limits:	50-150

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 133220007A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7275661	96	84
Blank	107	112
LCS	79	87
LCSD	82	90
Limits:	60-140	20-120

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Surrogate Quality Control

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 133220008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7275661	97	71
Blank	86	88
LCS	98	29*
LCSD	109	79
Limits:	45-120	45-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 133220016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7275672	95	114
7275673	98	106
7275674	95	113
Blank	93	106
LCS	102	120
MS	94	109
MSD	95	110
Limits:	50-130	20-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 133220036A

	2,4-Dichlorophenylacetic acid
7275662	79
7275663	73
7275664	86
7275665	85
7275670	72
7275671	82
Blank	64
LCS	86
MS	86
MSD	85
Limits:	50-150

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133240013A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7275662	109	108
7275663	117	113
7275664	103	107
7275665	102	104
7275670	110	104
7275671	107	99
7275672	76	73
7275673	110	111

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Surrogate Quality Control

7275674	103	98
Blank	106	113
LCS	107	109
LCSD	113	120
MS	103	107
MSD	102	104
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 133220028A

	Chlorobenzene	Orthoterphenyl
7275661	118	88
Blank	93	82
LCS	89	82
LCSD	95	89
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133230031A

	Chlorobenzene	Orthoterphenyl
7275662	90	87
7275663	83	81
7275664	89	88
7275665	86	83
7275670	90	88
7275671	90	88
7275672	88	84
7275673	88	75
7275674	153*	79
Blank	84	82
LCS	84	82
MS	89	88
MSD	86	83
Limits:	37-125	66-123

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13323002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7275661	71	72	93	93	89	87
Blank	88	85	112	112	110	109
OPR	63	70	94	94	91	90
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7275661	83	77	77	65	83	81
Blank	100	94	91	77	100	98
OPR	86	86	84	62	82	81

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Surrogate Quality Control

Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7275661	80	71	66	78	72	
Blank	97	88	80	95	84	
OPR	81	77	73	74	70	
Limits:	28-130	23-140	17-157	24-169	24-185	

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13324003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7275662	75	70	74	93	82	65
7275672	52	59	66	81	72	56
7275673	68	63	71	88	76	61
7275674	72	72	75	91	80	77
Blank	71	74	80	90	88	81
MS	66	72	81	88	85	82
MSD	84	81	87	92	91	97
OPR	59	67	77	82	80	79
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7275662	124	46	34	70	87	86
7275672	115	45	34	57	74	75
7275673	117	45	34	64	75	77
7275674	116	52	40	72	82	81
Blank	107	70	69	77	90	90
MS	96	68	68	69	85	84
MSD	95	84	86	72	87	88
OPR	98	73	71	65	83	82
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7275662	84	76	72	69	83	
7275672	73	71	69	53	70	
7275673	74	68	63	65	78	
7275674	80	70	65	66	85	
Blank	88	84	81	69	83	
MS	84	75	74	67	77	
MSD	85	82	85	82	83	
OPR	77	80	80	58	70	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Grp#14336661 Sample#72756061-75

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/12/2013
CarrierName: FedEx
AirbillNo:

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131112-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-111213	11/12/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Amber	10 day							X																								
EB1-111213	11/12/13 15:00	WQ	None	2 - 1 L Amber	10 day									X																						
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Amber	10 day										X																					
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																	
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Poly	10 day															X																
EB1-111213	11/12/13 15:00	WQ	None	2 - 1 L Amber	10 day																X															
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Amber	10 day																	X														
EB1-111213	11/12/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											
EB1-111213	11/12/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																					X										
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Amber	10 day					X																										

Special Instructions:

Sampler: Pam

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11.12.13	1600									
										11/13/13	0940

acct#13013 Gp#14336661 Sample#72756661-75

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/12/2013
CarrierName: FedEx
AirbillNo:

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131112-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-560-SA5D-SB-0.0-0.5	11/12/13 08:35	SO	None	2 - SS-Sleeve	10 day	X	X			X		X		X	X						X					X										
SL-560-SA5D-SB-4.0-5.0MS	11/12/13 09:20	SO	None	6 - 16 oz glass	10 day	X	X			X		X			X			X		X	X					X										
SL-560-SA5D-SB-7.0-8.0	11/12/13 09:35	SO	None	2 - 16 oz glass	10 day	X	X			X		X			X			X		X	X					X										
SL-860-SA5D-SB-4.0-5.0	11/12/13 09:05	SO	None	2 - 16 oz glass	10 day	X	X			X		X			X			X		X	X					X										
SL-560-SA5D-SB-4.0-5.0MS	11/12/13 09:20	SO	None	6 - Encore	10 day																				X											
SL-560-SA5D-SB-0.0-0.5	11/12/13 08:35	SO	None	2 - 4 oz glass	10 day													X		X																
SL-860-SA5D-SB-4.0-5.0	11/12/13 09:05	SO	None	2 - Encore	10 day																				X											
SL-560-SA5D-SB-7.0-8.0	11/12/13 09:35	SO	None	2 - Encore	10 day																				X											
SL-549-SA5D-SB-0.0-0.5	11/12/13 10:25	SO	None	2 - SS-Sleeve	10 day	X	X			X		X		X	X							X				X										
SL-549-SA5D-SB-0.0-0.5	11/12/13 10:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-549-SA5D-SB-4.0-5.0	11/12/13 10:40	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X			X				X				X										
SL-549-SA5D-SB-4.0-5.0	11/12/13 10:40	SO	None	2 - Encore	10 day																				X											
SL-549-SA5D-SB-11.0-12.0	11/12/13 11:05	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X			X				X				X										
SL-549-SA5D-SB-11.0-12.0	11/12/13 11:05	SO	None	2 - Encore	10 day																				X											
TB1-111213	11/12/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											

Special Instructions:

Sampler: Andy Vivian

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11.12.13	1600									
										11/13/13	0940

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C# 14336061

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 11/13/13

Time of Receipt: 0940

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.4	TB	WI	Y	B	
2	↓	0.4	↓	↓	↓	↓	
3	↓	0.4	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 3647 **Date/Time:** 11/13/13 1044

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH130

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

REVISED

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 11, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 11/16/2013
Group Number: 1434493
SDG: PH130
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-111513 Water	7280196
SL-516-SA5D-SB-0.0-0.5 Soil	7280197
SL-516-SA5D-SB-4.0-5.0 Soil	7280198
SL-516-SA5D-SB-4.0-5.0MS Soil	7280199
SL-516-SA5D-SB-4.0-5.0MSD Soil	7280200
SL-516-SA5D-SB-4.0-5.0SS Soil	7280201
SL-516-SA5D-SB-4.0-5.0IS Soil	7280202
SL-516-SA5D-SB-4.0-5.0PDS Soil	7280203
SL-516-SA5D-SB-4.0-5.0DUP Soil	7280204
SL-816-SA5D-SB-4.0-5.0 Soil	7280205
SL-516-SA5D-SB-9.0-10.0 Soil	7280206
SL-516-SA5D-SB-13.0-14.0 Soil	7280207
SL-609-SA5D-SB-0.0-0.5 Soil	7280208

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

REVISED

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

REVISED

Sample Description: TB-111513 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7280196
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:00

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3001 SDG#: PH130-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13325A94A	11/21/2013 23:57	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13325A94A	11/21/2013 23:57	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280197
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:35

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3002 SDG#: PH130-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	360	U	360	360	1
10401	2,4-DB	94-82-6	18	U	18	6.6	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.6	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.6	1
10401	MCPA	94-74-6	2,700	U	2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	900	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.87	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.80	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.6	1
13099	PCB-1221	11104-28-2	18	U	18	5.5	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280197
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:35

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3002 SDG#: PH130-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1248	12672-29-6	18	U	18	3.6	1
13099	PCB-1254	11097-69-1	18	U	18	4.8	1
13099	PCB-1260	11096-82-5	18	U	18	4.2	1
13099	PCB-1262	37324-23-5	18	U	18	3.6	1
13099	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	3.9	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	6.2	J	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,800		41.9	7.56	1
06944	Antimony	7440-36-0	4.19	U	4.19	0.776	1
06935	Arsenic	7440-38-2	6.83		4.19	0.734	1
06946	Barium	7440-39-3	118		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.899	J	1.05	0.0702	1
07914	Boron	7440-42-8	3.75	J	10.5	0.881	1
06949	Cadmium	7440-43-9	1.05	U	1.05	0.0797	1
01650	Calcium	7440-70-2	3,220		21.0	3.50	1
06951	Chromium	7440-47-3	29.9		3.15	0.168	1
06952	Cobalt	7440-48-4	8.50		1.05	0.104	1
06953	Copper	7440-50-8	14.0		2.10	0.304	1
01654	Iron	7439-89-6	25,900		41.9	3.80	1
06955	Lead	7439-92-1	9.00		3.15	0.524	1
01656	Lithium	7439-93-2	20.5		4.2	0.36	1
01657	Magnesium	7439-95-4	5,140		10.5	1.75	1
06958	Manganese	7439-96-5	366		1.05	0.0870	1
06960	Molybdenum	7439-98-7	0.366	J	2.10	0.178	1
06961	Nickel	7440-02-0	16.6		2.10	0.136	1
10145	Phosphorus	7723-14-0	248		10.5	3.03	1
01662	Potassium	7440-09-7	3,480		105	8.74	1
01667	Sodium	7440-23-5	122		105	17.5	1
06969	Tin	7440-31-5	2.94	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,180		1.05	0.178	1
06971	Vanadium	7440-62-2	51.3		1.05	0.136	1
06972	Zinc	7440-66-6	62.2		4.19	0.210	1
10146	Zirconium	7440-67-7	4.90	J	5.24	0.881	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.253	J	0.419	0.105	2
06142	Silver	7440-22-4	0.0478	J	0.210	0.0273	2
06144	Strontium	7440-24-6	25.7		0.419	0.0713	2
06145	Thallium	7440-28-0	0.322		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

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Analysis Report

REVISED

Sample Description: SL-516-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280197
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:35

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3002 SDG#: PH130-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0178 U	0.0178	0.0107	1
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.54	0.43	0.15	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.2 C.	n.a.	7.48	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	7.4	0.10	0.10	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280197
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:35

Submitted: 11/16/2013 09:25
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3002 SDG#: PH130-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0748	1
11031	12378-PeCDD	40321-76-4	0.102	JQ	5.31	0.0539	1
11031	123478-HxCDD	39227-28-6	0.0427	JB	5.31	0.0386	1
11031	123678-HxCDD	57653-85-7	0.271	JBQ	5.31	0.0415	1
11031	123789-HxCDD	19408-74-3	0.421	JB	5.31	0.0369	1
11031	1234678-HpCDD	35822-46-9	0.330	JB	5.31	0.0482	1
11031	OCDD	3268-87-9	3.39	JB	10.6	0.0518	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0710	1
11031	12378-PeCDF	57117-41-6	0.168	JBQ	5.31	0.0317	1
11031	23478-PeCDF	57117-31-4	5.31	U	5.31	0.0310	1
11031	123478-HxCDF	70648-26-9	0.0747	JB	5.31	0.0348	1
11031	123678-HxCDF	57117-44-9	0.0549	JQ	5.31	0.0305	1
11031	123789-HxCDF	72918-21-9	0.677	J	5.31	0.0397	1
11031	234678-HxCDF	60851-34-5	0.118	JBQ	5.31	0.0312	1
11031	1234678-HpCDF	67562-39-4	0.0969	JB	5.31	0.0183	1
11031	1234789-HpCDF	55673-89-7	0.105	JB	5.31	0.0359	1
11031	OCDF	39001-02-0	0.365	JB	10.6	0.0727	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.128				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	108	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	52	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280197
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:35

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3002 SDG#: PH130-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280197
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:35

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3002 SDG#: PH130-02

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13325SLD026	11/29/2013 14:57	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13325SLD026	11/22/2013 09:50	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133270040A	11/26/2013 19:32	Lisa A Reinert	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 15:11	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133260005A	11/22/2013 18:50	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133270040A	11/25/2013 08:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133260031A	11/23/2013 22:00	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133260031A	11/23/2013 09:10	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13329001	11/28/2013 02:36	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13329001	11/25/2013 10:39	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133290637001	11/27/2013 15:05	Maria A Orrs	1
01656	Lithium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280197
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:35

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3002 SDG#: PH130-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	133290637001	11/27/2013 02:45	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133290637001B	12/01/2013 04:00	John P Hook	2
06142	Silver	SW-846 6020A	1	133290637001A	12/01/2013 04:00	John P Hook	2
06144	Strontium	SW-846 6020A	1	133290637001A	12/01/2013 04:00	John P Hook	2
06145	Thallium	SW-846 6020A	1	133290637001A	12/01/2013 04:00	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133290638001	11/27/2013 08:38	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133290637001	11/26/2013 09:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133290638001	11/26/2013 13:00	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13330243201A	11/27/2013 18:41	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13321039401A	11/17/2013 00:05	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13330243201A	11/26/2013 15:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280198
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	26.04
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	99	U	99	48	1
10401	2,4-DB	94-82-6	19	U	19	6.8	1
10401	Dicamba	1918-00-9	13	U	13	4.4	1
10401	Dinoseb	88-85-7	26	U	26	9.9	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	9.9	1
10401	MCPA	94-74-6	2,800	U	2,800	840	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	830	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.90	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.83	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.6	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280198
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,200		43.8	7.89	1
06944	Antimony	7440-36-0	4.38	U	4.38	0.810	1
06935	Arsenic	7440-38-2	7.49		4.38	0.766	1
06946	Barium	7440-39-3	136		1.09	0.0361	1
06947	Beryllium	7440-41-7	0.984	J	1.09	0.0733	1
07914	Boron	7440-42-8	2.58	J	10.9	0.919	1
06949	Cadmium	7440-43-9	1.09	U	1.09	0.0831	1
01650	Calcium	7440-70-2	4,330		21.9	3.65	1
06951	Chromium	7440-47-3	25.2		3.28	0.175	1
06952	Cobalt	7440-48-4	7.02		1.09	0.108	1
06953	Copper	7440-50-8	12.1		2.19	0.317	1
01654	Iron	7439-89-6	25,400		43.8	3.96	1
06955	Lead	7439-92-1	7.84		3.28	0.547	1
01656	Lithium	7439-93-2	20.5		4.4	0.37	1
01657	Magnesium	7439-95-4	4,960		10.9	1.83	1
06958	Manganese	7439-96-5	425		1.09	0.0908	1
06960	Molybdenum	7439-98-7	0.543	J	2.19	0.186	1
06961	Nickel	7440-02-0	14.3		2.19	0.142	1
10145	Phosphorus	7723-14-0	132		10.9	3.16	1
01662	Potassium	7440-09-7	2,220		109	9.12	1
01667	Sodium	7440-23-5	481		109	18.3	1
06969	Tin	7440-31-5	3.31	J	10.9	0.241	1
06970	Titanium	7440-32-6	1,140		1.09	0.186	1
06971	Vanadium	7440-62-2	49.7		1.09	0.142	1
06972	Zinc	7440-66-6	48.1		4.38	0.219	1
10146	Zirconium	7440-67-7	4.99	J	5.47	0.919	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.167	J	0.438	0.109	2
06142	Silver	7440-22-4	0.0648	J	0.219	0.0284	2
06144	Strontium	7440-24-6	27.8		0.438	0.0744	2
06145	Thallium	7440-28-0	0.301		0.219	0.0328	2

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280198
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0337		0.0177	0.0106	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.44	U	0.44	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20 C.	n.a.	7.79		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	9.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280198
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0787	1
11031	12378-PeCDD	40321-76-4	0.0967	JQ	5.44	0.0596	1
11031	123478-HxCDD	39227-28-6	0.0899	JBQ	5.44	0.0422	1
11031	123678-HxCDD	57653-85-7	0.0667	JB	5.44	0.0441	1
11031	123789-HxCDD	19408-74-3	0.121	JBQ	5.44	0.0435	1
11031	1234678-HpCDD	35822-46-9	0.313	JB	5.44	0.0470	1
11031	OCDD	3268-87-9	1.85	JB	10.9	0.0549	1
11031	2378-TCDF	51207-31-9	1.09	U	1.09	0.0659	1
11031	12378-PeCDF	57117-41-6	0.136	JB	5.44	0.0358	1
11031	23478-PeCDF	57117-31-4	0.0691	JB	5.44	0.0346	1
11031	123478-HxCDF	70648-26-9	0.122	JBQ	5.44	0.0376	1
11031	123678-HxCDF	57117-44-9	0.0446	JQ	5.44	0.0344	1
11031	123789-HxCDF	72918-21-9	0.146	JQ	5.44	0.0466	1
11031	234678-HxCDF	60851-34-5	0.0666	JBQ	5.44	0.0376	1
11031	1234678-HpCDF	67562-39-4	0.112	JBQ	5.44	0.0203	1
11031	1234789-HpCDF	55673-89-7	0.0665	JBQ	5.44	0.0339	1
11031	OCDF	39001-02-0	0.281	JB	10.9	0.0769	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0352				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	53	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280198
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280198
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03BKG

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13325SLD026	11/29/2013 13:18	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13325SLD026	11/22/2013 09:50	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329B16A	11/27/2013 02:25	Laura M Krieger	26.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332033155	11/16/2013 18:43	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332033155	11/16/2013 18:43	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133270040A	11/26/2013 19:59	Lisa A Reinert	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 15:30	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133260005A	11/22/2013 18:50	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133270040A	11/25/2013 08:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133260031A	11/23/2013 22:22	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133260031A	11/23/2013 09:10	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13329001	11/28/2013 03:32	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13329001	11/25/2013 10:39	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133290637001	11/27/2013 14:42	Maria A Orrs	1
01656	Lithium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280198
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133290637001	11/27/2013 02:21	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133290637001B	12/01/2013 03:44	John P Hook	2
06142	Silver	SW-846 6020A	1	133290637001A	12/01/2013 03:44	John P Hook	2
06144	Strontium	SW-846 6020A	1	133290637001A	12/01/2013 03:44	John P Hook	2
06145	Thallium	SW-846 6020A	1	133290637001A	12/01/2013 03:44	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133290638001	11/27/2013 08:41	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133290637001	11/26/2013 09:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133290638001	11/26/2013 13:00	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13330243201A	11/27/2013 18:56	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13321039401A	11/17/2013 00:05	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13330243201A	11/26/2013 15:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280199
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	40		1.8	0.74	1
12969	Acenaphthylene	208-96-8	39		1.8	0.37	1
12969	Anthracene	120-12-7	39		1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	40		1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	38		1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	46		1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	35		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	27		1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	39		1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	49		20	6.6	1
12969	Di-n-butylphthalate	84-74-2	46		20	6.6	1
12969	Chrysene	218-01-9	38		1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	31		1.8	0.74	1
12969	Diethylphthalate	84-66-2	43		20	6.6	1
12969	Dimethylphthalate	131-11-3	41		20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	50		20	6.6	1
12969	Fluoranthene	206-44-0	39		1.8	0.74	1
12969	Fluorene	86-73-7	38		1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	30		1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	40		1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	39		1.8	0.74	1
12969	Naphthalene	91-20-3	38		1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	56		20	6.6	1
12969	Phenanthrene	85-01-8	37		1.8	0.74	1
12969	Pyrene	129-00-0	38		1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	11		1.1	0.2	24.75
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	110		40	13	1
10401	Dalapon	75-99-0	150		99	48	1
10401	2,4-DB	94-82-6	110		19	6.8	1
10401	Dicamba	1918-00-9	8.9	J	13	4.4	1
10401	Dinoseb	88-85-7	23	J	26	9.9	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	120		19	9.9	1
10401	MCPA	94-74-6	8,600		2,800	840	1
10401	MCPP (Mecoprop)	93-65-2	8,800		2,800	830	1
10401	2,4,5-T	93-76-5	11		1.9	0.90	1
10401	2,4,5-TP	93-72-1	9.8		1.9	0.83	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	170		19	3.6	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280199
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	210		19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.3	J	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	6.8		5.5	2.2	1
12952	EFH (C21-C30)	n.a.	11		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	13		11	4.4	1
12952	EFH (C8-C11)	n.a.	3.9	J	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,400		42.9	7.73	1
06944	Antimony	7440-36-0	17.3		4.29	0.794	1
06935	Arsenic	7440-38-2	21.0		4.29	0.751	1
06946	Barium	7440-39-3	272		1.07	0.0354	1
06947	Beryllium	7440-41-7	6.05		1.07	0.0719	1
07914	Boron	7440-42-8	201		10.7	0.901	1
06949	Cadmium	7440-43-9	4.52		1.07	0.0815	1
01650	Calcium	7440-70-2	3,030		21.5	3.58	1
06951	Chromium	7440-47-3	43.9		3.22	0.172	1
06952	Cobalt	7440-48-4	56.9		1.07	0.106	1
06953	Copper	7440-50-8	36.1		2.15	0.311	1
01654	Iron	7439-89-6	23,200		42.9	3.88	1
06955	Lead	7439-92-1	21.4		3.22	0.536	1
01656	Lithium	7439-93-2	122		4.3	0.36	1
01657	Magnesium	7439-95-4	4,980		10.7	1.79	1
06958	Manganese	7439-96-5	309		1.07	0.0890	1
06960	Molybdenum	7439-98-7	196		2.15	0.182	1
06961	Nickel	7440-02-0	62.0		2.15	0.139	1
10145	Phosphorus	7723-14-0	223		10.7	3.10	1
01662	Potassium	7440-09-7	3,290		107	8.95	1
01667	Sodium	7440-23-5	1,540		107	17.9	1
06969	Tin	7440-31-5	375		10.7	0.236	1
06970	Titanium	7440-32-6	1,370		1.07	0.182	1
06971	Vanadium	7440-62-2	95.9		1.07	0.139	1
06972	Zinc	7440-66-6	101		4.29	0.215	1
10146	Zirconium	7440-67-7	105		5.36	0.901	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.33		0.429	0.107	2
06142	Silver	7440-22-4	11.5		0.215	0.0279	2
06144	Strontium	7440-24-6	26.6		0.429	0.0729	2
06145	Thallium	7440-28-0	0.711		0.215	0.0322	2

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280199
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		mg/kg	mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.177	0.0174	0.0104	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	9.5	0.10	0.10	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280199
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.7	B	1.07	0.101	1
11031	12378-PeCDD	40321-76-4	107		5.34	0.0849	1
11031	123478-HxCDD	39227-28-6	111	B	5.34	0.0594	1
11031	123678-HxCDD	57653-85-7	110	B	5.34	0.0633	1
11031	123789-HxCDD	19408-74-3	111	B	5.34	0.0587	1
11031	1234678-HpCDD	35822-46-9	108	B	5.34	0.0726	1
11031	OCDD	3268-87-9	213	B	10.7	0.0728	1
11031	2378-TCDF	51207-31-9	22.2	B	1.07	0.0998	1
11031	12378-PeCDF	57117-41-6	108	B	5.34	0.0457	1
11031	23478-PeCDF	57117-31-4	110	B	5.34	0.0467	1
11031	123478-HxCDF	70648-26-9	114	B	5.34	0.0557	1
11031	123678-HxCDF	57117-44-9	112		5.34	0.0466	1
11031	123789-HxCDF	72918-21-9	115		5.34	0.0638	1
11031	234678-HxCDF	60851-34-5	117	B	5.34	0.0533	1
11031	1234678-HpCDF	67562-39-4	110	B	5.34	0.0335	1
11031	1234789-HpCDF	55673-89-7	117	B	5.34	0.0713	1
11031	OCDF	39001-02-0	226	B	10.7	0.119	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	50	26 - 138
13C12-OCDF	42	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280199
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MS

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13325SLD026	11/29/2013 13:52	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13325SLD026	11/22/2013 09:50	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329B16A	11/27/2013 03:02	Laura M Krieger	24.75
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332033155	11/16/2013 18:44	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332033155	11/16/2013 18:44	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133270040A	11/26/2013 20:26	Lisa A Reinert	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 15:48	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133260005A	11/22/2013 18:50	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133270040A	11/25/2013 08:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133260031A	11/23/2013 22:43	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133260031A	11/23/2013 09:10	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13329001	11/28/2013 04:29	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13329001	11/25/2013 10:39	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133290637001	11/27/2013 14:54	Maria A Orrs	1
01656	Lithium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280199
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133290637001	11/27/2013 02:33	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133290637001B	12/01/2013 03:52	John P Hook	2
06142	Silver	SW-846 6020A	1	133290637001A	12/01/2013 03:52	John P Hook	2
06144	Strontium	SW-846 6020A	1	133290637001A	12/01/2013 03:52	John P Hook	2
06145	Thallium	SW-846 6020A	1	133290637001A	12/01/2013 03:52	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133290638001	11/27/2013 08:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133290637001	11/26/2013 09:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133290638001	11/26/2013 13:00	James L Mertz	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280200
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	39		1.8	0.73	1
12969	Acenaphthylene	208-96-8	38		1.8	0.37	1
12969	Anthracene	120-12-7	38		1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	39		1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	37		1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	44		1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	34		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	26		1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	37		1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	47		20	6.6	1
12969	Di-n-butylphthalate	84-74-2	44		20	6.6	1
12969	Chrysene	218-01-9	37		1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	31		1.8	0.73	1
12969	Diethylphthalate	84-66-2	41		20	6.6	1
12969	Dimethylphthalate	131-11-3	40		20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	49		20	6.6	1
12969	Fluoranthene	206-44-0	38		1.8	0.73	1
12969	Fluorene	86-73-7	37		1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	30		1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	39		1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	38		1.8	0.73	1
12969	Naphthalene	91-20-3	37		1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	32		1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	51		20	6.6	1
12969	Phenanthrene	85-01-8	36		1.8	0.73	1
12969	Pyrene	129-00-0	37		1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	9.9		1.0	0.2	23.02
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	100		39	13	1
10401	Dalapon	75-99-0	130		98	48	1
10401	2,4-DB	94-82-6	110		19	6.8	1
10401	Dicamba	1918-00-9	8.3	J	13	4.4	1
10401	Dinoseb	88-85-7	27		26	9.8	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	120		19	9.8	1
10401	MCPA	94-74-6	8,400		2,700	830	1
10401	MCPP (Mecoprop)	93-65-2	8,000		2,700	820	1
10401	2,4,5-T	93-76-5	9.2		1.9	0.90	1
10401	2,4,5-TP	93-72-1	8.8		1.9	0.82	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	170		19	3.6	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280200
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	220		19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.7	J	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	7.5		5.5	2.2	1
12952	EFH (C21-C30)	n.a.	12		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	14		11	4.4	1
12952	EFH (C8-C11)	n.a.	4.0	J	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,900		43.8	7.89	1
06944	Antimony	7440-36-0	16.3		4.38	0.810	1
06935	Arsenic	7440-38-2	22.8		4.38	0.766	1
06946	Barium	7440-39-3	320		1.09	0.0361	1
06947	Beryllium	7440-41-7	6.58		1.09	0.0733	1
07914	Boron	7440-42-8	210		10.9	0.919	1
06949	Cadmium	7440-43-9	4.63		1.09	0.0831	1
01650	Calcium	7440-70-2	4,200		21.9	3.65	1
06951	Chromium	7440-47-3	50.0		3.28	0.175	1
06952	Cobalt	7440-48-4	58.9		1.09	0.108	1
06953	Copper	7440-50-8	40.5		2.19	0.317	1
01654	Iron	7439-89-6	26,700		43.8	3.96	1
06955	Lead	7439-92-1	24.2		3.28	0.547	1
01656	Lithium	7439-93-2	129		4.4	0.37	1
01657	Magnesium	7439-95-4	5,390		10.9	1.83	1
06958	Manganese	7439-96-5	372		1.09	0.0908	1
06960	Molybdenum	7439-98-7	201		2.19	0.186	1
06961	Nickel	7440-02-0	67.8		2.19	0.142	1
10145	Phosphorus	7723-14-0	257		10.9	3.16	1
01662	Potassium	7440-09-7	3,580		109	9.12	1
01667	Sodium	7440-23-5	1,550		109	18.3	1
06969	Tin	7440-31-5	390		10.9	0.241	1
06970	Titanium	7440-32-6	1,330		1.09	0.186	1
06971	Vanadium	7440-62-2	109		1.09	0.142	1
06972	Zinc	7440-66-6	105		4.38	0.219	1
10146	Zirconium	7440-67-7	109		5.47	0.919	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.22		0.438	0.109	2
06142	Silver	7440-22-4	11.2		0.219	0.0284	2
06144	Strontium	7440-24-6	36.1		0.438	0.0744	2
06145	Thallium	7440-28-0	0.731		0.219	0.0328	2

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280200
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		mg/kg	mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.181	0.0175	0.0105	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	9.5	0.10	0.10	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280200
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.6	B	1.06	0.0713	1
11031	12378-PeCDD	40321-76-4	99.4		5.30	0.0571	1
11031	123478-HxCDD	39227-28-6	105	B	5.30	0.0530	1
11031	123678-HxCDD	57653-85-7	107	B	5.30	0.0552	1
11031	123789-HxCDD	19408-74-3	105	B	5.30	0.0544	1
11031	1234678-HpCDD	35822-46-9	103	B	5.30	0.0593	1
11031	OCDD	3268-87-9	201	B	10.6	0.0778	1
11031	2378-TCDF	51207-31-9	21.0	B	1.06	0.0844	1
11031	12378-PeCDF	57117-41-6	103	B	5.30	0.0459	1
11031	23478-PeCDF	57117-31-4	106	B	5.30	0.0469	1
11031	123478-HxCDF	70648-26-9	104	B	5.30	0.0596	1
11031	123678-HxCDF	57117-44-9	106		5.30	0.0510	1
11031	123789-HxCDF	72918-21-9	106		5.30	0.0611	1
11031	234678-HxCDF	60851-34-5	107	B	5.30	0.0516	1
11031	1234678-HpCDF	67562-39-4	102	B	5.30	0.0340	1
11031	1234789-HpCDF	55673-89-7	109	B	5.30	0.0710	1
11031	OCDF	39001-02-0	208	B	10.6	0.0920	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	56	26 - 138
13C12-OCDF	43	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280200
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MSD

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13325SLD026	11/29/2013 14:24	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13325SLD026	11/22/2013 09:50	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329B16A	11/27/2013 03:40	Laura M Krieger	23.02
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332033155	11/16/2013 18:46	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332033155	11/16/2013 18:46	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133270040A	11/26/2013 20:52	Lisa A Reinert	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 16:07	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133260005A	11/22/2013 18:50	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133270040A	11/25/2013 08:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133260031A	11/23/2013 23:04	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133260031A	11/23/2013 09:10	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13329001	11/29/2013 16:15	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13329001	11/25/2013 10:39	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133290637001	11/27/2013 14:58	Maria A Orrs	1
01656	Lithium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280200
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133290637001	11/27/2013 02:37	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133290637001B	12/01/2013 03:54	John P Hook	2
06142	Silver	SW-846 6020A	1	133290637001A	12/01/2013 03:54	John P Hook	2
06144	Strontium	SW-846 6020A	1	133290637001A	12/01/2013 03:54	John P Hook	2
06145	Thallium	SW-846 6020A	1	133290637001A	12/01/2013 03:54	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133290638001	11/27/2013 08:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133290637001	11/26/2013 09:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133290638001	11/26/2013 13:00	James L Mertz	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0SS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280201
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03SS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	51.8	2.2	0.77	5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.5	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13330243201A	11/27/2013 19:35	Clinton M Wilson	5
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13330243201A	11/26/2013 15:50	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0IS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280202
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03IS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	1,090	44.2	15.5	100
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.5	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13330243201A	11/27/2013 19:51	Clinton M Wilson	100
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13330243201A	11/26/2013 15:50	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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Analysis Report

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0PDS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280203
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03PDS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	45.8	4.4	1.5	10
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.5	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13330243201A	11/27/2013 19:59	Clinton M Wilson	10
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13330243201A	11/26/2013 15:50	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280204
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,900		43.3	7.81	1
06944	Antimony	7440-36-0	4.33	U	4.33	0.802	1
06935	Arsenic	7440-38-2	7.65		4.33	0.758	1
06946	Barium	7440-39-3	122		1.08	0.0357	1
06947	Beryllium	7440-41-7	1.02	J	1.08	0.0726	1
07914	Boron	7440-42-8	2.04	J	10.8	0.910	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0823	1
01650	Calcium	7440-70-2	4,350		21.7	3.62	1
06951	Chromium	7440-47-3	26.8		3.25	0.173	1
06952	Cobalt	7440-48-4	5.90		1.08	0.107	1
06953	Copper	7440-50-8	12.9		2.17	0.314	1
01654	Iron	7439-89-6	27,100		43.3	3.92	1
06955	Lead	7439-92-1	9.06		3.25	0.542	1
01656	Lithium	7439-93-2	20.9		4.3	0.37	1
01657	Magnesium	7439-95-4	5,190		10.8	1.81	1
06958	Manganese	7439-96-5	221		1.08	0.0899	1
06960	Molybdenum	7439-98-7	0.448	J	2.17	0.184	1
06961	Nickel	7440-02-0	13.4		2.17	0.141	1
10145	Phosphorus	7723-14-0	126		10.8	3.13	1
01662	Potassium	7440-09-7	2,220		108	9.03	1
01667	Sodium	7440-23-5	495		108	18.1	1
06969	Tin	7440-31-5	3.19	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,130		1.08	0.184	1
06971	Vanadium	7440-62-2	52.2		1.08	0.141	1
06972	Zinc	7440-66-6	49.8		4.33	0.217	1
10146	Zirconium	7440-67-7	5.54		5.42	0.910	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.158	J	0.433	0.108	2
06142	Silver	7440-22-4	0.0453	J	0.217	0.0282	2
06144	Strontium	7440-24-6	28.5		0.433	0.0737	2
06145	Thallium	7440-28-0	0.276		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0200		0.0180	0.0108	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.70		0.44	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.85		0.0100	0.0100	1
	The pH was measured in water at 19.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.5		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	9.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280204
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133290637001	11/27/2013 14:50	Maria A Orrs	1
01656	Lithium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133290637001	11/27/2013 02:29	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133290637001B	12/01/2013 03:49	John P Hook	2
06142	Silver	SW-846 6020A	1	133290637001A	12/01/2013 03:49	John P Hook	2
06144	Strontium	SW-846 6020A	1	133290637001A	12/01/2013 03:49	John P Hook	2
06145	Thallium	SW-846 6020A	1	133290637001A	12/01/2013 03:49	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133290638001	11/27/2013 08:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133290637001	11/26/2013 09:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133290638001	11/26/2013 13:00	James L Mertz	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280204
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:45

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3003 SDG#: PH130-03DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13330243201A	11/27/2013 20:15	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13321039401A	11/17/2013 00:05	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13330243201A	11/26/2013 15:50	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-816-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280205
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:40

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3004 SDG#: PH130-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	26.21
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	99	U	99	48	1
10401	2,4-DB	94-82-6	19	U	19	6.8	1
10401	Dicamba	1918-00-9	13	U	13	4.4	1
10401	Dinoseb	88-85-7	26	U	26	9.9	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	9.9	1
10401	MCPA	94-74-6	2,700	U	2,700	840	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	820	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.90	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.82	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	37	U	37	11	1
13099	Aroclor 5442	12642-23-8	37	U	37	11	1
13099	Aroclor 5460	11126-42-4	37	U	37	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-816-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280205
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:40

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3004 SDG#: PH130-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1221	11104-28-2	19	U	19	5.7	1
13099	PCB-1232	11141-16-5	19	U	19	4.6	1
13099	PCB-1242	53469-21-9	19	U	19	4.6	1
13099	PCB-1248	12672-29-6	19	U	19	3.7	1
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.7	1
13099	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,400		43.2	7.80	1
06944	Antimony	7440-36-0	4.32	U	4.32	0.800	1
06935	Arsenic	7440-38-2	7.34		4.32	0.757	1
06946	Barium	7440-39-3	106		1.08	0.0357	1
06947	Beryllium	7440-41-7	1.01	J	1.08	0.0724	1
07914	Boron	7440-42-8	1.71	J	10.8	0.908	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0822	1
01650	Calcium	7440-70-2	3,670		21.6	3.61	1
06951	Chromium	7440-47-3	25.6		3.24	0.173	1
06952	Cobalt	7440-48-4	6.98		1.08	0.107	1
06953	Copper	7440-50-8	11.4		2.16	0.314	1
01654	Iron	7439-89-6	26,500		43.2	3.91	1
06955	Lead	7439-92-1	8.66		3.24	0.541	1
01656	Lithium	7439-93-2	19.0		4.3	0.37	1
01657	Magnesium	7439-95-4	5,110		10.8	1.81	1
06958	Manganese	7439-96-5	243		1.08	0.0897	1
06960	Molybdenum	7439-98-7	0.294	J	2.16	0.184	1
06961	Nickel	7440-02-0	12.9		2.16	0.141	1
10145	Phosphorus	7723-14-0	124		10.8	3.12	1
01662	Potassium	7440-09-7	2,270		108	9.02	1
01667	Sodium	7440-23-5	539		108	18.1	1
06969	Tin	7440-31-5	3.07	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,050		1.08	0.184	1
06971	Vanadium	7440-62-2	48.6		1.08	0.141	1
06972	Zinc	7440-66-6	51.9		4.32	0.216	1
10146	Zirconium	7440-67-7	5.10	J	5.41	0.908	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.147	J	0.432	0.108	2
06142	Silver	7440-22-4	0.0614	J	0.216	0.0281	2
06144	Strontium	7440-24-6	25.9		0.432	0.0735	2
06145	Thallium	7440-28-0	0.289		0.216	0.0324	2

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-816-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280205
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:40

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3004 SDG#: PH130-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0283	0.0185	0.0111	1
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.16 J	0.45	0.16	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19.7 C.	n.a.	8.32	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	10.2	0.10	0.10	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-816-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280205
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:40

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3004 SDG#: PH130-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.111	JBQ	1.09	0.0693	1
11031	12378-PeCDD	40321-76-4	0.172	J	5.44	0.0516	1
11031	123478-HxCDD	39227-28-6	0.195	JBQ	5.44	0.0367	1
11031	123678-HxCDD	57653-85-7	0.228	JBQ	5.44	0.0414	1
11031	123789-HxCDD	19408-74-3	0.224	JBQ	5.44	0.0374	1
11031	1234678-HpCDD	35822-46-9	0.280	JB	5.44	0.0335	1
11031	OCDD	3268-87-9	1.03	JB	10.9	0.0398	1
11031	2378-TCDF	51207-31-9	0.0787	JB	1.09	0.0683	1
11031	12378-PeCDF	57117-41-6	0.214	JB	5.44	0.0313	1
11031	23478-PeCDF	57117-31-4	0.223	JBQ	5.44	0.0342	1
11031	123478-HxCDF	70648-26-9	0.213	JBQ	5.44	0.0337	1
11031	123678-HxCDF	57117-44-9	0.195	J	5.44	0.0311	1
11031	123789-HxCDF	72918-21-9	0.222	JQ	5.44	0.0342	1
11031	234678-HxCDF	60851-34-5	0.224	JB	5.44	0.0315	1
11031	1234678-HpCDF	67562-39-4	0.236	JB	5.44	0.0182	1
11031	1234789-HpCDF	55673-89-7	0.205	JB	5.44	0.0269	1
11031	OCDF	39001-02-0	0.462	JB	10.9	0.0545	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.236				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	60	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	56	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-816-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280205
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:40

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3004 SDG#: PH130-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-816-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280205
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:40

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3004 SDG#: PH130-04

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13325SLD026	11/29/2013 15:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13325SLD026	11/22/2013 09:50	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329B16A	11/26/2013 21:34	Laura M Krieger	26.21
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332033155	11/16/2013 18:47	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332033155	11/16/2013 18:47	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133270040A	11/26/2013 21:19	Lisa A Reinert	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 16:25	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133260005A	11/22/2013 18:50	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133270040A	11/25/2013 08:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133260031A	11/23/2013 23:26	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133260031A	11/23/2013 09:10	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13329001	11/29/2013 17:12	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13329001	11/25/2013 10:39	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133290637001	11/27/2013 15:09	Maria A Orrs	1
01656	Lithium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-816-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280205
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:40

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3004 SDG#: PH130-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133290637001	11/27/2013 02:48	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133290637001B	12/01/2013 04:02	John P Hook	2
06142	Silver	SW-846 6020A	1	133290637001A	12/01/2013 04:02	John P Hook	2
06144	Strontium	SW-846 6020A	1	133290637001A	12/01/2013 04:02	John P Hook	2
06145	Thallium	SW-846 6020A	1	133290637001A	12/01/2013 04:02	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133290638001	11/27/2013 08:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133290637001	11/26/2013 09:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133290638001	11/26/2013 13:00	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13330243201A	11/27/2013 20:38	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13321039401A	11/17/2013 00:05	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13330243201A	11/26/2013 15:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280206
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:56

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3005 SDG#: PH130-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.23
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	99	U	99	48	1
10401	2,4-DB	94-82-6	19	U	19	6.8	1
10401	Dicamba	1918-00-9	13	U	13	4.4	1
10401	Dinoseb	88-85-7	26	U	26	9.9	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	9.9	1
10401	MCPA	94-74-6	2,800	U	2,800	840	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	830	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.90	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.83	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.6	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280206
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:56

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3005 SDG#: PH130-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.8	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,900		43.1	7.78	1
06944	Antimony	7440-36-0	4.31	U	4.31	0.798	1
06935	Arsenic	7440-38-2	7.33		4.31	0.755	1
06946	Barium	7440-39-3	97.3		1.08	0.0356	1
06947	Beryllium	7440-41-7	1.01	J	1.08	0.0723	1
07914	Boron	7440-42-8	1.67	J	10.8	0.906	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0820	1
01650	Calcium	7440-70-2	2,990		21.6	3.60	1
06951	Chromium	7440-47-3	23.9		3.24	0.173	1
06952	Cobalt	7440-48-4	7.43		1.08	0.107	1
06953	Copper	7440-50-8	11.4		2.16	0.313	1
01654	Iron	7439-89-6	26,700		43.1	3.90	1
06955	Lead	7439-92-1	8.54		3.24	0.539	1
01656	Lithium	7439-93-2	19.5		4.3	0.37	1
01657	Magnesium	7439-95-4	4,890		10.8	1.80	1
06958	Manganese	7439-96-5	274		1.08	0.0895	1
06960	Molybdenum	7439-98-7	0.366	J	2.16	0.183	1
06961	Nickel	7440-02-0	12.4		2.16	0.140	1
10145	Phosphorus	7723-14-0	135		10.8	3.12	1
01662	Potassium	7440-09-7	2,430		108	9.00	1
01667	Sodium	7440-23-5	545		108	18.0	1
06969	Tin	7440-31-5	3.07	J	10.8	0.237	1
06970	Titanium	7440-32-6	1,090		1.08	0.183	1
06971	Vanadium	7440-62-2	48.7		1.08	0.140	1
06972	Zinc	7440-66-6	50.1		4.31	0.216	1
10146	Zirconium	7440-67-7	4.73	J	5.39	0.906	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.146	J	0.431	0.108	2
06142	Silver	7440-22-4	0.0472	J	0.216	0.0280	2
06144	Strontium	7440-24-6	23.0		0.431	0.0733	2
06145	Thallium	7440-28-0	0.292		0.216	0.0324	2

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280206
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:56

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3005 SDG#: PH130-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0170 U	0.0170	0.0102	1
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.44 U	0.44	0.16	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.3 C.	n.a.	7.16	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	9.1	0.10	0.10	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280206
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:56

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3005 SDG#: PH130-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0598	1
11031	12378-PeCDD	40321-76-4	0.0896	JQ	5.35	0.0446	1
11031	123478-HxCDD	39227-28-6	0.0581	JBQ	5.35	0.0317	1
11031	123678-HxCDD	57653-85-7	0.173	JBQ	5.35	0.0328	1
11031	123789-HxCDD	19408-74-3	0.216	JB	5.35	0.0307	1
11031	1234678-HpCDD	35822-46-9	0.846	JB	5.35	0.0439	1
11031	OCDD	3268-87-9	9.55	JB	10.7	0.0407	1
11031	2378-TCDF	51207-31-9	0.0992	JB	1.07	0.0672	1
11031	12378-PeCDF	57117-41-6	0.303	JB	5.35	0.0329	1
11031	23478-PeCDF	57117-31-4	0.122	JBQ	5.35	0.0329	1
11031	123478-HxCDF	70648-26-9	0.149	JBQ	5.35	0.0347	1
11031	123678-HxCDF	57117-44-9	0.122	JQ	5.35	0.0295	1
11031	123789-HxCDF	72918-21-9	0.205	JQ	5.35	0.0360	1
11031	234678-HxCDF	60851-34-5	0.133	JB	5.35	0.0310	1
11031	1234678-HpCDF	67562-39-4	0.216	JB	5.35	0.0182	1
11031	1234789-HpCDF	55673-89-7	0.107	JBQ	5.35	0.0282	1
11031	OCDF	39001-02-0	0.601	JBQ	10.7	0.0463	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0674				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	58	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280206
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:56

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3005 SDG#: PH130-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280206
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:56

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3005 SDG#: PH130-05

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13325SLD026	11/29/2013 16:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13325SLD026	11/22/2013 09:50	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329B16A	11/26/2013 22:12	Laura M Krieger	23.23
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332033155	11/16/2013 18:48	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332033155	11/16/2013 18:48	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133270040A	11/26/2013 21:46	Lisa A Reinert	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 16:44	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133260005A	11/22/2013 18:50	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133270040A	11/25/2013 08:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133260031A	11/23/2013 23:47	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133260031A	11/23/2013 09:10	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13329001	11/29/2013 18:09	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13329001	11/25/2013 10:39	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133290637001	11/27/2013 15:21	Maria A Orrs	1
01656	Lithium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280206
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 08:56

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3005 SDG#: PH130-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133290637001	11/27/2013 03:02	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133290637001B	12/01/2013 04:10	John P Hook	2
06142	Silver	SW-846 6020A	1	133290637001A	12/01/2013 04:10	John P Hook	2
06144	Strontium	SW-846 6020A	1	133290637001A	12/01/2013 04:10	John P Hook	2
06145	Thallium	SW-846 6020A	1	133290637001A	12/01/2013 04:10	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133290638001	11/27/2013 08:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133290637001	11/26/2013 09:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133290638001	11/26/2013 13:00	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13330243201A	11/27/2013 21:01	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13321039401A	11/17/2013 00:05	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13330243201A	11/26/2013 15:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-13.0-14.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280207
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 09:08

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3006 SDG#: PH130-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	0.71	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.3	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.96	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.1	J	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	0.91	J	1.7	0.69	1
12969	Naphthalene	91-20-3	1.4	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.1	J	1.7	0.69	1
12969	Pyrene	129-00-0	0.87	J	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.75
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	92	U	92	45	1
10401	2,4-DB	94-82-6	17	U	17	6.3	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.2	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.2	1
10401	MCPA	94-74-6	2,600	U	2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	770	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.84	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.77	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-13.0-14.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280207
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 09:08

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3006 SDG#: PH130-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.3		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	11		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,700		40.0	7.20	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.739	1
06935	Arsenic	7440-38-2	12.0		4.00	0.699	1
06946	Barium	7440-39-3	77.0		0.999	0.0330	1
06947	Beryllium	7440-41-7	0.650	J	0.999	0.0669	1
07914	Boron	7440-42-8	1.78	J	9.99	0.839	1
06949	Cadmium	7440-43-9	1.44		0.999	0.0759	1
01650	Calcium	7440-70-2	4,020		20.0	3.34	1
06951	Chromium	7440-47-3	25.2		3.00	0.160	1
06952	Cobalt	7440-48-4	7.37		0.999	0.0989	1
06953	Copper	7440-50-8	11.6		2.00	0.290	1
01654	Iron	7439-89-6	23,500		40.0	3.62	1
06955	Lead	7439-92-1	6.84		3.00	0.499	1
01656	Lithium	7439-93-2	17.2		4.0	0.34	1
01657	Magnesium	7439-95-4	4,910		9.99	1.67	1
06958	Manganese	7439-96-5	273		0.999	0.0829	1
06960	Molybdenum	7439-98-7	0.509	J	2.00	0.170	1
06961	Nickel	7440-02-0	11.1		2.00	0.130	1
10145	Phosphorus	7723-14-0	513		9.99	2.89	1
01662	Potassium	7440-09-7	2,750		99.9	8.33	1
01667	Sodium	7440-23-5	360		99.9	16.7	1
06969	Tin	7440-31-5	13.7		9.99	0.220	1
06970	Titanium	7440-32-6	1,130		0.999	0.170	1
06971	Vanadium	7440-62-2	42.9		0.999	0.130	1
06972	Zinc	7440-66-6	53.8		4.00	0.200	1
10146	Zirconium	7440-67-7	3.74	J	4.99	0.839	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.160	J	0.400	0.0999	2
06142	Silver	7440-22-4	0.200	U	0.200	0.0260	2
06144	Strontium	7440-24-6	19.3		0.400	0.0679	2
06145	Thallium	7440-28-0	0.287		0.200	0.0300	2

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-13.0-14.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280207
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 09:08

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3006 SDG#: PH130-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0103 J	0.0168	0.0101	1
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.26 J	0.41	0.14	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20 C.	n.a.	7.11	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.8	0.10	0.10	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-13.0-14.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280207
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 09:08

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3006 SDG#: PH130-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.02 U	1.02	0.0430	1
11031	12378-PeCDD	40321-76-4	0.0548 JQ	5.10	0.0358	1
11031	123478-HxCDD	39227-28-6	0.0505 JBQ	5.10	0.0226	1
11031	123678-HxCDD	57653-85-7	0.0367 JBQ	5.10	0.0244	1
11031	123789-HxCDD	19408-74-3	0.0443 JBQ	5.10	0.0226	1
11031	1234678-HpCDD	35822-46-9	0.137 JBQ	5.10	0.0277	1
11031	OCDD	3268-87-9	1.40 JB	10.2	0.0320	1
11031	2378-TCDF	51207-31-9	1.02 U	1.02	0.0468	1
11031	12378-PeCDF	57117-41-6	0.0757 JBQ	5.10	0.0234	1
11031	23478-PeCDF	57117-31-4	0.0686 JBQ	5.10	0.0222	1
11031	123478-HxCDF	70648-26-9	0.0758 JB	5.10	0.0197	1
11031	123678-HxCDF	57117-44-9	0.0515 J	5.10	0.0178	1
11031	123789-HxCDF	72918-21-9	0.0384 J	5.10	0.0198	1
11031	234678-HxCDF	60851-34-5	0.0484 JB	5.10	0.0186	1
11031	1234678-HpCDF	67562-39-4	0.0921 JBQ	5.10	0.0121	1
11031	1234789-HpCDF	55673-89-7	0.0501 JB	5.10	0.0183	1
11031	OCDF	39001-02-0	0.156 JBQ	10.2	0.0363	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0223			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-13.0-14.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280207
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 09:08

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3006 SDG#: PH130-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-13.0-14.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280207
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 09:08

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3006 SDG#: PH130-06

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13325SLD026	11/29/2013 16:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13325SLD026	11/22/2013 09:50	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329B16A	11/26/2013 22:50	Laura M Krieger	24.75
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332033155	11/16/2013 18:49	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332033155	11/16/2013 18:50	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133270040A	11/26/2013 22:13	Lisa A Reinert	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 17:02	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133260005A	11/22/2013 18:50	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133270040A	11/25/2013 08:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133260031A	11/24/2013 00:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133260031A	11/23/2013 09:10	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13329001	11/29/2013 19:06	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13329001	11/25/2013 10:39	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133290637001	11/27/2013 15:24	Maria A Orrs	1
06935	Arsenic	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133290637001	11/27/2013 15:24	Maria A Orrs	1
01656	Lithium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133290637001	11/27/2013 15:24	Maria A Orrs	1
06961	Nickel	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-516-SA5D-SB-13.0-14.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280207
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 09:08

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3006 SDG#: PH130-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133290637001	11/27/2013 03:06	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133290637001B	12/01/2013 04:12	John P Hook	2
06142	Silver	SW-846 6020A	1	133290637001A	12/01/2013 04:12	John P Hook	2
06144	Strontium	SW-846 6020A	1	133290637001A	12/01/2013 04:12	John P Hook	2
06145	Thallium	SW-846 6020A	1	133290637001A	12/01/2013 04:12	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133290638001	11/27/2013 08:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133290637001	11/26/2013 09:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133290638001	11/26/2013 13:00	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13330243201A	11/27/2013 21:25	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13321039401A	11/17/2013 00:05	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13330243201A	11/26/2013 15:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-609-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280208
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 12:50

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3007 SDG#: PH130-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	2.6	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	5.5	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-609-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280208
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 12:50

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3007 SDG#: PH130-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,700		41.7	7.51	1
06944	Antimony	7440-36-0	4.17	U	4.17	0.771	1
06935	Arsenic	7440-38-2	8.61		4.17	0.729	1
06946	Barium	7440-39-3	96.8		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.600	J	1.04	0.0698	1
07914	Boron	7440-42-8	1.27	J	10.4	0.875	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0792	1
01650	Calcium	7440-70-2	3,700		20.8	3.48	1
06951	Chromium	7440-47-3	30.0		3.13	0.167	1
06952	Cobalt	7440-48-4	7.32		1.04	0.103	1
06953	Copper	7440-50-8	13.3		2.08	0.302	1
01654	Iron	7439-89-6	23,300		41.7	3.77	1
06955	Lead	7439-92-1	6.55		3.13	0.521	1
01656	Lithium	7439-93-2	31.3		4.2	0.35	1
01657	Magnesium	7439-95-4	5,880		10.4	1.74	1
06958	Manganese	7439-96-5	333		1.04	0.0865	1
06960	Molybdenum	7439-98-7	2.08	U	2.08	0.177	1
06961	Nickel	7440-02-0	23.9		2.08	0.135	1
10145	Phosphorus	7723-14-0	461		10.4	3.01	1
01662	Potassium	7440-09-7	2,220		104	8.69	1
01667	Sodium	7440-23-5	117		104	17.4	1
06969	Tin	7440-31-5	2.57	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,230		1.04	0.177	1
06971	Vanadium	7440-62-2	43.0		1.04	0.135	1
06972	Zinc	7440-66-6	55.6		4.17	0.208	1
10146	Zirconium	7440-67-7	4.77	J	5.21	0.875	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.417	U	0.417	0.104	2
06142	Silver	7440-22-4	0.0283	J	0.208	0.0271	2
06144	Strontium	7440-24-6	20.2		0.417	0.0708	2
06145	Thallium	7440-28-0	0.266		0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20 C.	n.a.	7.03		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	4.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-609-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280208
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 12:50

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3007 SDG#: PH130-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0640	JBQ	1.03	0.0555	1
11031	12378-PeCDD	40321-76-4	0.414	J	5.17	0.0422	1
11031	123478-HxCDD	39227-28-6	0.452	JB	5.17	0.0364	1
11031	123678-HxCDD	57653-85-7	0.397	JB	5.17	0.0390	1
11031	123789-HxCDD	19408-74-3	0.524	JB	5.17	0.0388	1
11031	1234678-HpCDD	35822-46-9	0.580	JBQ	5.17	0.0278	1
11031	OCDD	3268-87-9	1.49	JB	10.3	0.0322	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0557	1
11031	12378-PeCDF	57117-41-6	0.501	JB	5.17	0.0298	1
11031	23478-PeCDF	57117-31-4	0.336	JBQ	5.17	0.0310	1
11031	123478-HxCDF	70648-26-9	0.393	JB	5.17	0.0345	1
11031	123678-HxCDF	57117-44-9	0.481	JQ	5.17	0.0275	1
11031	123789-HxCDF	72918-21-9	0.492	J	5.17	0.0402	1
11031	234678-HxCDF	60851-34-5	0.418	JB	5.17	0.0305	1
11031	1234678-HpCDF	67562-39-4	0.544	JB	5.17	0.0136	1
11031	1234789-HpCDF	55673-89-7	0.439	JB	5.17	0.0278	1
11031	OCDF	39001-02-0	1.05	JBQ	10.3	0.0488	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.707				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	60	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	58	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-609-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280208
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 12:50

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3007 SDG#: PH130-07*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-609-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280208
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 12:50

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3007 SDG#: PH130-07*

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13325SLD026	11/29/2013 17:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13325SLD026	11/22/2013 09:50	Anna E Stager	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 17:20	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133260005A	11/22/2013 18:50	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133260031A	11/24/2013 00:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133260031A	11/23/2013 09:10	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13329001	11/29/2013 20:02	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13329001	11/25/2013 10:39	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133290637001	11/27/2013 15:28	Maria A Orrs	1
01656	Lithium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133290637001	11/27/2013 03:09	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133290637001B	12/01/2013 04:15	John P Hook	2
06142	Silver	SW-846 6020A	1	133290637001A	12/01/2013 04:15	John P Hook	2
06144	Strontium	SW-846 6020A	1	133290637001A	12/01/2013 04:15	John P Hook	2
06145	Thallium	SW-846 6020A	1	133290637001A	12/01/2013 04:15	John P Hook	2

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SL-609-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7280208
LL Group # 1434493
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/15/2013 12:50

Submitted: 11/16/2013 09:25
Reported: 12/11/2013 15:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P3007 SDG#: PH130-07*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133290638001	11/27/2013 09:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133290637001	11/26/2013 09:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133290638001	11/26/2013 13:00	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13321039401A	11/17/2013 00:05	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434493
Reported: 12/11/13 at 03:53 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13325SLD026	Sample number(s): 7280197-7280200,7280205-7280208									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	104		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	102		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	103		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	104		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	101		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	92		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	103		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	103		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	121		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	117		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	107		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	113		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	108		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	127*		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	103		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	105		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	97		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	87		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	121		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	98		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	100		79-112		
Batch number: 13325A94A	Sample number(s): 7280196									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	103	75-135	3	30
Batch number: 13329B16A	Sample number(s): 7280198-7280200,7280205-7280207									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	92		67-119		
Batch number: 133270040A	Sample number(s): 7280197-7280200,7280205-7280207									
2,4-D	36	U	36.	12	ug/kg	129*		59-122		
Dalapon	90	U	90.	44	ug/kg	68		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	119		54-131		
Dicamba	12	U	12.	4.0	ug/kg	100		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	7*		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	141		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	98		56-133		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	95		54-134		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434493
Reported: 12/11/13 at 03:53 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	136*		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	108		63-130		
Batch number: 133260005A	Sample number(s): 7280197-7280200,7280205-7280208									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	70	86	62-87	20	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	93		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	117		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133260031A	Sample number(s): 7280197-7280200,7280205-7280208									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	92		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	95		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	93		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	85		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	78		60-115		
Batch number: 133290637001	Sample number(s): 7280197-7280200,7280204-7280208									
Aluminum	40.0	U	40.0	7.21	mg/kg	101		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	106		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	100		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	103		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	101		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	97		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	100		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	101		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	103		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	96		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	107		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	100		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	96		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	101		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	104		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	104		80-120		
Potassium	100	U	100.	8.34	mg/kg	96		80-120		
Sodium	100	U	100.	16.7	mg/kg	97		80-120		
Tin	1.55	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	102		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	103		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	99		80-120		
Batch number: 133290637001A	Sample number(s): 7280197-7280200,7280204-7280208									

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434493
Reported: 12/11/13 at 03:53 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Silver	0.200	U	0.200	0.0260	mg/kg	104		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	104		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	100		80-120		
Batch number: 133290637001B	Sample number(s): 7280197-7280200,7280204-7280208									
Selenium	0.400	U	0.400	0.100	mg/kg	114		80-120		
Batch number: 133290638001	Sample number(s): 7280197-7280200,7280204-7280208									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	85		85-120		
Batch number: 13330243201A	Sample number(s): 7280197-7280198,7280201-7280207									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	101		80-120		
Batch number: 13321039401A	Sample number(s): 7280197-7280198,7280204-7280208									
15a pH by 9045D						99		95-105		
Batch number: 13330162401A	Sample number(s): 7280197-7280208									
14a Moisture Content by 160.3						99		80-120		
14a Moisture Content by 160.3						99		80-120		
14a Moisture Content by 160.3						99		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13329001	Sample number(s): 7280197-7280200,7280205-7280208									
2378-TCDD	0.166	J	1.00	0.0795	ng/kg	92		67-158		
12378-PeCDD	5.00	U	5.00	0.0506	ng/kg	99		70-142		
123478-HxCDD	0.0502	J	5.00	0.0360	ng/kg	102		70-164		
123678-HxCDD	0.0706	J	5.00	0.0386	ng/kg	105		76-134		
123789-HxCDD	0.0838	J	5.00	0.0350	ng/kg	103		64-162		
1234678-HpCDD	0.211	J	5.00	0.0395	ng/kg	103		70-140		
OCDD	1.58	J	10.0	0.0363	ng/kg	102		78-144		
2378-TCDF	0.101	J	1.00	0.0739	ng/kg	105		75-158		
12378-PeCDF	0.0746	J	5.00	0.0341	ng/kg	105		80-134		
23478-PeCDF	0.0903	J	5.00	0.0341	ng/kg	109		68-160		
123478-HxCDF	0.0660	J	5.00	0.0332	ng/kg	106		72-134		
123678-HxCDF	5.00	U	5.00	0.0284	ng/kg	108		84-130		
123789-HxCDF	5.00	U	5.00	0.0383	ng/kg	108		78-130		
234678-HxCDF	0.0762	J	5.00	0.0303	ng/kg	108		70-156		
1234678-HpCDF	0.0819	J	5.00	0.0115	ng/kg	103		82-122		
1234789-HpCDF	0.0771	J	5.00	0.0234	ng/kg	110		78-138		
OCDF	0.234	J	10.0	0.0720	ng/kg	109		63-170		
TEQ WHO 2005 - EDLx0.0	0.0389				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434493
Reported: 12/11/13 at 03:53 PM

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13325SLD026	Sample number(s): 7280197-7280200,7280205-7280208 UNSPK: 7280198								
Acenaphthene	109	105	48-127	3	30				
Acenaphthylene	105	103	49-121	3	30				
Anthracene	105	103	52-126	2	30				
Benzo(a)anthracene	107	105	44-143	2	30				
Benzo(a)pyrene	104	101	44-140	3	30				
Benzo(b)fluoranthene	126	121	26-142	4	30				
Benzo(e)pyrene	96	93	70-130	4	30				
Benzo(g,h,i)perylene	72	71	33-141	1	30				
Benzo(k)fluoranthene	105	101	54-142	4	30				
Butylbenzylphthalate	133	128	49-151	4	30				
Di-n-butylphthalate	126	121	52-147	4	30				
Chrysene	103	101	29-148	3	30				
Dibenz(a,h)anthracene	85	84	20-137	1	30				
Diethylphthalate	117	113	43-145	4	30				
Dimethylphthalate	110	108	58-129	2	30				
Bis(2-Ethylhexyl)phthalate	136	135	39-167	1	30				
Fluoranthene	105	105	40-148	0	30				
Fluorene	103	102	51-137	1	30				
Indeno(1,2,3-cd)pyrene	82	81	17-136	2	30				
1-Methylnaphthalene	108	106	50-131	2	30				
2-Methylnaphthalene	106	105	35-152	2	30				
Naphthalene	103	100	31-148	3	30				
N-Nitrosodimethylamine	91	88	48-113	4	30				
Di-n-octylphthalate	153	140	52-162	9	30				
Phenanthrene	100	99	29-142	1	30				
Pyrene	103	102	26-143	2	30				
Batch number: 13329B16A	Sample number(s): 7280198-7280200,7280205-7280207 UNSPK: 7280198								
11a TPH by EPA 8015B GRO	89	89	69-123	7	30				
Batch number: 133270040A	Sample number(s): 7280197-7280200,7280205-7280207 UNSPK: 7280198								
2,4-D	121	114	42-143	6	35				
Dalapon	67	57	16-98	16	50				
2,4-DB	115	124	10-179	6	50				
Dicamba	97	91	55-133	6	50				
Dinoseb	15	18	10-52	18	35				
2,4-DP (Dichlorprop)	135	126	32-171	8	50				
MCPA	93	91	23-169	3	50				
MCPP (Mecoprop)	95	87	24-164	9	50				
2,4,5-T	123	101	12-172	21	35				
2,4,5-TP	107	96	10-142	11	35				
Batch number: 133260005A	Sample number(s): 7280197-7280200,7280205-7280208 UNSPK: 7280198								
PCB-1016	91	94	41-135	3	50				
PCB-1260	115	117	40-134	2	50				
Batch number: 133260031A	Sample number(s): 7280197-7280200,7280205-7280208 UNSPK: 7280198								
EFH (C12-C14)	79	86	49-123	9	20				
EFH (C15-C20)	82	90	49-123	10	20				
EFH (C21-C30)	80	89	49-123	12	20				
EFH (C30-C40)	77	83	49-123	8	20				
EFH (C8-C11)	70	73	49-123	4	20				
Batch number: 133290637001	Sample number(s): 7280197-7280200,7280204-7280208 UNSPK: 7280198 BKG: 7280198								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434493
Reported: 12/11/13 at 03:53 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Aluminum	-1771 (2)	2164 (2)	75-125	32*	20	23,700	24,400	3	20
Antimony	32*	30*	75-125	6	20	3.96 U	3.92 U	0 (1)	20
Arsenic	84	93	75-125	8	20	6.78	6.93	2 (1)	20
Barium	63*	84	75-125	16	20	123	110	11	20
Beryllium	94	102	75-125	8	20	0.890 J	0.924 J	4 (1)	20
Boron	93	95	75-125	4	20	2.33 J	1.85 J	23* (1)	20
Cadmium	84	85	75-125	2	20	0.990 U	0.980 U	0 (1)	20
Calcium	-304 (2)	-29 (2)	75-125	33*	20	3,920	3,930	0	20
Chromium	87	113	75-125	13	20	22.8	24.3	6	20
Cobalt	93	95	75-125	4	20	6.35	5.34	17	20
Copper	90	104	75-125	11	20	11.0	11.6	6	20
Iron	-2043 (2)	1200 (2)	75-125	14	20	23,000	24,500	6	20
Lead	84	100	75-125	12	20	7.09	8.20	14 (1)	20
Lithium	95	99	75-125	5	20	18.6	18.9	2 (1)	20
Magnesium	5 (2)	193 (2)	75-125	8	20	4,490	4,700	4	20
Manganese	-217 (2)	-97 (2)	75-125	18	20	385	200	63*	20
Molybdenum	91	92	75-125	2	20	0.491 J	0.406 J	19 (1)	20
Nickel	89	98	75-125	9	20	12.9	12.1	6	20
Phosphorus	85	114	75-125	14	20	120	114	5	20
Potassium	100	125	75-125	9	20	2,000	2,010	0	20
Sodium	98	98	75-125	1	20	435	448	3 (1)	20
Tin	87	88	75-125	4	20	3.00 J	2.89 J	4 (1)	20
Titanium	212 (2)	172 (2)	75-125	3	20	1,030	1,020	1	20
Vanadium	86	107	75-125	12	20	45.0	47.2	5	20
Zinc	99	104	75-125	4	20	43.6	45.1	3	20
Zirconium	93	95	75-125	4	20	4.51 J	5.01	10 (1)	20
Batch number: 133290637001A	Sample number(s): 7280197-7280200,7280204-7280208 UNSPK: 7280198 BKG: 7280198								
Silver	107	102	75-125	2	20	0.0586 J	0.0410 J	35* (1)	20
Strontium	-13*	94	75-125	30*	20	25.2	25.8	2	20
Thallium	95	98	75-125	3	20	0.272	0.250	9 (1)	20
Batch number: 133290637001B	Sample number(s): 7280197-7280200,7280204-7280208 UNSPK: 7280198 BKG: 7280198								
Selenium	101	94	75-125	5	20	0.151 J	0.143 J	6 (1)	20
Batch number: 133290638001	Sample number(s): 7280197-7280200,7280204-7280208 UNSPK: 7280198 BKG: 7280198								
3a Mercury 7471A	83	84	65-135	2	20	0.0305	0.0181	51* (1)	20
Batch number: 13330243201A	Sample number(s): 7280197-7280198,7280201-7280207 UNSPK: 7280198 BKG: 7280198								
2a Chromium VI by EPA 7199	117		75-125			0.40 U	0.63	200* (1)	20
Batch number: 13321039401A	Sample number(s): 7280197-7280198,7280204-7280208 BKG: 7280198								
15a pH by 9045D						7.79	7.85	1	3
Batch number: 13330162401A	Sample number(s): 7280197-7280208 BKG: 7280198								
14a Moisture Content by 160.3						9.5	9.3	2	20
14a Moisture Content by 160.3						9.5	9.3	2	20
14a Moisture Content by 160.3						9.5	9.3	2	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434493
Reported: 12/11/13 at 03:53 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13329001	Sample number(s): 7280197-7280200,7280205-7280208 UNSPK: 7280198								
2378-TCDD	92	88	40-135	6	20				
12378-PeCDD	100	94	40-135	7	20				
123478-HxCDD	103	99	40-135	5	20				
123678-HxCDD	102	101	40-135	3	20				
123789-HxCDD	104	99	40-135	6	20				
1234678-HpCDD	101	97	40-135	4	20				
OCDD	99	94	40-135	6	20				
2378-TCDF	104	99	40-135	6	20				
12378-PeCDF	101	97	40-135	5	20				
23478-PeCDF	103	100	40-135	4	20				
123478-HxCDF	106	98	40-135	9	20				
123678-HxCDF	105	100	40-135	5	20				
123789-HxCDF	107	99	40-135	8	20				
234678-HxCDF	109	100	40-135	9	20				
1234678-HpCDF	103	96	40-135	8	20				
1234789-HpCDF	109	102	40-135	7	20				
OCDF	106	98	40-135	8	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13325SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7280197	90	92	104
7280198	89	94	103
7280199	91	95	103
7280200	87	91	101
7280205	90	94	103
7280206	88	92	101
7280207	91	93	108
7280208	89	92	101
Blank	90	92	104
LCS	88	90	100
MS	91	95	103
MSD	87	91	101
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13325A94A

	Trifluorotoluene-F

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434493
Reported: 12/11/13 at 03:53 PM

Surrogate Quality Control

7280196	90
Blank	85
LCS	92
LCSD	90
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13329B16A

	Trifluorotoluene-F
7280198	84
7280199	98
7280200	94
7280205	91
7280206	98
7280207	96
Blank	121
LCS	108
MS	98
MSD	94
Limits:	50-142

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133260005A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7280197	107	115
7280198	103	114
7280199	102	117
7280200	103	118
7280205	108	122*
7280206	107	115
7280207	109	114
7280208	112	120
Blank	109	121*
LCS	108	117
LCSD	114	129*
MS	102	117
MSD	103	118
Limits:	45-120	45-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 133270040A

	2,4-Dichlorophenylacetic acid
7280197	79
7280198	79
7280199	88
7280200	89
7280205	79
7280206	82
7280207	86

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434493
Reported: 12/11/13 at 03:53 PM

Surrogate Quality Control

Blank	83
LCS	94
MS	88
MSD	89
Limits:	50-150

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133260031A

	Chlorobenzene	Orthoterphenyl
7280197	89	82
7280198	84	74
7280199	90	79
7280200	93	86
7280205	94	85
7280206	92	85
7280207	97	91
7280208	90	86
Blank	94	85
LCS	95	90
MS	90	79
MSD	93	86
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13329001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7280197	71	82	75	83	79	68
7280198	66	66	71	77	71	64
7280199	59	63	67	80	69	63
7280200	59	64	69	79	78	76
7280205	59	56	68	74	69	71
7280206	65	63	75	84	79	74
7280207	75	76	79	86	83	85
7280208	66	60	72	87	84	68
Blank	60	59	71	81	77	67
MS	59	63	67	80	69	63
MSD	59	64	69	79	78	76
OPR	70	65	76	87	83	70
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7280197	108	59	52	87	84	83
7280198	94	63	53	72	74	74
7280199	102	50	42	64	73	75
7280200	104	56	43	69	82	81
7280205	82	58	50	60	72	73
7280206	93	64	58	70	86	88
7280207	85	60	57	74	86	85
7280208	99	54	58	65	90	85
Blank	105	57	49	64	81	81

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434493
Reported: 12/11/13 at 03:53 PM

Surrogate Quality Control

MS	102	50	42	64	73	75
MSD	104	56	43	69	82	81
OPR	117	58	48	72	86	85
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7280197	83	77	73	64	86
7280198	69	78	68	60	69
7280199	74	70	67	54	71
7280200	80	73	63	53	72
7280205	70	66	60	53	65
7280206	86	77	71	59	68
7280207	83	68	65	65	78
7280208	80	79	72	57	69
Blank	79	74	72	54	64
MS	74	70	67	54	71
MSD	80	73	63	53	72
OPR	86	78	70	59	73
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
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(2) The unspiked result was more than four times the spike added.

acct# 13013 Gp# 1434493 Sample# 7280196-208

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/15/2013
CarrierName: FedEx
AirbillNo: 797173822496

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131115-01
Cooler #: 1 of 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-111513	11/15/13 08:00	WQ	HCl	1 - 40 mL Vial	10 day																			X												
SL-516-SA5D-SB-0.0-0.5	11/15/13 08:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X					X										
SL-516-SA5D-SB-0.0-0.5	11/15/13 08:35	SO	None	2 - 4 oz glass	10 day													X		X																
SL-516-SA5D-SB-4.0-5.0MS	11/15/13 08:45	SO	None	6 - 16 oz glass	10 day	X	X					X		X	X			X		X	X					X										
SL-516-SA5D-SB-4.0-5.0MS	11/15/13 08:45	SO	None	6 - Encore	10 day																			X												
SL-816-SA5D-SB-4.0-5.0	11/15/13 08:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X		X	X					X										
SL-516-SA5D-SB-4.0-5.0	11/15/13 08:45	SO	None	2 - Encore	10 day																			X												
SL-516-SA5D-SB-9.0-10.0	11/15/13 08:56	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X		X	X					X										
SL-516-SA5D-SB-9.0-10.0	11/15/13 08:56	SO	None	2 - Encore	10 day																			X												
SL-516-SA5D-SB-13.0-14.0	11/15/13 09:08	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X		X	X					X										
SL-516-SA5D-SB-13.0-14.0	11/15/13 09:08	SO	None	2 - Encore	10 day																			X												
SL-609-SA5D-SB-0.0-0.5	11/15/13 12:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-609-SA5D-SB-0.0-0.5	11/15/13 12:50	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/15/13	1430									
										11/16/13	0725

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C# 1434493

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 11/16/13

Time of Receipt: 0925

Source Code: 5.

Shipping Container Sealed: YES NO

Custody Seal Present * : YES NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	3258	3.7	~~TB~~ (3) JG 11/16/13 ST	WI	Y	B	
2	D1131	1.2	TB	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 2

Paperwork Discrepancy/Unpacking Problems:

SL-516-SA5D-SB-4.0-5.0MS Jars + Encores have collection times @ 0840

SL-816-SA5D-SB-4.0-5.0 Jars have collection time @ 0845

SL-516-SA5D-SB-4.0-5.0 is labeled @ ~~SL-516-5~~ SL-816-SA5D-SB-4.0-5.0 ~~and has collection time @~~ (3) JG 11/16/13

Unpacker Signature/Emp#: 5200 **Date/Time:** 11/16/13 1150

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH062

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

July 19, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/09/2013
Group Number: 1402514
SDG: PH062
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-586-SA8-SB-0.0-0.5 Soil	7120501
SL-588-SA8-SB-0.0-0.5 Soil	7120502
SL-588-SA8-SB-0.0-0.5MS Soil	7120503
SL-588-SA8-SB-0.0-0.5MSD Soil	7120504
SL-588-SA8-SB-0.0-0.5DUP Soil	7120505
SL-888-SA8-SB-0.0-0.5 Soil	7120506
SL-588-SA8-SB-2.0-3.0 Soil	7120507
TB-070813 Water	7120508

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-586-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120501
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:10 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58600 SDG#: PH062-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.3	J	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	2.2		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.73	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	18		1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	9.3	J	19	6.3	1
12969	Chrysene	218-01-9	2.7		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	55		19	6.3	1
12969	Fluoranthene	206-44-0	2.4		1.8	0.70	1
12969	Fluorene	86-73-7	11		1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.2	J	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	2.0		1.8	0.70	1
12969	Naphthalene	91-20-3	2.8		1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	7.8	J	19	6.3	1
12969	Phenanthrene	85-01-8	2.3		1.8	0.70	1
12969	Pyrene	129-00-0	2.2		1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	12	J	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	10	U	10	4.2	2
12952	EFH (C15-C20)	n.a.	7.5	J	10	4.2	2
12952	EFH (C21-C30)	n.a.	69		10	4.2	2
12952	EFH (C30-C40)	n.a.	130		21	8.4	2
12952	EFH (C8-C11)	n.a.	10	U	10	4.2	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-586-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120501
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:10 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58600 SDG#: PH062-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,700		41.2	7.42	1
06944	Antimony	7440-36-0	4.12	U	4.12	0.762	1
06935	Arsenic	7440-38-2	5.79		4.12	0.721	1
06946	Barium	7440-39-3	101		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.548	J	1.03	0.0690	1
07914	Boron	7440-42-8	4.37	J	10.3	0.865	1
06949	Cadmium	7440-43-9	0.535	J	1.03	0.0782	1
01650	Calcium	7440-70-2	3,660		20.6	3.44	1
06951	Chromium	7440-47-3	17.8		3.09	0.165	1
06952	Cobalt	7440-48-4	5.50		1.03	0.102	1
06953	Copper	7440-50-8	11.2		2.06	0.299	1
01654	Iron	7439-89-6	19,400		41.2	3.73	1
06955	Lead	7439-92-1	10.3		3.09	0.515	1
01656	Lithium	7439-93-2	23.2		4.1	0.35	1
01657	Magnesium	7439-95-4	3,960		10.3	1.72	1
06958	Manganese	7439-96-5	427		1.03	0.0855	1
06960	Molybdenum	7439-98-7	0.652	J	2.06	0.175	1
06961	Nickel	7440-02-0	11.4		2.06	0.134	1
10145	Phosphorus	7723-14-0	452		10.3	2.98	1
01662	Potassium	7440-09-7	3,690		103	8.59	1
01667	Sodium	7440-23-5	84.2	J	103	17.2	1
06969	Tin	7440-31-5	2.58	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,030		1.03	0.175	1
06971	Vanadium	7440-62-2	33.8		1.03	0.134	1
06972	Zinc	7440-66-6	101		4.12	0.206	1
10146	Zirconium	7440-67-7	3.99	J	5.15	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.139	J	0.412	0.103	2
06142	Silver	7440-22-4	0.0427	J	0.206	0.0268	2
06144	Strontium	7440-24-6	25.7		0.412	0.0700	2
06145	Thallium	7440-28-0	0.252		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0288		0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.34		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-586-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120501
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:10 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58600 SDG#: PH062-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0950	J	1.01	0.0216	1
11031	12378-PeCDD	40321-76-4	0.397	JB	5.05	0.0356	1
11031	123478-HxCDD	39227-28-6	0.249	JB	5.05	0.0335	1
11031	123678-HxCDD	57653-85-7	0.807	JB	5.05	0.0362	1
11031	123789-HxCDD	19408-74-3	0.711	JB	5.05	0.0343	1
11031	1234678-HpCDD	35822-46-9	14.0	B	5.05	0.0368	1
11031	OCDD	3268-87-9	143	B	10.1	0.0303	1
11031	2378-TCDF	51207-31-9	0.538	J	1.01	0.0529	1
11031	12378-PeCDF	57117-41-6	0.914	JB	5.05	0.0257	1
11031	23478-PeCDF	57117-31-4	0.566	JB	5.05	0.0239	1
11031	123478-HxCDF	70648-26-9	0.378	JB	5.05	0.0212	1
11031	123678-HxCDF	57117-44-9	0.383	JB	5.05	0.0211	1
11031	123789-HxCDF	72918-21-9	0.345	JBQ	5.05	0.0213	1
11031	234678-HxCDF	60851-34-5	0.337	JB	5.05	0.0197	1
11031	1234678-HpCDF	67562-39-4	2.14	JB	5.05	0.0258	1
11031	1234789-HpCDF	55673-89-7	0.221	JB	5.05	0.0319	1
11031	OCDF	39001-02-0	5.49	JB	10.1	0.0248	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.24				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-586-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120501
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:10 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58600 SDG#: PH062-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-586-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120501
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:10 by VC

Submitted: 07/09/2013 09:20
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58600 SDG#: PH062-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13190SLC026	07/12/2013 10:43	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13190SLC026	07/10/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131960009A	07/16/2013 14:00	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	131960009A	07/16/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/17/2013 07:50	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13192002	07/13/2013 12:03	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13192002	07/11/2013 13:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 19:18	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:32	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:32	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:32	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:32	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-586-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120501
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:10 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58600 SDG#: PH062-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 10:41	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13190039402A	07/09/2013 20:05	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120502
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.66	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.66	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.66	1
12969	Benzo(b)fluoranthene	205-99-2	0.82	J	1.7	0.66	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.66	1
12969	Benzo(k)fluoranthene	207-08-9	4.1		1.7	0.66	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.1	J	1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.66	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	18	6.0	1
12969	Fluoranthene	206-44-0	0.87	J	1.7	0.66	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.66	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.66	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.66	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.66	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.66	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.66	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.66	1
12969	Pyrene	129-00-0	0.73	J	1.7	0.66	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	3.0	J	5.0	2.1	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	9.3		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	25		10	4.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120502
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,000		39.6	7.14	1
06944	Antimony	7440-36-0	3.96	U	3.96	0.732	1
06935	Arsenic	7440-38-2	4.15		3.96	0.693	1
06946	Barium	7440-39-3	103		0.990	0.0327	1
06947	Beryllium	7440-41-7	0.522	J	0.990	0.0663	1
07914	Boron	7440-42-8	2.63	J	9.90	0.831	1
06949	Cadmium	7440-43-9	0.423	J	0.990	0.0752	1
01650	Calcium	7440-70-2	2,210		19.8	3.31	1
06951	Chromium	7440-47-3	16.0		2.97	0.158	1
06952	Cobalt	7440-48-4	4.35		0.990	0.0980	1
06953	Copper	7440-50-8	10.4		1.98	0.287	1
01654	Iron	7439-89-6	17,100		39.6	3.58	1
06955	Lead	7439-92-1	9.00		2.97	0.495	1
01656	Lithium	7439-93-2	20.1		4.0	0.34	1
01657	Magnesium	7439-95-4	3,500		9.90	1.65	1
06958	Manganese	7439-96-5	325		0.990	0.0822	1
06960	Molybdenum	7439-98-7	0.843	J	1.98	0.168	1
06961	Nickel	7440-02-0	10.3		1.98	0.129	1
10145	Phosphorus	7723-14-0	493		9.90	2.86	1
01662	Potassium	7440-09-7	3,690		99.0	8.25	1
01667	Sodium	7440-23-5	66.5	J	99.0	16.5	1
06969	Tin	7440-31-5	2.47	J	9.90	0.218	1
06970	Titanium	7440-32-6	1,020		0.990	0.168	1
06971	Vanadium	7440-62-2	28.9		0.990	0.129	1
06972	Zinc	7440-66-6	62.4		3.96	0.198	1
10146	Zirconium	7440-67-7	3.62	J	4.95	0.831	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.102	J	0.396	0.0990	2
06142	Silver	7440-22-4	0.0326	J	0.198	0.0257	2
06144	Strontium	7440-24-6	19.3		0.396	0.0673	2
06145	Thallium	7440-28-0	0.240		0.198	0.0297	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0120	J	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.56		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.95		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120502
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120502
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

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Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0397	JQ	0.982	0.0216	1
11031	12378-PeCDD	40321-76-4	0.178	JB	4.91	0.0285	1
11031	123478-HxCDD	39227-28-6	0.130	JBQ	4.91	0.0388	1
11031	123678-HxCDD	57653-85-7	0.460	JB	4.91	0.0428	1
11031	123789-HxCDD	19408-74-3	0.467	JB	4.91	0.0409	1
11031	1234678-HpCDD	35822-46-9	6.94	B	4.91	0.0317	1
11031	OCDD	3268-87-9	70.3	B	9.82	0.0211	1
11031	2378-TCDF	51207-31-9	0.345	J	0.982	0.0504	1
11031	12378-PeCDF	57117-41-6	0.397	JBQ	4.91	0.0249	1
11031	23478-PeCDF	57117-31-4	0.518	JB	4.91	0.0231	1
11031	123478-HxCDF	70648-26-9	0.270	JB	4.91	0.0224	1
11031	123678-HxCDF	57117-44-9	0.223	JB	4.91	0.0227	1
11031	123789-HxCDF	72918-21-9	0.309	JB	4.91	0.0235	1
11031	234678-HxCDF	60851-34-5	0.243	JB	4.91	0.0222	1
11031	1234678-HpCDF	67562-39-4	0.972	JB	4.91	0.0144	1
11031	1234789-HpCDF	55673-89-7	0.118	JBQ	4.91	0.0205	1
11031	OCDF	39001-02-0	1.80	JB	9.82	0.0230	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.666				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120502
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120502
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13190SLC026	07/12/2013 09:06	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13190SLC026	07/10/2013 08:30	Anna E Stager	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131920010A	07/12/2013 16:21	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131960009A	07/16/2013 14:19	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	131960009A	07/16/2013 03:00	Sherry L Morrow	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	131920010A	07/12/2013 08:30	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 11:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13192002	07/15/2013 11:45	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13192002	07/11/2013 13:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 18:54	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120502
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:18	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:18	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:18	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:18	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 10:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13190039402A	07/09/2013 20:05	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120503
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	27		1.7	0.66	1
12969	Acenaphthylene	208-96-8	26		1.7	0.33	1
12969	Anthracene	120-12-7	27		1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	27		1.7	0.66	1
12969	Benzo(a)pyrene	50-32-8	26		1.7	0.66	1
12969	Benzo(b)fluoranthene	205-99-2	30		1.7	0.66	1
12969	Benzo(e)pyrene	192-97-2	26		17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	18		1.7	0.66	1
12969	Benzo(k)fluoranthene	207-08-9	33		1.7	0.66	1
12969	Butylbenzylphthalate	85-68-7	40		18	6.0	1
12969	Di-n-butylphthalate	84-74-2	39		18	6.0	1
12969	Chrysene	218-01-9	28		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	21		1.7	0.66	1
12969	Diethylphthalate	84-66-2	34		18	6.0	1
12969	Dimethylphthalate	131-11-3	29		18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	44		18	6.0	1
12969	Fluoranthene	206-44-0	29		1.7	0.66	1
12969	Fluorene	86-73-7	28		1.7	0.66	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	20		1.7	0.66	1
12969	1-Methylnaphthalene	90-12-0	29		1.7	0.66	1
12969	2-Methylnaphthalene	91-57-6	29		1.7	0.66	1
12969	Naphthalene	91-20-3	28		1.7	0.66	1
12969	N-Nitrosodimethylamine	62-75-9	23		1.7	0.66	1
12969	Di-n-octylphthalate	117-84-0	41		18	6.0	1
12969	Phenanthrene	85-01-8	28		1.7	0.66	1
12969	Pyrene	129-00-0	29		1.7	0.66	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	110		5.0	2.1	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	170		17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	190		17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	4.4	J	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	16		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	45		10	4.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120503
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,900		40.4	7.28	1
06944	Antimony	7440-36-0	18.8		4.04	0.747	1
06935	Arsenic	7440-38-2	19.9		4.04	0.707	1
06946	Barium	7440-39-3	317		1.01	0.0333	1
06947	Beryllium	7440-41-7	5.82		1.01	0.0676	1
07914	Boron	7440-42-8	207		10.1	0.848	1
06949	Cadmium	7440-43-9	5.49		1.01	0.0767	1
01650	Calcium	7440-70-2	3,130		20.2	3.37	1
06951	Chromium	7440-47-3	40.2		3.03	0.162	1
06952	Cobalt	7440-48-4	54.2		1.01	0.0999	1
06953	Copper	7440-50-8	37.6		2.02	0.293	1
01654	Iron	7439-89-6	18,800		40.4	3.65	1
06955	Lead	7439-92-1	24.7		3.03	0.505	1
01656	Lithium	7439-93-2	126		4.0	0.34	1
01657	Magnesium	7439-95-4	4,100		10.1	1.69	1
06958	Manganese	7439-96-5	391		1.01	0.0838	1
06960	Molybdenum	7439-98-7	201		2.02	0.172	1
06961	Nickel	7440-02-0	62.0		2.02	0.131	1
10145	Phosphorus	7723-14-0	615		10.1	2.92	1
01662	Potassium	7440-09-7	5,280		101	8.42	1
01667	Sodium	7440-23-5	1,080		101	16.9	1
06969	Tin	7440-31-5	372		10.1	0.222	1
06970	Titanium	7440-32-6	1,390		1.01	0.172	1
06971	Vanadium	7440-62-2	85.6		1.01	0.131	1
06972	Zinc	7440-66-6	123		4.04	0.202	1
10146	Zirconium	7440-67-7	102		5.05	0.848	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	1.87		0.404	0.101	2
06142	Silver	7440-22-4	10.4		0.202	0.0262	2
06144	Strontium	7440-24-6	28.6		0.404	0.0687	2
06145	Thallium	7440-28-0	0.645		0.202	0.0303	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.195		0.0167	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	0.95		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120503
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.9		1.01	0.0342	1
11031	12378-PeCDD	40321-76-4	108	B	5.05	0.0648	1
11031	123478-HxCDD	39227-28-6	116	B	5.05	0.0802	1
11031	123678-HxCDD	57653-85-7	114	B	5.05	0.0863	1
11031	123789-HxCDD	19408-74-3	113	B	5.05	0.0744	1
11031	1234678-HpCDD	35822-46-9	119	B	5.05	0.0803	1
11031	OCDD	3268-87-9	348	B	10.1	0.0423	1
11031	2378-TCDF	51207-31-9	22.2		1.01	0.0637	1
11031	12378-PeCDF	57117-41-6	113	B	5.05	0.0503	1
11031	23478-PeCDF	57117-31-4	114	B	5.05	0.0461	1
11031	123478-HxCDF	70648-26-9	116	B	5.05	0.0647	1
11031	123678-HxCDF	57117-44-9	112	B	5.05	0.0622	1
11031	123789-HxCDF	72918-21-9	115	B	5.05	0.0527	1
11031	234678-HxCDF	60851-34-5	115	B	5.05	0.0624	1
11031	1234678-HpCDF	67562-39-4	113	B	5.05	0.0622	1
11031	1234789-HpCDF	55673-89-7	113	B	5.05	0.0748	1
11031	OCDF	39001-02-0	222	B	10.1	0.0496	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	47	25 - 181
13C12-123478-HxCDD	45	32 - 141
13C12-123678-HxCDD	45	28 - 130
13C12-123789-HxCDD	48	28 - 130
13C12-1234678-HpCDD	43	23 - 140
13C12-OCDD	46	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	50	24 - 185
13C12-23478-PeCDF	52	21 - 178
13C12-123478-HxCDF	53	26 - 152
13C12-123678-HxCDF	54	26 - 123
13C12-234678-HxCDF	52	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	50	28 - 143
13C12-1234789-HpCDF	48	26 - 138
13C12-OCDF	43	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120503
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13190SLC026	07/12/2013 09:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13190SLC026	07/10/2013 08:30	Anna E Stager	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131920010A	07/12/2013 16:34	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131960009A	07/16/2013 14:37	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	131960009A	07/16/2013 03:00	Sherry L Morrow	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	131920010A	07/12/2013 08:30	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 11:44	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13192002	07/15/2013 12:41	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13192002	07/11/2013 13:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 19:06	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120503
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:25	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:25	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:25	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:25	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 10:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120504
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	27		1.7	0.67	1
12969	Acenaphthylene	208-96-8	27		1.7	0.34	1
12969	Anthracene	120-12-7	28		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	28		1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	27		1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	31		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	27		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	16		1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	34		1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	38		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	38		18	6.1	1
12969	Chrysene	218-01-9	29		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	21		1.7	0.67	1
12969	Diethylphthalate	84-66-2	35		18	6.1	1
12969	Dimethylphthalate	131-11-3	29		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	46		18	6.1	1
12969	Fluoranthene	206-44-0	30		1.7	0.67	1
12969	Fluorene	86-73-7	28		1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19		1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	30		1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	29		1.7	0.67	1
12969	Naphthalene	91-20-3	28		1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	23		1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	44		18	6.1	1
12969	Phenanthrene	85-01-8	29		1.7	0.67	1
12969	Pyrene	129-00-0	30		1.7	0.67	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	110		5.0	2.1	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	170		17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	190		17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	3.3	J	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	13		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	34		10	4.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120504
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.0 U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,000	39.6	7.14	1
06944	Antimony	7440-36-0	18.3	3.96	0.732	1
06935	Arsenic	7440-38-2	19.4	3.96	0.693	1
06946	Barium	7440-39-3	313	0.990	0.0327	1
06947	Beryllium	7440-41-7	5.73	0.990	0.0663	1
07914	Boron	7440-42-8	203	9.90	0.831	1
06949	Cadmium	7440-43-9	5.32	0.990	0.0752	1
01650	Calcium	7440-70-2	2,960	19.8	3.31	1
06951	Chromium	7440-47-3	38.1	2.97	0.158	1
06952	Cobalt	7440-48-4	52.8	0.990	0.0980	1
06953	Copper	7440-50-8	36.9	1.98	0.287	1
01654	Iron	7439-89-6	18,500	39.6	3.58	1
06955	Lead	7439-92-1	24.0	2.97	0.495	1
01656	Lithium	7439-93-2	124	4.0	0.34	1
01657	Magnesium	7439-95-4	4,090	9.90	1.65	1
06958	Manganese	7439-96-5	393	0.990	0.0822	1
06960	Molybdenum	7439-98-7	197	1.98	0.168	1
06961	Nickel	7440-02-0	60.4	1.98	0.129	1
10145	Phosphorus	7723-14-0	614	9.90	2.86	1
01662	Potassium	7440-09-7	5,290	99.0	8.25	1
01667	Sodium	7440-23-5	1,050	99.0	16.5	1
06969	Tin	7440-31-5	365	9.90	0.218	1
06970	Titanium	7440-32-6	1,400	0.990	0.168	1
06971	Vanadium	7440-62-2	83.7	0.990	0.129	1
06972	Zinc	7440-66-6	118	3.96	0.198	1
10146	Zirconium	7440-67-7	100	4.95	0.831	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	1.98	0.396	0.0990	2
06142	Silver	7440-22-4	9.80	0.198	0.0257	2
06144	Strontium	7440-24-6	27.6	0.396	0.0673	2
06145	Thallium	7440-28-0	0.641	0.198	0.0297	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.209	0.0167	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	0.95	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120504
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.2		0.995	0.0360	1
11031	12378-PeCDD	40321-76-4	107	B	4.97	0.0399	1
11031	123478-HxCDD	39227-28-6	115	B	4.97	0.0446	1
11031	123678-HxCDD	57653-85-7	110	B	4.97	0.0480	1
11031	123789-HxCDD	19408-74-3	111	B	4.97	0.0488	1
11031	1234678-HpCDD	35822-46-9	115	B	4.97	0.0566	1
11031	OCDD	3268-87-9	307	B	9.95	0.0321	1
11031	2378-TCDF	51207-31-9	21.6		0.995	0.0576	1
11031	12378-PeCDF	57117-41-6	111	B	4.97	0.0336	1
11031	23478-PeCDF	57117-31-4	112	B	4.97	0.0297	1
11031	123478-HxCDF	70648-26-9	114	B	4.97	0.0405	1
11031	123678-HxCDF	57117-44-9	110	B	4.97	0.0395	1
11031	123789-HxCDF	72918-21-9	112	B	4.97	0.0426	1
11031	234678-HxCDF	60851-34-5	113	B	4.97	0.0406	1
11031	1234678-HpCDF	67562-39-4	112	B	4.97	0.0337	1
11031	1234789-HpCDF	55673-89-7	111	B	4.97	0.0493	1
11031	OCDF	39001-02-0	220	B	9.95	0.0336	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120504
LL Group # 1402514
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58800 SDG#: PH062-02MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13190SLC026	07/12/2013 10:11	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13190SLC026	07/10/2013 08:30	Anna E Stager	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131920010A	07/12/2013 16:47	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131960009A	07/16/2013 14:56	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131920021A	07/12/2013 02:30	Sherry L Morrow	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	131920010A	07/12/2013 08:30	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 12:05	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13192002	07/15/2013 13:38	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13192002	07/11/2013 13:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 19:10	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120504
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:27	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:27	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:27	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:27	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 10:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120505
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,100		40.4	7.28	1
06944	Antimony	7440-36-0	4.04	U	4.04	0.747	1
06935	Arsenic	7440-38-2	4.50		4.04	0.707	1
06946	Barium	7440-39-3	110		1.01	0.0333	1
06947	Beryllium	7440-41-7	0.535	J	1.01	0.0676	1
07914	Boron	7440-42-8	3.38	J	10.1	0.848	1
06949	Cadmium	7440-43-9	0.894	J	1.01	0.0767	1
01650	Calcium	7440-70-2	3,340		20.2	3.37	1
06951	Chromium	7440-47-3	18.6		3.03	0.162	1
06952	Cobalt	7440-48-4	4.86		1.01	0.0999	1
06953	Copper	7440-50-8	11.5		2.02	0.293	1
01654	Iron	7439-89-6	18,700		40.4	3.65	1
06955	Lead	7439-92-1	10.4		3.03	0.505	1
01656	Lithium	7439-93-2	22.5		4.0	0.34	1
01657	Magnesium	7439-95-4	3,950		10.1	1.69	1
06958	Manganese	7439-96-5	348		1.01	0.0838	1
06960	Molybdenum	7439-98-7	0.632	J	2.02	0.172	1
06961	Nickel	7440-02-0	11.6		2.02	0.131	1
10145	Phosphorus	7723-14-0	571		10.1	2.92	1
01662	Potassium	7440-09-7	4,670		101	8.42	1
01667	Sodium	7440-23-5	83.5	J	101	16.9	1
06969	Tin	7440-31-5	2.57	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,030		1.01	0.172	1
06971	Vanadium	7440-62-2	33.2		1.01	0.131	1
06972	Zinc	7440-66-6	116		4.04	0.202	1
10146	Zirconium	7440-67-7	4.87	J	5.05	0.848	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.127	J	0.404	0.101	2
06142	Silver	7440-22-4	0.0298	J	0.202	0.0262	2
06144	Strontium	7440-24-6	25.1		0.404	0.0687	2
06145	Thallium	7440-28-0	0.251		0.202	0.0303	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0280		0.0158	0.0095	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.58		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	0.95		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	0.94		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120505
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 13:50 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58800 SDG#: PH062-02DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 19:02	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:22	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:22	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:22	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:22	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 10:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13190039402A	07/09/2013 20:05	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-888-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120506
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:00 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

88800 SDG#: PH062-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	0.71	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	4.9		1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	0.94	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.0	1
12969	Fluoranthene	206-44-0	0.90	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	0.67	J	1.7	0.67	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.0	U	5.0	2.1	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: SL-888-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120506
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:00 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

88800 SDG#: PH062-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	10		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	27		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,600		39.6	7.14	1
06944	Antimony	7440-36-0	3.96	U	3.96	0.733	1
06935	Arsenic	7440-38-2	4.22		3.96	0.693	1
06946	Barium	7440-39-3	109		0.990	0.0327	1
06947	Beryllium	7440-41-7	0.551	J	0.990	0.0663	1
07914	Boron	7440-42-8	2.49	J	9.90	0.832	1
06949	Cadmium	7440-43-9	0.441	J	0.990	0.0752	1
01650	Calcium	7440-70-2	2,320		19.8	3.31	1
06951	Chromium	7440-47-3	16.5		2.97	0.158	1
06952	Cobalt	7440-48-4	4.55		0.990	0.0980	1
06953	Copper	7440-50-8	10.7		1.98	0.287	1
01654	Iron	7439-89-6	18,000		39.6	3.58	1
06955	Lead	7439-92-1	8.79		2.97	0.495	1
01656	Lithium	7439-93-2	21.1		4.0	0.34	1
01657	Magnesium	7439-95-4	3,680		9.90	1.65	1
06958	Manganese	7439-96-5	341		0.990	0.0822	1
06960	Molybdenum	7439-98-7	0.559	J	1.98	0.168	1
06961	Nickel	7440-02-0	10.5		1.98	0.129	1
10145	Phosphorus	7723-14-0	501		9.90	2.86	1
01662	Potassium	7440-09-7	3,950		99.0	8.26	1
01667	Sodium	7440-23-5	67.3	J	99.0	16.5	1
06969	Tin	7440-31-5	2.41	J	9.90	0.218	1
06970	Titanium	7440-32-6	1,050		0.990	0.168	1
06971	Vanadium	7440-62-2	30.7		0.990	0.129	1
06972	Zinc	7440-66-6	65.2		3.96	0.198	1
10146	Zirconium	7440-67-7	3.65	J	4.95	0.832	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.181	J	0.396	0.0990	2
06142	Silver	7440-22-4	0.0312	J	0.198	0.0257	2
06144	Strontium	7440-24-6	20.8		0.396	0.0673	2
06145	Thallium	7440-28-0	0.249		0.198	0.0297	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0099	J	0.0157	0.0094	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.42		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-888-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120506
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:00 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

88800 SDG#: PH062-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	0.97	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-888-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120506
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:00 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

88800 SDG#: PH062-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0222	JQ	1.01	0.0191	1
11031	12378-PeCDD	40321-76-4	0.148	JBQ	5.03	0.0255	1
11031	123478-HxCDD	39227-28-6	0.152	JB	5.03	0.0345	1
11031	123678-HxCDD	57653-85-7	0.410	JBQ	5.03	0.0378	1
11031	123789-HxCDD	19408-74-3	0.484	JB	5.03	0.0354	1
11031	1234678-HpCDD	35822-46-9	5.63	B	5.03	0.0311	1
11031	OCDD	3268-87-9	55.8	B	10.1	0.0207	1
11031	2378-TCDF	51207-31-9	0.265	JQ	1.01	0.0421	1
11031	12378-PeCDF	57117-41-6	0.307	JB	5.03	0.0220	1
11031	23478-PeCDF	57117-31-4	0.330	JB	5.03	0.0194	1
11031	123478-HxCDF	70648-26-9	0.190	JB	5.03	0.0207	1
11031	123678-HxCDF	57117-44-9	0.206	JB	5.03	0.0208	1
11031	123789-HxCDF	72918-21-9	0.304	JB	5.03	0.0213	1
11031	234678-HxCDF	60851-34-5	0.184	JB	5.03	0.0204	1
11031	1234678-HpCDF	67562-39-4	0.910	JB	5.03	0.0165	1
11031	1234789-HpCDF	55673-89-7	0.103	JB	5.03	0.0239	1
11031	OCDF	39001-02-0	1.73	JB	10.1	0.0194	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.344				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	70	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-888-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120506
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:00 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

88800 SDG#: PH062-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-888-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120506
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:00 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

88800 SDG#: PH062-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13190SLC026	07/12/2013 11:15	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13190SLC026	07/10/2013 08:30	Anna E Stager	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131920010A	07/12/2013 16:49	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131960009A	07/16/2013 15:14	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	131960009A	07/16/2013 03:00	Sherry L Morrow	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	131920010A	07/12/2013 08:30	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 10:42	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13192002	07/15/2013 14:34	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13192002	07/11/2013 13:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 19:22	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-888-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120506
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:00 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

88800 SDG#: PH062-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:35	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:35	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:35	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:35	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 10:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13190039402A	07/09/2013 20:05	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120507
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:35 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58820 SDG#: PH062-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	2.2		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.41	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	27.53
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.1	U	5.1	2.1	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120507
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:35 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58820 SDG#: PH062-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	7.2		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	22		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,200		40.8	7.36	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.755	1
06935	Arsenic	7440-38-2	4.33		4.08	0.714	1
06946	Barium	7440-39-3	103		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.604	J	1.02	0.0684	1
07914	Boron	7440-42-8	2.18	J	10.2	0.857	1
06949	Cadmium	7440-43-9	0.393	J	1.02	0.0776	1
01650	Calcium	7440-70-2	2,060		20.4	3.41	1
06951	Chromium	7440-47-3	22.7		3.06	0.163	1
06952	Cobalt	7440-48-4	4.66		1.02	0.101	1
06953	Copper	7440-50-8	10.9		2.04	0.296	1
01654	Iron	7439-89-6	18,500		40.8	3.69	1
06955	Lead	7439-92-1	6.44		3.06	0.510	1
01656	Lithium	7439-93-2	22.0		4.1	0.35	1
01657	Magnesium	7439-95-4	3,710		10.2	1.70	1
06958	Manganese	7439-96-5	322		1.02	0.0847	1
06960	Molybdenum	7439-98-7	0.513	J	2.04	0.173	1
06961	Nickel	7440-02-0	13.6		2.04	0.133	1
10145	Phosphorus	7723-14-0	484		10.2	2.95	1
01662	Potassium	7440-09-7	3,500		102	8.51	1
01667	Sodium	7440-23-5	74.3	J	102	17.0	1
06969	Tin	7440-31-5	2.39	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,030		1.02	0.173	1
06971	Vanadium	7440-62-2	31.5		1.02	0.133	1
06972	Zinc	7440-66-6	61.9		4.08	0.204	1
10146	Zirconium	7440-67-7	3.40	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.408	U	0.408	0.102	2
06142	Silver	7440-22-4	0.0476	J	0.204	0.0265	2
06144	Strontium	7440-24-6	20.0		0.408	0.0694	2
06145	Thallium	7440-28-0	0.254		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0163	U	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.45		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120507
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:35 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58820 SDG#: PH062-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	2.0	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120507
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:35 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58820 SDG#: PH062-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.995	U	0.995	0.0173	1
11031	12378-PeCDD	40321-76-4	0.0492	JBQ	4.97	0.0283	1
11031	123478-HxCDD	39227-28-6	0.0750	JB	4.97	0.0342	1
11031	123678-HxCDD	57653-85-7	0.257	JB	4.97	0.0365	1
11031	123789-HxCDD	19408-74-3	0.266	JB	4.97	0.0379	1
11031	1234678-HpCDD	35822-46-9	5.11	B	4.97	0.0361	1
11031	OCDD	3268-87-9	62.2	B	9.95	0.0251	1
11031	2378-TCDF	51207-31-9	0.0981	JQ	0.995	0.0334	1
11031	12378-PeCDF	57117-41-6	0.170	JB	4.97	0.0202	1
11031	23478-PeCDF	57117-31-4	0.165	JBQ	4.97	0.0173	1
11031	123478-HxCDF	70648-26-9	0.0905	JBQ	4.97	0.0150	1
11031	123678-HxCDF	57117-44-9	0.0816	JBQ	4.97	0.0149	1
11031	123789-HxCDF	72918-21-9	0.163	JB	4.97	0.0159	1
11031	234678-HxCDF	60851-34-5	0.105	JB	4.97	0.0163	1
11031	1234678-HpCDF	67562-39-4	0.508	JB	4.97	0.0381	1
11031	1234789-HpCDF	55673-89-7	0.0811	JBQ	4.97	0.0471	1
11031	OCDF	39001-02-0	1.03	JB	9.95	0.0270	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.167				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	54	25 - 181
13C12-123478-HxCDD	55	32 - 141
13C12-123678-HxCDD	55	28 - 130
13C12-123789-HxCDD	53	28 - 130
13C12-1234678-HpCDD	52	23 - 140
13C12-OCDD	55	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	56	24 - 185
13C12-23478-PeCDF	60	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	60	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	64	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	55	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120507
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:35 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58820 SDG#: PH062-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120507
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:35 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58820 SDG#: PH062-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13190SLC026	07/12/2013 11:47	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13190SLC026	07/10/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13193A16A	07/12/2013 22:19	Laura M Krieger	27.53
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319031652	07/09/2013 20:18	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319031652	07/09/2013 20:18	Lisa J Cooke	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131920010A	07/12/2013 17:12	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131960009A	07/16/2013 15:33	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	131960009A	07/16/2013 03:00	Sherry L Morrow	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	131920010A	07/12/2013 08:30	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 11:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13192002	07/15/2013 15:31	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13192002	07/11/2013 13:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-588-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7120507
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 14:35 by VC

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58820 SDG#: PH062-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 19:35	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:42	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:42	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:42	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:42	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 10:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13190039402A	07/09/2013 20:05	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-070813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7120508
LL Group # 1402514
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/08/2013 08:00

Submitted: 07/09/2013 09:20
Reported: 07/19/2013 14:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

7-8TB SDG#: PH062-05TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13192A20A	07/11/2013 18:25	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13192A20A	07/11/2013 18:25	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402514
Reported: 07/19/13 at 02:58 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13190SLC026	Sample number(s): 7120501-7120504,7120506-7120507									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	95		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	93		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	96		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	100		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	112		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	90		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	101		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	114		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	122		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	95		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	120		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	102		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	111		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	98		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	94		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	98		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	77		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	118		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	94		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Batch number: 13192A20A	Sample number(s): 7120508									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	106	101	75-135	5	30
Batch number: 13193A16A	Sample number(s): 7120507									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	86	81	67-119	7	30
Batch number: 131920010A	Sample number(s): 7120502-7120504,7120506-7120507									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	98		85-115		
Batch number: 131960009A	Sample number(s): 7120501-7120504,7120506-7120507									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	84	83	36-106	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	99		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402514
Reported: 07/19/13 at 02:58 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	107		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 131940007A	Sample number(s): 7120501-7120504,7120506-7120507									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	100		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	104		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	104		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	112		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 131910637001	Sample number(s): 7120501-7120507									
Aluminum	11.0	J	40.0	7.21	mg/kg	108		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	105		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	105		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	105		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	104		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	103		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	105		80-120		
Calcium	12.8	J	20.0	3.34	mg/kg	106		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	105		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	106		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	110		80-120		
Iron	6.78	J	40.0	3.62	mg/kg	111		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	106		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	105		80-120		
Magnesium	5.68	J	10.0	1.67	mg/kg	104		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	107		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	108		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	109		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	100		80-120		
Tin	1.32	J	10.0	0.220	mg/kg	104		80-120		
Titanium	0.177	J	1.00	0.170	mg/kg	109		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	104		80-120		
Zinc	0.422	J	4.00	0.200	mg/kg	107		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	105		80-120		
Batch number: 131910637001A	Sample number(s): 7120501-7120507									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.0774	J	0.400	0.0680	mg/kg	101		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	93		80-120		
Batch number: 131910637001B	Sample number(s): 7120501-7120507									
Selenium	0.400	U	0.400	0.100	mg/kg	102		80-120		
Batch number: 131910638001	Sample number(s): 7120501-7120507									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	104		85-120		
Batch number: 13190039402A	Sample number(s): 7120501-7120502,7120505-7120507									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402514
Reported: 07/19/13 at 02:58 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
15a pH by 9045D					100		95-105		
Batch number: 13197162401A	Sample number(s): 7120501-7120507								
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13192002	Sample number(s): 7120501-7120504,7120506-7120507								
2378-TCDD	1.00 U	1.00	0.0241	ng/kg	101		67-158		
12378-PeCDD	0.0216 J	5.00	0.0213	ng/kg	106		70-142		
123478-HxCDD	0.0239 J	5.00	0.0155	ng/kg	114		70-164		
123678-HxCDD	0.0206 J	5.00	0.0166	ng/kg	113		76-134		
123789-HxCDD	0.0274 J	5.00	0.0167	ng/kg	112		64-162		
1234678-HpCDD	0.0814 J	5.00	0.0140	ng/kg	109		70-140		
OCDD	0.214 J	10.0	0.0146	ng/kg	109		78-144		
2378-TCDF	1.00 U	1.00	0.0199	ng/kg	111		75-158		
12378-PeCDF	0.0503 J	5.00	0.0124	ng/kg	109		80-134		
23478-PeCDF	0.0333 J	5.00	0.0116	ng/kg	111		68-160		
123478-HxCDF	0.0351 J	5.00	0.00820	ng/kg	113		72-134		
123678-HxCDF	0.0220 J	5.00	0.00740	ng/kg	112		84-130		
123789-HxCDF	0.0184 J	5.00	0.00970	ng/kg	113		78-130		
234678-HxCDF	0.0269 J	5.00	0.00780	ng/kg	113		70-156		
1234678-HpCDF	0.0265 J	5.00	0.00430	ng/kg	110		82-122		
1234789-HpCDF	0.0357 J	5.00	0.00750	ng/kg	110		78-138		
OCDF	0.0705 J	10.0	0.0227	ng/kg	109		63-170		
TEQ WHO 2005 - EDLx0.0	0.0243			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13190SLC026	Sample number(s): 7120501-7120504,7120506-7120507 UNSPK: 7120502								
Acenaphthene	82	81	48-127	1	30				
Acenaphthylene	80	81	49-121	3	30				
Anthracene	80	82	52-126	3	30				
Benzo(a)anthracene	82	84	32-135	3	30				
Benzo(a)pyrene	80	79	36-138	1	30				
Benzo(b)fluoranthene	87	89	26-142	3	30				
Benzo(e)pyrene	79	81	70-130	4	30				
Benzo(g,h,i)perylene	53	49	33-141	7	30				
Benzo(k)fluoranthene	88	89	47-129	3	30				
Butylbenzylphthalate	119	114	59-153	3	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402514
Reported: 07/19/13 at 02:58 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Di-n-butylphthalate	118	114	62-154	2	30				
Chrysene	80	82	29-148	3	30				
Dibenz(a,h)anthracene	64	62	34-125	2	30				
Diethylphthalate	103	105	76-127	3	30				
Dimethylphthalate	87	86	62-136	1	30				
Bis(2-Ethylhexyl)phthalate	104	107	39-167	3	30				
Fluoranthene	84	86	47-135	3	30				
Fluorene	83	84	50-129	2	30				
Indeno(1,2,3-cd)pyrene	62	58	17-136	5	30				
1-Methylnaphthalene	89	90	50-131	3	30				
2-Methylnaphthalene	87	87	28-144	2	30				
Naphthalene	84	85	31-148	3	30				
N-Nitrosodimethylamine	70	67	48-113	2	30				
Di-n-octylphthalate	123	131	52-162	8	30				
Phenanthrene	85	86	29-142	3	30				
Pyrene	84	86	26-143	4	30				
Batch number: 131920010A	Sample number(s): 7120502-7120504,7120506-7120507 UNSPK: 7120502								
6a Perchlorate (Method 6850)	105	104	80-120	0	20				
Batch number: 131960009A	Sample number(s): 7120501-7120504,7120506-7120507 UNSPK: 7120502								
PCB-1016	103	103	16-146	0	50				
PCB-1260	112	111	40-134	1	50				
Batch number: 131940007A	Sample number(s): 7120501-7120504,7120506-7120507 UNSPK: 7120502								
EFH (C12-C14)	101	102	49-123	1	20				
EFH (C15-C20)	173*	132*	49-123	27*	20				
EFH (C21-C30)	162*	82	49-123	24*	20				
EFH (C30-C40)	388 (2)	182 (2)	49-123	26*	20				
EFH (C8-C11)	89	86	49-123	5	20				
Batch number: 131910637001	Sample number(s): 7120501-7120507 UNSPK: 7120502 BKG: 7120502								
Aluminum	1971 (2)	2027 (2)	75-125	0	20	15,800	16,900	7	20
Antimony	37*	37*	75-125	3	20	3.92 U	4.00 U	0 (1)	20
Arsenic	104	103	75-125	3	20	4.11	4.46	8 (1)	20
Barium	106	106	75-125	1	20	102	109	6	20
Beryllium	105	105	75-125	1	20	0.517 J	0.530 J	3 (1)	20
Boron	101	101	75-125	2	20	2.61 J	3.35 J	25* (1)	20
Cadmium	100	99	75-125	3	20	0.419 J	0.886 J	72* (1)	20
Calcium	228 (2)	188 (2)	75-125	6	20	2,190	3,310	41*	20
Chromium	120	112	75-125	5	20	15.8	18.4	15	20
Cobalt	99	98	75-125	3	20	4.31	4.81	11 (1)	20
Copper	108	107	75-125	2	20	10.3	11.4	10	20
Iron	1714 (2)	1495 (2)	75-125	1	20	16,900	18,600	9	20
Lead	104	101	75-125	3	20	8.92	10.3	15 (1)	20
Lithium	105	105	75-125	2	20	19.9	22.3	11	20
Magnesium	296 (2)	298 (2)	75-125	0	20	3,470	3,910	12	20
Manganese	132 (2)	137 (2)	75-125	0	20	322	345	7	20
Molybdenum	99	99	75-125	2	20	0.835 J	0.626 J	29* (1)	20
Nickel	102	101	75-125	3	20	10.3	11.5	11	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402514
Reported: 07/19/13 at 02:58 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Phosphorus	120 (2)	122 (2)	75-125	0	20	489	566	15	20
Potassium	158*	162*	75-125	0	20	3,650	4,620	23*	20
Sodium	100	99	75-125	3	20	65.9 J	82.7 J	23* (1)	20
Tin	92	92	75-125	2	20	2.45 J	2.55 J	4 (1)	20
Titanium	371 (2)	392 (2)	75-125	1	20	1,010	1,020	2	20
Vanadium	112	111	75-125	2	20	28.7	32.9	14	20
Zinc	120	112	75-125	4	20	61.8	114	60*	20
Zirconium	97	98	75-125	2	20	3.59 J	4.82 J	29* (1)	20
Batch number: 131910637001A	Sample number(s): 7120501-7120507 UNSPK: 7120502 BKG: 7120502								
Silver	103	99	75-125	6	20	0.0323 J	0.0295 J	9 (1)	20
Strontium	115	105	75-125	4	20	19.1	24.9	26*	20
Thallium	100	101	75-125	1	20	0.237	0.249	5 (1)	20
Batch number: 131910637001B	Sample number(s): 7120501-7120507 UNSPK: 7120502 BKG: 7120502								
Selenium	87	95	75-125	6	20	0.101 J	0.125 J	21* (1)	20
Batch number: 131910638001	Sample number(s): 7120501-7120507 UNSPK: 7120502 BKG: 7120502								
3a Mercury 7471A	110	118	65-135	7	20	0.0119 J	0.0278	80* (1)	20
Batch number: 13190039402A	Sample number(s): 7120501-7120502,7120505-7120507 BKG: 7120502								
15a pH by 9045D						6.56	6.58	0	3
Batch number: 13197162401A	Sample number(s): 7120501-7120507 BKG: 7120502								
14a Moisture Content by 160.3						0.95	0.94	1	20
14a Moisture Content by 160.3						0.95	0.94	1	20
14a Moisture Content by 160.3						0.95	0.94	1	20
Batch number: 13192002	Sample number(s): 7120501-7120504,7120506-7120507 UNSPK: 7120502								
2378-TCDD	103	101	40-135	4	20				
12378-PeCDD	107	108	40-135	1	20				
123478-HxCDD	115	116	40-135	1	20				
123678-HxCDD	112	110	40-135	3	20				
123789-HxCDD	112	112	40-135	2	20				
1234678-HpCDD	111	109	40-135	3	20				
OCDD	138*	119	40-135	13	20				
2378-TCDF	108	107	40-135	3	20				
12378-PeCDF	112	111	40-135	2	20				
23478-PeCDF	112	112	40-135	2	20				
123478-HxCDF	115	114	40-135	2	20				
123678-HxCDF	111	111	40-135	2	20				
123789-HxCDF	114	112	40-135	3	20				
234678-HxCDF	114	114	40-135	2	20				
1234678-HpCDF	111	111	40-135	2	20				
1234789-HpCDF	112	112	40-135	1	20				
OCDF	109	110	40-135	1	20				

Surrogate Quality Control

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402514
Reported: 07/19/13 at 02:58 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13190SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7120501	73	65	96
7120502	66	62	78
7120503	74	76	89
7120504	75	79	91
7120506	67	69	79
7120507	69	74	81
Blank	87	95	103
LCS	86	94	100
MS	74	76	89
MSD	75	79	91
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13192A20A

	Trifluorotoluene-F
7120508	87
Blank	87
LCS	121
LCSD	118
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13193A16A

	Trifluorotoluene-F
7120507	87
Blank	81
LCS	76
LCSD	75
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 131960009A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7120501	106	99
7120502	113	101
7120503	117	103
7120504	119	110
7120506	121*	106
7120507	113	104
Blank	114	103
LCS	114	105
LCSD	124*	115

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402514
Reported: 07/19/13 at 02:58 PM

Surrogate Quality Control

MS	117	103
MSD	119	110
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131940007A

	Chlorobenzene	Orthoterphenyl
7120501	98	113
7120502	91	98
7120503	90	101
7120504	94	101
7120506	92	101
7120507	84	91
Blank	96	103
LCS	93	100
MS	90	102
MSD	94	101
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13192002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7120501	73	75	80	82	80	86
7120502	62	68	77	78	76	80
7120503	68	52	53	54	52	68
7120504	60	67	76	76	71	77
7120506	62	71	77	79	74	81
7120507	64	60	69	66	60	71
Blank	60	67	71	78	72	70
MS	68	52	53	54	52	68
MSD	60	67	76	76	71	77
OPR	69	48	43	45	49	64
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7120501	84	79	83	70	73	73
7120502	85	68	67	65	69	70
7120503	50	48	43	47	45	45
7120504	79	64	63	62	67	69
7120506	84	70	70	67	69	69
7120507	64	60	55	54	55	55
Blank	95	64	61	66	70	72
MS	50	48	43	47	45	45
MSD	79	64	63	62	67	69
OPR	49	41	39	45	42	42
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402514
Reported: 07/19/13 at 02:58 PM

Surrogate Quality Control

7120501	72	72	78	70	74
7120502	69	67	67	60	68
7120503	48	43	46	53	50
7120504	63	63	63	55	64
7120506	67	67	69	57	68
7120507	53	52	55	54	56
Blank	67	69	70	52	67
MS	48	43	46	53	50
MSD	63	63	63	55	64
OPR	49	42	47	53	49
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1402514 7120501-08

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/8/2013
CarrierName: FedEx
AirbillNo: 796180308494

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130708-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-586-SA8-SB-0.0-0.5	7/8/13 13:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-586-SA8-SB-0.0-0.5	7/8/13 13:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-588-SA8-SB-0.0-0.5MS	7/8/13 13:50	SO	None	6 - SS-Sleeve	10 day	X	X					X		X	X		X									X										MS/MSD
SL-588-SA8-SB-0.0-0.5MS	7/8/13 13:50	SO	None	1 - 8 oz glass	10 day													X																		MS/MSD
SL-888-SA8-SB-0.0-0.5	7/8/13 14:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X		X									X										
SL-888-SA8-SB-0.0-0.5	7/8/13 14:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-588-SA8-SB-2.0-3.0	7/8/13 14:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X		X									X										
SL-588-SA8-SB-2.0-3.0	7/8/13 14:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-588-SA8-SB-2.0-3.0	7/8/13 14:35	SO	None	2 - Encore	10 day																			X												
TB-070813	7/8/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	07/08/2013	1600							Brandy 7-9-13		920
									Barclay		

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Environmental Sample Administration Receipt Documentation Log

1402514

Client/Project: CDM Smith

Date of Receipt: 9.9.13

Time of Receipt: 920

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.9	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Barclay 2249 **Date/Time:** 9.9.13 1054

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH063

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

July 23, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/10/2013
Group Number: 1402927
SDG: PH063
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-070913 Water	7122287
SL-561-SA8-SB-0.0-0.5 Soil	7122288
SL-561-SA8-SB-4.0-5.0 Soil	7122289
SL-562-SA8-SB-0.0-0.5 Soil	7122290
SL-563-SA8-SB-0.0-0.5 Soil	7122291
SL-563-SA8-SB-2.0-3.0 Soil	7122292

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-070913 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7122287
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 08:00

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB709 SDG#: PH063-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13192A20A	07/11/2013 18:47	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13192A20A	07/11/2013 18:47	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122288
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 09:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL561 SDG#: PH063-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.79	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	0.94	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.82	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	10		1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.2	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.2	1
12969	Chrysene	218-01-9	3.1		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	18	U	18	6.2	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.8	J	18	6.2	1
12969	Fluoranthene	206-44-0	3.0		1.7	0.69	1
12969	Fluorene	86-73-7	0.87	J	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	J	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.2	J	1.7	0.69	1
12969	Naphthalene	91-20-3	1.3	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.2	1
12969	Phenanthrene	85-01-8	1.9		1.7	0.69	1
12969	Pyrene	129-00-0	2.3		1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	3.1	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	45		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	82		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122288
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 09:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL561 SDG#: PH063-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,700		40.8	7.36	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.755	1
06935	Arsenic	7440-38-2	4.96		4.08	0.715	1
06946	Barium	7440-39-3	114		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.611	J	1.02	0.0684	1
07914	Boron	7440-42-8	4.63	J	10.2	0.857	1
06949	Cadmium	7440-43-9	0.477	J	1.02	0.0776	1
01650	Calcium	7440-70-2	3,500		20.4	3.41	1
06951	Chromium	7440-47-3	21.5		3.06	0.163	1
06952	Cobalt	7440-48-4	6.49		1.02	0.101	1
06953	Copper	7440-50-8	13.4		2.04	0.296	1
01654	Iron	7439-89-6	20,000		40.8	3.70	1
06955	Lead	7439-92-1	13.0		3.06	0.510	1
01656	Lithium	7439-93-2	17.3		4.1	0.35	1
01657	Magnesium	7439-95-4	4,150		10.2	1.70	1
06958	Manganese	7439-96-5	423		1.02	0.0847	1
06960	Molybdenum	7439-98-7	0.508	J	2.04	0.174	1
06961	Nickel	7440-02-0	13.5		2.04	0.133	1
10145	Phosphorus	7723-14-0	398		10.2	2.95	1
01662	Potassium	7440-09-7	4,740		102	8.51	1
01667	Sodium	7440-23-5	76.3	J	102	17.0	1
06969	Tin	7440-31-5	2.46	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,100		1.02	0.174	1
06971	Vanadium	7440-62-2	40.7		1.02	0.133	1
06972	Zinc	7440-66-6	58.6		4.08	0.204	1
10146	Zirconium	7440-67-7	4.50	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.135	J	0.408	0.102	2
06142	Silver	7440-22-4	0.204	U	0.204	0.0265	2
06144	Strontium	7440-24-6	24.6		0.408	0.0694	2
06145	Thallium	7440-28-0	0.284		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0227		0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.07		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122288
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 09:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL561 SDG#: PH063-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0259	1
11031	12378-PeCDD	40321-76-4	0.205	JB	5.11	0.0362	1
11031	123478-HxCDD	39227-28-6	0.185	JB	5.11	0.0458	1
11031	123678-HxCDD	57653-85-7	0.945	JB	5.11	0.0474	1
11031	123789-HxCDD	19408-74-3	1.14	JB	5.11	0.0482	1
11031	1234678-HpCDD	35822-46-9	10.6	B	5.11	0.0397	1
11031	OCDD	3268-87-9	91.3	B	10.2	0.0251	1
11031	2378-TCDF	51207-31-9	0.349	J	1.02	0.0546	1
11031	12378-PeCDF	57117-41-6	0.484	JB	5.11	0.0252	1
11031	23478-PeCDF	57117-31-4	0.475	JB	5.11	0.0238	1
11031	123478-HxCDF	70648-26-9	0.229	JB	5.11	0.0260	1
11031	123678-HxCDF	57117-44-9	0.284	JB	5.11	0.0242	1
11031	123789-HxCDF	72918-21-9	0.844	JB	5.11	0.0272	1
11031	234678-HxCDF	60851-34-5	0.281	JB	5.11	0.0242	1
11031	1234678-HpCDF	67562-39-4	1.81	JB	5.11	0.0234	1
11031	1234789-HpCDF	55673-89-7	0.187	JBQ	5.11	0.0284	1
11031	OCDF	39001-02-0	3.70	JB	10.2	0.0182	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.940				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	85	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122288
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 09:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL561 SDG#: PH063-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122288
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 09:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL561 SDG#: PH063-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 05:28	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 01:33	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 12:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13192002	07/15/2013 16:28	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13192002	07/11/2013 13:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 19:39	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:44	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:44	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:44	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:44	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122288
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 09:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL561 SDG#: PH063-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 11:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13191039402A	07/10/2013 20:15	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122289
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 11:40 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5614 SDG#: PH063-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.3	U	1.3	0.3	29.41
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122289
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 11:40 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5614 SDG#: PH063-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,200		43.1	7.77	1
06944	Antimony	7440-36-0	4.31	U	4.31	0.797	1
06935	Arsenic	7440-38-2	7.92		4.31	0.754	1
06946	Barium	7440-39-3	145		1.08	0.0356	1
06947	Beryllium	7440-41-7	0.975	J	1.08	0.0722	1
07914	Boron	7440-42-8	3.82	J	10.8	0.905	1
06949	Cadmium	7440-43-9	0.400	J	1.08	0.0819	1
01650	Calcium	7440-70-2	6,820		21.5	3.60	1
06951	Chromium	7440-47-3	29.8		3.23	0.172	1
06952	Cobalt	7440-48-4	7.00		1.08	0.107	1
06953	Copper	7440-50-8	15.0		2.15	0.312	1
01654	Iron	7439-89-6	28,300		43.1	3.90	1
06955	Lead	7439-92-1	7.25		3.23	0.539	1
01656	Lithium	7439-93-2	23.2		4.3	0.37	1
01657	Magnesium	7439-95-4	5,840		10.8	1.80	1
06958	Manganese	7439-96-5	327		1.08	0.0894	1
06960	Molybdenum	7439-98-7	0.280	J	2.15	0.183	1
06961	Nickel	7440-02-0	18.3		2.15	0.140	1
10145	Phosphorus	7723-14-0	261		10.8	3.11	1
01662	Potassium	7440-09-7	2,910		108	8.99	1
01667	Sodium	7440-23-5	178		108	18.0	1
06969	Tin	7440-31-5	2.80	J	10.8	0.237	1
06970	Titanium	7440-32-6	1,160		1.08	0.183	1
06971	Vanadium	7440-62-2	56.3		1.08	0.140	1
06972	Zinc	7440-66-6	62.1		4.31	0.215	1
10146	Zirconium	7440-67-7	6.33		5.39	0.905	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.431	U	0.431	0.108	2
06142	Silver	7440-22-4	0.0465	J	0.215	0.0280	2
06144	Strontium	7440-24-6	36.6		0.431	0.0733	2
06145	Thallium	7440-28-0	0.340		0.215	0.0323	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0176		0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.23		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122289
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 11:40 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5614 SDG#: PH063-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122289
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 11:40 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5614 SDG#: PH063-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0640	JQ	1.08	0.0256	1
11031	12378-PeCDD	40321-76-4	0.255	JBQ	5.42	0.0246	1
11031	123478-HxCDD	39227-28-6	0.162	JB	5.42	0.0284	1
11031	123678-HxCDD	57653-85-7	0.213	JBQ	5.42	0.0284	1
11031	123789-HxCDD	19408-74-3	0.199	JB	5.42	0.0296	1
11031	1234678-HpCDD	35822-46-9	1.26	JB	5.42	0.0298	1
11031	OCDD	3268-87-9	9.19	JB	10.8	0.0189	1
11031	2378-TCDF	51207-31-9	0.124	JQ	1.08	0.0284	1
11031	12378-PeCDF	57117-41-6	0.419	JB	5.42	0.0169	1
11031	23478-PeCDF	57117-31-4	0.259	JB	5.42	0.0151	1
11031	123478-HxCDF	70648-26-9	0.182	JBQ	5.42	0.0139	1
11031	123678-HxCDF	57117-44-9	0.181	JBQ	5.42	0.0132	1
11031	123789-HxCDF	72918-21-9	0.193	JB	5.42	0.0157	1
11031	234678-HxCDF	60851-34-5	0.128	JB	5.42	0.0133	1
11031	1234678-HpCDF	67562-39-4	0.248	JBQ	5.42	0.0115	1
11031	1234789-HpCDF	55673-89-7	0.0995	JBQ	5.42	0.0149	1
11031	OCDF	39001-02-0	0.457	JB	10.8	0.0224	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.174				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122289
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 11:40 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5614 SDG#: PH063-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122289
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 11:40 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5614 SDG#: PH063-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 07:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13193A16A	07/12/2013 22:57	Laura M Krieger	29.41
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319131662	07/10/2013 14:31	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319131662	07/10/2013 14:32	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 02:28	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 09:00	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13192002	07/15/2013 17:24	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13192002	07/11/2013 13:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 19:43	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-561-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122289
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 11:40 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5614 SDG#: PH063-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:47	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:47	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:47	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:47	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 11:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13191039402A	07/10/2013 20:15	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122290
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 08:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL562 SDG#: PH063-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	0.70	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	2.6		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.80	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	12		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	35		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122290
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 08:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL562 SDG#: PH063-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,800		39.6	7.14	1
06944	Antimony	7440-36-0	3.96	U	3.96	0.733	1
06935	Arsenic	7440-38-2	4.59		3.96	0.693	1
06946	Barium	7440-39-3	110		0.991	0.0327	1
06947	Beryllium	7440-41-7	0.618	J	0.991	0.0664	1
07914	Boron	7440-42-8	2.75	J	9.91	0.832	1
06949	Cadmium	7440-43-9	0.405	J	0.991	0.0753	1
01650	Calcium	7440-70-2	2,520		19.8	3.31	1
06951	Chromium	7440-47-3	19.4		2.97	0.159	1
06952	Cobalt	7440-48-4	6.18		0.991	0.0981	1
06953	Copper	7440-50-8	11.3		1.98	0.287	1
01654	Iron	7439-89-6	19,300		39.6	3.59	1
06955	Lead	7439-92-1	7.55		2.97	0.495	1
01656	Lithium	7439-93-2	17.1		4.0	0.34	1
01657	Magnesium	7439-95-4	3,700		9.91	1.65	1
06958	Manganese	7439-96-5	360		0.991	0.0822	1
06960	Molybdenum	7439-98-7	0.467	J	1.98	0.168	1
06961	Nickel	7440-02-0	12.2		1.98	0.129	1
10145	Phosphorus	7723-14-0	264		9.91	2.86	1
01662	Potassium	7440-09-7	3,550		99.1	8.26	1
01667	Sodium	7440-23-5	80.1	J	99.1	16.5	1
06969	Tin	7440-31-5	2.38	J	9.91	0.218	1
06970	Titanium	7440-32-6	1,030		0.991	0.168	1
06971	Vanadium	7440-62-2	37.5		0.991	0.129	1
06972	Zinc	7440-66-6	50.1		3.96	0.198	1
10146	Zirconium	7440-67-7	4.13	J	4.95	0.832	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.130	J	0.396	0.0991	2
06142	Silver	7440-22-4	0.0399	J	0.198	0.0258	2
06144	Strontium	7440-24-6	22.7		0.396	0.0674	2
06145	Thallium	7440-28-0	0.294		0.198	0.0297	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0148	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.14		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122290
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 08:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL562 SDG#: PH063-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0207	1
11031	12378-PeCDD	40321-76-4	0.343	JB	5.09	0.0312	1
11031	123478-HxCDD	39227-28-6	0.165	JB	5.09	0.0305	1
11031	123678-HxCDD	57653-85-7	0.835	JB	5.09	0.0319	1
11031	123789-HxCDD	19408-74-3	1.08	JB	5.09	0.0314	1
11031	1234678-HpCDD	35822-46-9	3.38	JB	5.09	0.0287	1
11031	OCDD	3268-87-9	26.5	B	10.2	0.0182	1
11031	2378-TCDF	51207-31-9	0.177	J	1.02	0.0330	1
11031	12378-PeCDF	57117-41-6	0.561	JB	5.09	0.0177	1
11031	23478-PeCDF	57117-31-4	0.496	JBQ	5.09	0.0161	1
11031	123478-HxCDF	70648-26-9	0.229	JB	5.09	0.0179	1
11031	123678-HxCDF	57117-44-9	0.299	JB	5.09	0.0167	1
11031	123789-HxCDF	72918-21-9	0.716	JB	5.09	0.0195	1
11031	234678-HxCDF	60851-34-5	0.200	JB	5.09	0.0173	1
11031	1234678-HpCDF	67562-39-4	0.812	JB	5.09	0.0153	1
11031	1234789-HpCDF	55673-89-7	0.127	JB	5.09	0.0196	1
11031	OCDF	39001-02-0	1.40	JB	10.2	0.0170	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.781				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	79	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122290
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 08:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL562 SDG#: PH063-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122290
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 08:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL562 SDG#: PH063-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 07:35	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 02:47	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 12:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13192002	07/15/2013 18:21	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13192002	07/11/2013 13:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 19:47	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:49	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:49	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:49	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:49	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-562-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122290
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 08:45 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL562 SDG#: PH063-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 11:06	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13191039402A	07/10/2013 20:15	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122291
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 13:50 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL563 SDG#: PH063-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	3.9		1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.81	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	0.76	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	7.2		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	22		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122291
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 13:50 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL563 SDG#: PH063-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,200		40.2	7.25	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.744	1
06935	Arsenic	7440-38-2	4.41		4.02	0.704	1
06946	Barium	7440-39-3	105		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.573	J	1.01	0.0673	1
07914	Boron	7440-42-8	2.72	J	10.1	0.844	1
06949	Cadmium	7440-43-9	0.431	J	1.01	0.0764	1
01650	Calcium	7440-70-2	2,780		20.1	3.36	1
06951	Chromium	7440-47-3	18.7		3.02	0.161	1
06952	Cobalt	7440-48-4	5.45		1.01	0.0995	1
06953	Copper	7440-50-8	11.1		2.01	0.292	1
01654	Iron	7439-89-6	18,600		40.2	3.64	1
06955	Lead	7439-92-1	7.48		3.02	0.503	1
01656	Lithium	7439-93-2	17.3		4.0	0.34	1
01657	Magnesium	7439-95-4	3,650		10.1	1.68	1
06958	Manganese	7439-96-5	329		1.01	0.0834	1
06960	Molybdenum	7439-98-7	0.390	J	2.01	0.171	1
06961	Nickel	7440-02-0	11.4		2.01	0.131	1
10145	Phosphorus	7723-14-0	295		10.1	2.90	1
01662	Potassium	7440-09-7	3,510		101	8.38	1
01667	Sodium	7440-23-5	73.0	J	101	16.8	1
06969	Tin	7440-31-5	2.30	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,030		1.01	0.171	1
06971	Vanadium	7440-62-2	35.0		1.01	0.131	1
06972	Zinc	7440-66-6	52.8		4.02	0.201	1
10146	Zirconium	7440-67-7	3.77	J	5.03	0.844	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.151	J	0.402	0.101	2
06142	Silver	7440-22-4	0.0280	J	0.201	0.0261	2
06144	Strontium	7440-24-6	21.9		0.402	0.0684	2
06145	Thallium	7440-28-0	0.287		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0116	J	0.0160	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.16		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122291
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 13:50 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL563 SDG#: PH063-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0540	JQ	1.01	0.0190	1
11031	12378-PeCDD	40321-76-4	0.315	JB	5.03	0.0240	1
11031	123478-HxCDD	39227-28-6	0.184	JBQ	5.03	0.0329	1
11031	123678-HxCDD	57653-85-7	0.827	JB	5.03	0.0350	1
11031	123789-HxCDD	19408-74-3	0.982	JB	5.03	0.0357	1
11031	1234678-HpCDD	35822-46-9	4.37	JB	5.03	0.0309	1
11031	OCDD	3268-87-9	44.5	B	10.1	0.0153	1
11031	2378-TCDF	51207-31-9	0.110	J	1.01	0.0309	1
11031	12378-PeCDF	57117-41-6	0.498	JB	5.03	0.0151	1
11031	23478-PeCDF	57117-31-4	0.380	JB	5.03	0.0141	1
11031	123478-HxCDF	70648-26-9	0.236	JB	5.03	0.0156	1
11031	123678-HxCDF	57117-44-9	0.260	JB	5.03	0.0149	1
11031	123789-HxCDF	72918-21-9	0.729	JB	5.03	0.0168	1
11031	234678-HxCDF	60851-34-5	0.190	JBQ	5.03	0.0153	1
11031	1234678-HpCDF	67562-39-4	1.03	JB	5.03	0.0139	1
11031	1234789-HpCDF	55673-89-7	0.146	JBQ	5.03	0.0160	1
11031	OCDF	39001-02-0	2.97	JB	10.1	0.0150	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.826				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	98	26 - 152
13C12-123678-HxCDF	98	26 - 123
13C12-234678-HxCDF	96	28 - 136
13C12-123789-HxCDF	100	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	100	26 - 138
13C12-OCDF	101	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122291
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 13:50 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL563 SDG#: PH063-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122291
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 13:50 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL563 SDG#: PH063-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 08:07	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 03:05	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 09:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13192002	07/15/2013 19:17	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13192002	07/11/2013 13:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 19:51	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:52	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:52	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:52	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:52	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122291
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 13:50 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL563 SDG#: PH063-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 11:08	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13191039402A	07/10/2013 20:15	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122292
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 14:30 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5632 SDG#: PH063-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	0.88	J	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.37	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	39		19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.67
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122292
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 14:30 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5632 SDG#: PH063-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	4.9	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	12		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,500		40.8	7.36	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.755	1
06935	Arsenic	7440-38-2	5.44		4.08	0.715	1
06946	Barium	7440-39-3	115		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.755	J	1.02	0.0684	1
07914	Boron	7440-42-8	2.67	J	10.2	0.857	1
06949	Cadmium	7440-43-9	0.434	J	1.02	0.0776	1
01650	Calcium	7440-70-2	2,940		20.4	3.41	1
06951	Chromium	7440-47-3	24.0		3.06	0.163	1
06952	Cobalt	7440-48-4	7.08		1.02	0.101	1
06953	Copper	7440-50-8	12.5		2.04	0.296	1
01654	Iron	7439-89-6	23,500		40.8	3.70	1
06955	Lead	7439-92-1	6.36		3.06	0.510	1
01656	Lithium	7439-93-2	21.7		4.1	0.35	1
01657	Magnesium	7439-95-4	4,560		10.2	1.70	1
06958	Manganese	7439-96-5	385		1.02	0.0847	1
06960	Molybdenum	7439-98-7	0.364	J	2.04	0.174	1
06961	Nickel	7440-02-0	14.3		2.04	0.133	1
10145	Phosphorus	7723-14-0	266		10.2	2.95	1
01662	Potassium	7440-09-7	3,160		102	8.51	1
01667	Sodium	7440-23-5	100	J	102	17.0	1
06969	Tin	7440-31-5	2.63	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,120		1.02	0.174	1
06971	Vanadium	7440-62-2	45.0		1.02	0.133	1
06972	Zinc	7440-66-6	56.5		4.08	0.204	1
10146	Zirconium	7440-67-7	4.55	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.158	J	0.408	0.102	2
06142	Silver	7440-22-4	0.0400	J	0.204	0.0265	2
06144	Strontium	7440-24-6	25.0		0.408	0.0694	2
06145	Thallium	7440-28-0	0.306		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	6.16		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.8		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122292
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 14:30 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5632 SDG#: PH063-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122292
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5632 SDG#: PH063-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0293	J	1.04	0.0242	1
11031	12378-PeCDD	40321-76-4	0.211	JBQ	5.22	0.0281	1
11031	123478-HxCDD	39227-28-6	0.116	JB	5.22	0.0346	1
11031	123678-HxCDD	57653-85-7	0.449	JBQ	5.22	0.0363	1
11031	123789-HxCDD	19408-74-3	0.658	JB	5.22	0.0359	1
11031	1234678-HpCDD	35822-46-9	0.454	JB	5.22	0.0277	1
11031	OCDD	3268-87-9	4.24	JB	10.4	0.0210	1
11031	2378-TCDF	51207-31-9	0.0655	J	1.04	0.0235	1
11031	12378-PeCDF	57117-41-6	0.342	JB	5.22	0.0143	1
11031	23478-PeCDF	57117-31-4	0.194	JB	5.22	0.0123	1
11031	123478-HxCDF	70648-26-9	0.141	JBQ	5.22	0.0118	1
11031	123678-HxCDF	57117-44-9	0.157	JBQ	5.22	0.0121	1
11031	123789-HxCDF	72918-21-9	0.732	JBQ	5.22	0.0131	1
11031	234678-HxCDF	60851-34-5	0.0936	JB	5.22	0.0120	1
11031	1234678-HpCDF	67562-39-4	0.152	JB	5.22	0.0131	1
11031	1234789-HpCDF	55673-89-7	0.0678	JBQ	5.22	0.0160	1
11031	OCDF	39001-02-0	0.310	JB	10.4	0.0273	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.199				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122292
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 14:30 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5632 SDG#: PH063-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122292
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 14:30 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5632 SDG#: PH063-06*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 08:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13193A16A	07/12/2013 23:35	Laura M Krieger	25.67
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319131662	07/10/2013 14:33	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319131662	07/10/2013 14:33	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 03:24	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 10:01	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13192002	07/15/2013 20:14	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13192002	07/11/2013 13:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131910637001	07/12/2013 19:55	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-563-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7122292
LL Group # 1402927
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/09/2013 14:30 by VC

Submitted: 07/10/2013 09:25
Reported: 07/23/2013 16:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5632 SDG#: PH063-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131910637001B	07/18/2013 17:54	David K Beck	2
06142	Silver	SW-846 6020A	1	131910637001A	07/18/2013 17:54	David K Beck	2
06144	Strontium	SW-846 6020A	1	131910637001A	07/18/2013 17:54	David K Beck	2
06145	Thallium	SW-846 6020A	1	131910637001A	07/18/2013 17:54	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131910638001	07/12/2013 11:10	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131910637001	07/11/2013 09:10	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131910638001	07/11/2013 11:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13191039402A	07/10/2013 20:15	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401A	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402927
Reported: 07/23/13 at 04:39 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13193SLA026	Sample number(s): 7122288-7122292									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	96		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	96		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	99		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	103		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	115		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	99		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	104		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	101		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	111		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	125		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	103		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	106		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	122		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	110		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	106		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	106		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	105		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	97		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	84		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	110		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	96		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		71-120		
Batch number: 13192A20A	Sample number(s): 7122287									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	106	101	75-135	5	30
Batch number: 13193A16A	Sample number(s): 7122289,7122292									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	86	81	67-119	7	30
Batch number: 131940014A	Sample number(s): 7122288-7122292									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	70	71	36-106	2	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	93		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402927
Reported: 07/23/13 at 04:39 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	98		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 131940007A	Sample number(s): 7122288-7122292									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	100		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	104		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	104		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	112		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 131910637001	Sample number(s): 7122288-7122292									
Aluminum	11.0	J	40.0	7.21	mg/kg	108		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	105		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	105		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	105		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	104		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	103		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	105		80-120		
Calcium	12.8	J	20.0	3.34	mg/kg	106		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	105		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	106		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	110		80-120		
Iron	6.78	J	40.0	3.62	mg/kg	111		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	106		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	105		80-120		
Magnesium	5.68	J	10.0	1.67	mg/kg	104		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	107		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	108		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	109		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	100		80-120		
Tin	1.32	J	10.0	0.220	mg/kg	104		80-120		
Titanium	0.177	J	1.00	0.170	mg/kg	109		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	104		80-120		
Zinc	0.422	J	4.00	0.200	mg/kg	107		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	105		80-120		
Batch number: 131910637001A	Sample number(s): 7122288-7122292									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.0774	J	0.400	0.0680	mg/kg	101		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	93		80-120		
Batch number: 131910637001B	Sample number(s): 7122288-7122292									
Selenium	0.400	U	0.400	0.100	mg/kg	102		80-120		
Batch number: 131910638001	Sample number(s): 7122288-7122292									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	104		85-120		
Batch number: 13191039402A	Sample number(s): 7122288-7122292									
15a pH by 9045D						100		95-105		
Batch number: 13197162401A	Sample number(s): 7122288-7122292									

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402927
Reported: 07/23/13 at 04:39 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13192002	Sample number(s): 7122288-7122292								
2378-TCDD	1.00 U	1.00	0.0241	ng/kg	101		67-158		
12378-PeCDD	0.0216 J	5.00	0.0213	ng/kg	106		70-142		
123478-HxCDD	0.0239 J	5.00	0.0155	ng/kg	114		70-164		
123678-HxCDD	0.0206 J	5.00	0.0166	ng/kg	113		76-134		
123789-HxCDD	0.0274 J	5.00	0.0167	ng/kg	112		64-162		
1234678-HpCDD	0.0814 J	5.00	0.0140	ng/kg	109		70-140		
OCDD	0.214 J	10.0	0.0146	ng/kg	109		78-144		
2378-TCDF	1.00 U	1.00	0.0199	ng/kg	111		75-158		
12378-PeCDF	0.0503 J	5.00	0.0124	ng/kg	109		80-134		
23478-PeCDF	0.0333 J	5.00	0.0116	ng/kg	111		68-160		
123478-HxCDF	0.0351 J	5.00	0.00820	ng/kg	113		72-134		
123678-HxCDF	0.0220 J	5.00	0.00740	ng/kg	112		84-130		
123789-HxCDF	0.0184 J	5.00	0.00970	ng/kg	113		78-130		
234678-HxCDF	0.0269 J	5.00	0.00780	ng/kg	113		70-156		
1234678-HpCDF	0.0265 J	5.00	0.00430	ng/kg	110		82-122		
1234789-HpCDF	0.0357 J	5.00	0.00750	ng/kg	110		78-138		
OCDF	0.0705 J	10.0	0.0227	ng/kg	109		63-170		
TEQ WHO 2005 - EDLx0.0	0.0243			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13193SLA026	Sample number(s): 7122288-7122292 UNSPK: 7122288								
Acenaphthene	89	93	48-127	4	30				
Acenaphthylene	80	84	49-121	5	30				
Anthracene	81	85	52-126	5	30				
Benzo(a)anthracene	81	87	32-135	7	30				
Benzo(a)pyrene	77	80	36-138	4	30				
Benzo(b)fluoranthene	85	101	26-142	16	30				
Benzo(e)pyrene	79	84	70-130	5	30				
Benzo(g,h,i)perylene	54	52	33-141	3	30				
Benzo(k)fluoranthene	78	82	47-129	4	30				
Butylbenzylphthalate	112	119	59-153	6	30				
Di-n-butylphthalate	112	121	62-154	7	30				
Chrysene	80	84	29-148	3	30				
Dibenz(a,h)anthracene	65	64	34-125	2	30				
Diethylphthalate	111	117	76-127	5	30				
Dimethylphthalate	90	95	62-136	4	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402927
Reported: 07/23/13 at 04:39 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Bis(2-Ethylhexyl)phthalate	97	107	39-167	8	30				
Fluoranthene	83	92	47-135	9	30				
Fluorene	82	86	50-129	4	30				
Indeno(1,2,3-cd)pyrene	61	60	17-136	2	30				
1-Methylnaphthalene	92	96	50-131	4	30				
2-Methylnaphthalene	87	92	28-144	4	30				
Naphthalene	84	89	31-148	6	30				
N-Nitrosodimethylamine	69	73	48-113	5	30				
Di-n-octylphthalate	113	124	52-162	9	30				
Phenanthrene	82	88	29-142	6	30				
Pyrene	80	87	26-143	7	30				
Batch number: 131940014A	Sample number(s): 7122288-7122292 UNSPK: 7122288								
PCB-1016	84	81	16-146	3	50				
PCB-1260	90	85	40-134	6	50				
Batch number: 131940007A	Sample number(s): 7122288-7122292 UNSPK: P120502								
EFH (C12-C14)	101	102	49-123	1	20				
EFH (C15-C20)	173*	132*	49-123	27*	20				
EFH (C21-C30)	162*	82	49-123	24*	20				
EFH (C30-C40)	388 (2)	182 (2)	49-123	26*	20				
EFH (C8-C11)	89	86	49-123	5	20				
Batch number: 131910637001	Sample number(s): 7122288-7122292 UNSPK: P120502 BKG: P120502								
Aluminum	1971 (2)	2027 (2)	75-125	0	20	15,800	16,900	7	20
Antimony	37*	37*	75-125	3	20	3.92 U	4.00 U	0 (1)	20
Arsenic	104	103	75-125	3	20	4.11	4.46	8 (1)	20
Barium	106	106	75-125	1	20	102	109	6	20
Beryllium	105	105	75-125	1	20	0.517 J	0.530 J	3 (1)	20
Boron	101	101	75-125	2	20	2.61 J	3.35 J	25* (1)	20
Cadmium	100	99	75-125	3	20	0.419 J	0.886 J	72* (1)	20
Calcium	228 (2)	188 (2)	75-125	6	20	2,190	3,310	41*	20
Chromium	120	112	75-125	5	20	15.8	18.4	15	20
Cobalt	99	98	75-125	3	20	4.31	4.81	11 (1)	20
Copper	108	107	75-125	2	20	10.3	11.4	10	20
Iron	1714 (2)	1495 (2)	75-125	1	20	16,900	18,600	9	20
Lead	104	101	75-125	3	20	8.92	10.3	15 (1)	20
Lithium	105	105	75-125	2	20	19.9	22.3	11	20
Magnesium	296 (2)	298 (2)	75-125	0	20	3,470	3,910	12	20
Manganese	132 (2)	137 (2)	75-125	0	20	322	345	7	20
Molybdenum	99	99	75-125	2	20	0.835 J	0.626 J	29* (1)	20
Nickel	102	101	75-125	3	20	10.3	11.5	11	20
Phosphorus	120 (2)	122 (2)	75-125	0	20	489	566	15	20
Potassium	158*	162*	75-125	0	20	3,650	4,620	23*	20
Sodium	100	99	75-125	3	20	65.9 J	82.7 J	23* (1)	20
Tin	92	92	75-125	2	20	2.45 J	2.55 J	4 (1)	20
Titanium	371 (2)	392 (2)	75-125	1	20	1,010	1,020	2	20
Vanadium	112	111	75-125	2	20	28.7	32.9	14	20
Zinc	120	112	75-125	4	20	61.8	114	60*	20
Zirconium	97	98	75-125	2	20	3.59 J	4.82 J	29* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402927
Reported: 07/23/13 at 04:39 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131910637001A	Sample number(s): 7122288-7122292 UNSPK: P120502 BKG: P120502								
Silver	103	99	75-125	6	20	0.0323 J	0.0295 J	9 (1)	20
Strontium	115	105	75-125	4	20	19.1	24.9	26*	20
Thallium	100	101	75-125	1	20	0.237	0.249	5 (1)	20
Batch number: 131910637001B	Sample number(s): 7122288-7122292 UNSPK: P120502 BKG: P120502								
Selenium	87	95	75-125	6	20	0.101 J	0.125 J	21* (1)	20
Batch number: 131910638001	Sample number(s): 7122288-7122292 UNSPK: P120502 BKG: P120502								
3a Mercury 7471A	110	118	65-135	7	20	0.0119 J	0.0278	80* (1)	20
Batch number: 13191039402A	Sample number(s): 7122288-7122292 BKG: 7122288								
15a pH by 9045D						6.07	6.06	0	3
Batch number: 13197162401A	Sample number(s): 7122288-7122292 BKG: P120502								
14a Moisture Content by 160.3						0.95	0.94	1	20
Batch number: 13192002	Sample number(s): 7122288-7122292 UNSPK: P120502								
2378-TCDD	103	101	40-135	4	20				
12378-PeCDD	107	108	40-135	1	20				
123478-HxCDD	115	116	40-135	1	20				
123678-HxCDD	112	110	40-135	3	20				
123789-HxCDD	112	112	40-135	2	20				
1234678-HpCDD	111	109	40-135	3	20				
OCDD	138*	119	40-135	13	20				
2378-TCDF	108	107	40-135	3	20				
12378-PeCDF	112	111	40-135	2	20				
23478-PeCDF	112	112	40-135	2	20				
123478-HxCDF	115	114	40-135	2	20				
123678-HxCDF	111	111	40-135	2	20				
123789-HxCDF	114	112	40-135	3	20				
234678-HxCDF	114	114	40-135	2	20				
1234678-HpCDF	111	111	40-135	2	20				
1234789-HpCDF	112	112	40-135	1	20				
OCDF	109	110	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13193SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7122288	73	69	90
7122289	69	73	81

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402927
Reported: 07/23/13 at 04:39 PM

Surrogate Quality Control

7122290	79	81	92
7122291	74	76	89
7122292	72	73	84
Blank	87	93	102
LCS	87	93	101
MS	72	71	87
MSD	77	76	94
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13192A20A

	Trifluorotoluene-F
7122287	86
Blank	87
LCS	121
LCSD	118
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13193A16A

	Trifluorotoluene-F
7122289	78
7122292	79
Blank	81
LCS	76
LCSD	75
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 131940014A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7122288	92	62
7122289	100	84
7122290	90	83
7122291	94	82
7122292	106	90
Blank	102	95
LCS	102	101
LCSD	106	104
MS	93	90
MSD	93	86
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131940007A

	Chlorobenzene	Orthoterphenyl
7122288	95	101
7122289	85	84

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1402927
Reported: 07/23/13 at 04:39 PM

Surrogate Quality Control

7122290	90	97
7122291	87	93
7122292	91	96
Blank	96	103
LCS	93	100
MS	90	102
MSD	94	101
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13192002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7122288	67	74	82	85	82	86
7122289	61	72	79	81	78	79
7122290	68	78	85	85	82	83
7122291	79	90	98	98	96	100
7122292	60	67	75	74	71	75
Blank	60	67	71	78	72	70
MS	68	52	53	54	52	68
MSD	60	67	76	76	71	77
OPR	69	48	43	45	49	64
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7122288	89	85	83	71	73	76
7122289	85	77	75	68	69	72
7122290	90	80	79	73	73	74
7122291	102	100	101	85	84	86
7122292	76	70	71	62	64	66
Blank	95	64	61	66	70	72
MS	50	48	43	47	45	45
MSD	79	64	63	62	67	69
OPR	49	41	39	45	42	42
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7122288	74	76	80	66	74
7122289	68	69	73	59	69
7122290	73	74	77	67	76
7122291	84	86	93	79	88
7122292	63	64	66	58	65
Blank	67	69	70	52	67
MS	48	43	46	53	50
MSD	63	63	63	55	64
OPR	49	42	47	53	49
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Op#1402927 sample#7122287-92

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/9/2013
CarrierName: FedEx
AirbillNo: 796190893006

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130709-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-070913	7/9/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-561-SA8-SB-0.0-0.5	7/9/13 09:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-561-SA8-SB-0.0-0.5	7/9/13 09:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-561-SA8-SB-4.0-5.0	7/9/13 11:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-561-SA8-SB-4.0-5.0	7/9/13 11:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-561-SA8-SB-4.0-5.0	7/9/13 11:40	SO	None	2 - Encore	10 day																			X												
SL-562-SA8-SB-0.0-0.5	7/9/13 08:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-562-SA8-SB-0.0-0.5	7/9/13 08:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-563-SA8-SB-0.0-0.5	7/9/13 13:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-563-SA8-SB-0.0-0.5	7/9/13 13:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-563-SA8-SB-2.0-3.0	7/9/13 14:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-563-SA8-SB-2.0-3.0	7/9/13 14:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-563-SA8-SB-2.0-3.0	7/9/13 14:30	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Myers	07/09/13	1600									
									Patch	7/10/2013	0925

COC Rev 2

COC: 20130709-01, Page 1 of 1

eurofins | Lancaster Laboratories

C# 1402927

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 7/10/13

Time of Receipt: 0925

Source Code: 90

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	OT131	1.1	TB	WI	y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat Gu 3477 **Date/Time:** 7/10/13 1013

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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SAMPLE DELIVERY GROUP

PH064

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

July 25, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/11/2013
Group Number: 1403202
SDG: PH064
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB1-071013 Water	7123467
EB2-071013 Water	7123468
SL-572-SA8-SB-0.0-0.5 Soil	7123469
SL-572-SA8-SB-4.0-5.0 Soil	7123470
SL-572-SA8-SB-9.0-10.0 Soil	7123471
SL-572-SA8-SB-14.0-15.0 Soil	7123472
SL-572-SA8-SB-18.5-19.5 Soil	7123473
SL-573-SA8-SB-0.0-0.5 Soil	7123474
SL-573-SA8-SB-4.0-5.0 Soil	7123475
SL-573-SA8-SB-9.5-10.5 Soil	7123476
TB-071013 Water	7123477
SL-571-SA8-SB-0.0-0.5 Soil	7123478
SL-571-SA8-SB-6.5-7.5 Soil	7123479
SL-571-SA8-SB-12.5-13.5 Soil	7123480

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: EB1-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123467
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:00 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB1 SDG#: PH064-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	8	J	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123467
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:00 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB1 SDG#: PH064-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.052	U	0.052	0.010	1
12971	Acenaphthylene	208-96-8	0.052	U	0.052	0.010	1
12971	Anthracene	120-12-7	0.052	U	0.052	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.052	U	0.052	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.052	U	0.052	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.052	U	0.052	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.052	U	0.052	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.052	U	0.052	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.052	U	0.052	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.052	1
12971	Di-n-butylphthalate	84-74-2	1.0	U	1.0	0.052	1
12971	Chrysene	218-01-9	0.052	U	0.052	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.052	U	0.052	0.010	1
12971	Diethylphthalate	84-66-2	1.0	U	1.0	0.052	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.052	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.43	J	1.0	0.052	1
12971	Fluoranthene	206-44-0	0.052	U	0.052	0.010	1
12971	Fluorene	86-73-7	0.052	U	0.052	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.052	U	0.052	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.052	U	0.052	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.052	U	0.052	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123467
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:00 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB1 SDG#: PH064-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Naphthalene	91-20-3	0.034	J	0.052	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.052	U	0.052	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.052	1
12971	Phenanthrene	85-01-8	0.052	U	0.052	0.031	1
12971	Pyrene	129-00-0	0.052	U	0.052	0.010	1
Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.							
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.49	U	0.49	0.16	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.25	1
10407	2,4-DB	94-82-6	0.99	U	0.99	0.30	1
10407	Dicamba	1918-00-9	0.30	U	0.30	0.079	1
10407	Dinoseb	88-85-7	0.49	U	0.49	0.12	1
The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.							
10407	2,4-DP (Dichlorprop)	120-36-5	0.49	U	0.49	0.16	1
10407	MCPA	94-74-6	200	U	200	49	1
10407	MCPP	93-65-2	200	U	200	49	1
10407	2,4,5-T	93-76-5	0.089		0.049	0.015	1
10407	2,4,5-TP	93-72-1	0.049	U	0.049	0.0099	1
Perchlorate	**SW-846 6850 1/2007**		**ug/l**		**ug/l**	**ug/l**	
06386	6b Perchlorate (Method 6850)	14797-73-0	1.0	U	1.0	0.20	1
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0084	U	0.0084	0.0017	1
10589	Alpha BHC	319-84-6	0.0084	U	0.0084	0.0025	1
10589	Beta BHC	319-85-7	0.0084	U	0.0084	0.0029	1
10589	Gamma BHC - Lindane	58-89-9	0.0084	U	0.0084	0.0017	1
10589	Chlordane	57-74-9	0.42	U	0.42	0.13	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0042	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0042	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0044	1
10589	Delta BHC	319-86-8	0.0084	U	0.0084	0.0029	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0045	1
10589	Endosulfan I	959-98-8	0.0084	U	0.0084	0.0036	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0049	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0068	1
10589	Endrin Aldehyde	7421-93-4	0.084	U	0.084	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0042	1
10589	Heptachlor	76-44-8	0.0084	U	0.0084	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0084	U	0.0084	0.0019	1
10589	Methoxychlor	72-43-5	0.084	U	0.084	0.025	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123467
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:00 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB1 SDG#: PH064-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Mirex	2385-85-5	0.21	U	0.21	0.071	1
10589	Toxaphene	8001-35-2	2.5	U	2.5	0.84	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.42	U	0.42	0.084	1
10591	Aroclor 5442	12642-23-8	0.42	U	0.42	0.084	1
10591	Aroclor 5460	11126-42-4	0.42	U	0.42	0.092	1
10591	PCB-1016	12674-11-2	0.42	U	0.42	0.084	1
10591	PCB-1221	11104-28-2	0.42	U	0.42	0.084	1
10591	PCB-1232	11141-16-5	0.42	U	0.42	0.17	1
10591	PCB-1242	53469-21-9	0.42	U	0.42	0.084	1
10591	PCB-1248	12672-29-6	0.42	U	0.42	0.084	1
10591	PCB-1254	11097-69-1	0.42	U	0.42	0.084	1
10591	PCB-1260	11096-82-5	0.42	U	0.42	0.13	1
10591	PCB-1262	37324-23-5	0.42	U	0.42	0.17	1
10591	PCB-1268	11100-14-4	0.42	U	0.42	0.13	1
	The PCTs were not spiked correctly for the LCS/LCSD. The sample was reextracted outside the method hold time. The PCT data was reported from the reextract.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C15-C20)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C21-C30)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C30 - C40)	n.a.	0.48	U	0.48	0.096	1
10365	EFH (C8-C11)	n.a.	0.096	U	0.096	0.048	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100	U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400	U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300	U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100	U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0031	J	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400	U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300	U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400	U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200	U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100	U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0035	J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200	U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200	U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00	U	1.00	0.0980	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123467
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:00 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB1 SDG#: PH064-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.0	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123467
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:00 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB1 SDG#: PH064-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.93	U	1.93	0.247	1
10915	12378-PeCDD	40321-76-4	9.64	U	9.64	0.253	1
10915	123478-HxCDD	39227-28-6	0.224	JBQ	9.64	0.159	1
10915	123678-HxCDD	57653-85-7	0.241	JBQ	9.64	0.170	1
10915	123789-HxCDD	19408-74-3	0.393	JBQ	9.64	0.164	1
10915	1234678-HpCDD	35822-46-9	0.309	JBQ	9.64	0.193	1
10915	OCDD	3268-87-9	1.04	JBQ	19.3	0.187	1
10915	2378-TCDF	51207-31-9	1.93	U	1.93	0.221	1
10915	12378-PeCDF	57117-41-6	0.405	JBQ	9.64	0.152	1
10915	23478-PeCDF	57117-31-4	9.64	U	9.64	0.133	1
10915	123478-HxCDF	70648-26-9	0.412	JBQ	9.64	0.0847	1
10915	123678-HxCDF	57117-44-9	0.201	JBQ	9.64	0.0855	1
10915	123789-HxCDF	72918-21-9	0.336	JB	9.64	0.0935	1
10915	234678-HxCDF	60851-34-5	0.235	JBQ	9.64	0.0799	1
10915	1234678-HpCDF	67562-39-4	0.282	JBQ	9.64	0.0837	1
10915	1234789-HpCDF	55673-89-7	0.203	JBQ	9.64	0.0997	1
10915	OCDF	39001-02-0	0.838	JBQ	19.3	0.204	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0336				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	80	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123467
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:00 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB1 SDG#: PH064-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123467
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:00 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB1 SDG#: PH064-01EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y131973AA	07/16/2013 23:24	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y131973AA	07/16/2013 23:24	Brett W Kenyon	1
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13197WAC026	07/19/2013 23:43	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13197WAC026	07/16/2013 13:30	David S Schrum	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13192A20A	07/11/2013 22:04	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13192A20A	07/11/2013 22:04	Marie D Beamenderfer	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	131940016A	07/16/2013 16:22	Matthew S Listner	1
06386	6b Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131970017A	07/16/2013 18:01	Richard A Shober	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	131980014A	07/18/2013 18:00	Lisa A Reinert	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	131980015A	07/19/2013 00:38	Monica M Souders	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	132000013A	07/22/2013 02:36	Monica M Souders	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	131980015A	07/17/2013 17:10	JoElla L Rice	1
11121	PCB Waters Update IV Ext	SW-846 3510C	2	132000013A	07/20/2013 10:00	William H Saadeh	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	131980014A	07/17/2013 17:10	JoElla L Rice	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	131940016A	07/15/2013 08:30	Kerrie A Freeburn	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131960020A	07/17/2013 22:12	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	131960020A	07/16/2013 22:00	Elaine F Stoltzfus	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13200001	07/19/2013 22:11	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13200001	07/19/2013 08:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123467
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:00 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB1 SDG#: PH064-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07052	Cobalt	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
01756	Lithium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07060	Molybdenum	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07061	Nickel	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
10143	Phosphorus	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
07072	Zinc	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	131970635001	07/18/2013 20:39	Katlin N Cataldi	1
06041	Selenium	SW-846 6020A	1	131970639001B	07/18/2013 11:27	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	131970639001A	07/18/2013 11:27	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	131970639001A	07/18/2013 11:27	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	131970639001A	07/18/2013 11:27	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	131925713006	07/15/2013 07:44	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	131970635001	07/17/2013 11:00	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	131970639001	07/17/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131925713006	07/12/2013 16:00	Nelli S Markaryan	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13192004101A	07/11/2013 17:03	Clayton C Litchmore	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123468
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:30 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB2 SDG#: PH064-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	7	J	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123468
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:30 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB2 SDG#: PH064-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	1.0	U	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	1.0	U	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	1.0	U	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.051	U	0.051	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123468
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:30 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB2 SDG#: PH064-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Naphthalene	91-20-3	0.032	J	0.051	0.030	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.030	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.51	U	0.51	0.16	1
10407	Dalapon	75-99-0	1.3	U	1.3	0.26	1
10407	2,4-DB	94-82-6	1.0	U	1.0	0.31	1
10407	Dicamba	1918-00-9	0.31	U	0.31	0.082	1
10407	Dinoseb	88-85-7	0.51	U	0.51	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.51	U	0.51	0.16	1
10407	MCPA	94-74-6	210	U	210	51	1
10407	MCPP	93-65-2	210	U	210	51	1
10407	2,4,5-T	93-76-5	0.051	U	0.051	0.015	1
10407	2,4,5-TP	93-72-1	0.051	U	0.051	0.010	1
	The data from the original extraction could not be used because interference was observed on the chromatogram which affected the internal standard. The source of the interferent is suspected to be from residual detergent. The sample was reextracted one day outside the method hold time. The data associated with the reextraction did not have this interference. The data from the reextraction was reported.						
	The recovery for the method blank surrogate is outside the QC acceptance limits as noted on the QC Summary.						
Perchlorate	**SW-846 6850 1/2007**		**ug/l**		**ug/l**	**ug/l**	
06386	6b Perchlorate (Method 6850)	14797-73-0	1.0	U	1.0	0.20	1
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0087	U	0.0087	0.0017	1
10589	Alpha BHC	319-84-6	0.0087	U	0.0087	0.0026	1
10589	Beta BHC	319-85-7	0.0087	U	0.0087	0.0030	1
10589	Gamma BHC - Lindane	58-89-9	0.0087	U	0.0087	0.0017	1
10589	Chlordane	57-74-9	0.44	U	0.44	0.14	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0044	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0044	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0045	1
10589	Delta BHC	319-86-8	0.0087	U	0.0087	0.0030	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0046	1
10589	Endosulfan I	959-98-8	0.0087	U	0.0087	0.0038	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0051	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0071	1
10589	Endrin Aldehyde	7421-93-4	0.087	U	0.087	0.017	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123468
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:30 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB2 SDG#: PH064-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**	**ug/l**	**ug/l**	
10589	Endrin Ketone	53494-70-5	0.017 U	0.017	0.0044	1
10589	Heptachlor	76-44-8	0.0087 U	0.0087	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0087 U	0.0087	0.0020	1
10589	Methoxychlor	72-43-5	0.087 U	0.087	0.026	1
10589	Mirex	2385-85-5	0.22 U	0.22	0.074	1
10589	Toxaphene	8001-35-2	2.6 U	2.6	0.87	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**	**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.44 U	0.44	0.087	1
10591	Aroclor 5442	12642-23-8	0.44 U	0.44	0.087	1
10591	Aroclor 5460	11126-42-4	0.44 U	0.44	0.096	1
10591	PCB-1016	12674-11-2	0.44 U	0.44	0.087	1
10591	PCB-1221	11104-28-2	0.44 U	0.44	0.087	1
10591	PCB-1232	11141-16-5	0.44 U	0.44	0.17	1
10591	PCB-1242	53469-21-9	0.44 U	0.44	0.087	1
10591	PCB-1248	12672-29-6	0.44 U	0.44	0.087	1
10591	PCB-1254	11097-69-1	0.44 U	0.44	0.087	1
10591	PCB-1260	11096-82-5	0.44 U	0.44	0.13	1
10591	PCB-1262	37324-23-5	0.44 U	0.44	0.17	1
10591	PCB-1268	11100-14-4	0.44 U	0.44	0.14	1
	The PCTs were not spiked correctly for the LCS/LCSD. The sample was reextracted outside the method hold time. The PCT data was reported from the reextract.					
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.098 U	0.098	0.049	1
10365	EFH (C15-C20)	n.a.	0.098 U	0.098	0.049	1
10365	EFH (C21-C30)	n.a.	0.098 U	0.098	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49 U	0.49	0.098	1
10365	EFH (C8-C11)	n.a.	0.098 U	0.098	0.049	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.					
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0030 J	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123468
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:30 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB2 SDG#: PH064-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.2	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123468
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:30 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB2 SDG#: PH064-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	2.04	U	2.04	0.245	1
10915	12378-PeCDD	40321-76-4	0.268	JQ	10.2	0.262	1
10915	123478-HxCDD	39227-28-6	10.2	U	10.2	0.172	1
10915	123678-HxCDD	57653-85-7	0.375	JBQ	10.2	0.181	1
10915	123789-HxCDD	19408-74-3	10.2	U	10.2	0.176	1
10915	1234678-HpCDD	35822-46-9	0.532	JB	10.2	0.200	1
10915	OCDD	3268-87-9	0.674	JBQ	20.4	0.174	1
10915	2378-TCDF	51207-31-9	2.04	U	2.04	0.235	1
10915	12378-PeCDF	57117-41-6	0.450	JB	10.2	0.150	1
10915	23478-PeCDF	57117-31-4	0.209	JBQ	10.2	0.132	1
10915	123478-HxCDF	70648-26-9	0.344	JB	10.2	0.0967	1
10915	123678-HxCDF	57117-44-9	0.187	JBQ	10.2	0.101	1
10915	123789-HxCDF	72918-21-9	0.410	JBQ	10.2	0.112	1
10915	234678-HxCDF	60851-34-5	0.206	JBQ	10.2	0.0930	1
10915	1234678-HpCDF	67562-39-4	0.248	JBQ	10.2	0.0753	1
10915	1234789-HpCDF	55673-89-7	0.333	JBQ	10.2	0.0903	1
10915	OCDF	39001-02-0	0.599	JB	20.4	0.240	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0534				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123468
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:30 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB2 SDG#: PH064-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123468
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:30 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB2 SDG#: PH064-02EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y131973AA	07/16/2013 23:45	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y131973AA	07/16/2013 23:45	Brett W Kenyon	1
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13197WAC026	07/20/2013 00:10	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13197WAC026	07/16/2013 13:30	David S Schrum	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13192A20A	07/11/2013 19:53	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13192A20A	07/11/2013 19:53	Marie D Beamenderfer	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	131990011A	07/19/2013 11:22	Matthew S Listner	1
06386	6b Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131970017A	07/16/2013 18:39	Richard A Shober	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	131980014A	07/18/2013 18:16	Lisa A Reinert	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	131980015A	07/19/2013 00:57	Monica M Souders	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	132000013A	07/22/2013 02:54	Monica M Souders	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	131980015A	07/17/2013 17:10	JoElla L Rice	1
11121	PCB Waters Update IV Ext	SW-846 3510C	2	132000013A	07/20/2013 10:00	William H Saadeh	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	131980014A	07/17/2013 17:10	JoElla L Rice	1
00816	Water Sample Herbicide Extract	SW-846 8151A	2	131990011A	07/18/2013 20:10	Karen L Beyer	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131960020A	07/17/2013 22:33	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	131960020A	07/16/2013 22:00	Elaine F Stoltzfus	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13200001	07/19/2013 23:07	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13200001	07/19/2013 08:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123468
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:30 by PH

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10EB2 SDG#: PH064-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07052	Cobalt	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
01756	Lithium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07060	Molybdenum	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07061	Nickel	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
10143	Phosphorus	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
07072	Zinc	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	131970635001	07/18/2013 20:43	Katlin N Cataldi	1
06041	Selenium	SW-846 6020A	1	131970639001B	07/18/2013 11:30	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	131970639001A	07/18/2013 11:30	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	131970639001A	07/18/2013 11:30	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	131970639001A	07/18/2013 11:30	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	131925713006	07/15/2013 07:46	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	131970635001	07/17/2013 11:00	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	131970639001	07/17/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131925713006	07/12/2013 16:00	Nelli S Markaryan	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13192004101A	07/11/2013 16:59	Clayton C Litchmore	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123469
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 10:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57200 SDG#: PH064-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.79	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	0.87	J	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	5.6		2.0	0.79	1
12969	Benzo(a)pyrene	50-32-8	6.3		2.0	0.79	1
12969	Benzo(b)fluoranthene	205-99-2	10		2.0	0.79	1
12969	Benzo(e)pyrene	192-97-2	5.2	J	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.8		2.0	0.79	1
12969	Benzo(k)fluoranthene	207-08-9	3.8		2.0	0.79	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.1	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.1	1
12969	Chrysene	218-01-9	9.2		2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.0	J	2.0	0.79	1
12969	Diethylphthalate	84-66-2	21	U	21	7.1	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	17	J	21	7.1	1
12969	Fluoranthene	206-44-0	13		2.0	0.79	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.79	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.4		2.0	0.79	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.79	1
12969	2-Methylnaphthalene	91-57-6	0.80	J	2.0	0.79	1
12969	Naphthalene	91-20-3	2.0	U	2.0	0.79	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.79	1
12969	Di-n-octylphthalate	117-84-0	12	J	21	7.1	1
12969	Phenanthrene	85-01-8	9.7		2.0	0.79	1
12969	Pyrene	129-00-0	13		2.0	0.79	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	12	U	12	4.7	2
12952	EFH (C15-C20)	n.a.	12	U	12	4.7	2
12952	EFH (C21-C30)	n.a.	18		12	4.7	2
12952	EFH (C30-C40)	n.a.	79		23	9.4	2
12952	EFH (C8-C11)	n.a.	12	U	12	4.7	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123469
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 10:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57200 SDG#: PH064-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	35,000		46.6	8.41	1
06944	Antimony	7440-36-0	0.944	J	4.66	0.863	1
06935	Arsenic	7440-38-2	4.37	J	4.66	0.816	1
06946	Barium	7440-39-3	138		1.17	0.0385	1
06947	Beryllium	7440-41-7	1.03	J	1.17	0.0781	1
07914	Boron	7440-42-8	9.52	J	11.7	0.979	1
06949	Cadmium	7440-43-9	0.422	J	1.17	0.0886	1
01650	Calcium	7440-70-2	12,100		23.3	3.89	1
06951	Chromium	7440-47-3	37.9		3.50	0.187	1
06952	Cobalt	7440-48-4	10.6		1.17	0.115	1
06953	Copper	7440-50-8	16.6		2.33	0.338	1
01654	Iron	7439-89-6	33,300		233	21.1	5
06955	Lead	7439-92-1	9.69		3.50	0.583	1
01656	Lithium	7439-93-2	29.1		4.7	0.40	1
01657	Magnesium	7439-95-4	7,070		11.7	1.95	1
06958	Manganese	7439-96-5	687		1.17	0.0968	1
06960	Molybdenum	7439-98-7	0.516	J	2.33	0.198	1
06961	Nickel	7440-02-0	22.1		2.33	0.152	1
10145	Phosphorus	7723-14-0	213		11.7	3.37	1
01662	Potassium	7440-09-7	4,060		117	9.72	1
01667	Sodium	7440-23-5	481		117	19.5	1
06969	Tin	7440-31-5	3.45	J	11.7	0.256	1
06970	Titanium	7440-32-6	1,340		5.83	0.991	5
06971	Vanadium	7440-62-2	66.9		1.17	0.152	1
06972	Zinc	7440-66-6	66.2		4.66	0.233	1
10146	Zirconium	7440-67-7	7.31		5.83	0.979	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.466	U	0.466	0.117	2
06142	Silver	7440-22-4	0.0410	J	0.233	0.0303	2
06144	Strontium	7440-24-6	47.1		0.466	0.0793	2
06145	Thallium	7440-28-0	0.346		0.233	0.0350	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0188	U	0.0188	0.0113	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	9.70		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	15.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123469
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 10:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57200 SDG#: PH064-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.16	U	1.16	0.0256	1
11031	12378-PeCDD	40321-76-4	0.0684	JBQ	5.82	0.0264	1
11031	123478-HxCDD	39227-28-6	0.0392	JB	5.82	0.0247	1
11031	123678-HxCDD	57653-85-7	0.195	JB	5.82	0.0257	1
11031	123789-HxCDD	19408-74-3	0.169	JB	5.82	0.0251	1
11031	1234678-HpCDD	35822-46-9	2.58	JB	5.82	0.0279	1
11031	OCDD	3268-87-9	19.6	B	11.6	0.0245	1
11031	2378-TCDF	51207-31-9	1.16	U	1.16	0.0283	1
11031	12378-PeCDF	57117-41-6	0.119	JB	5.82	0.0256	1
11031	23478-PeCDF	57117-31-4	0.0542	JBQ	5.82	0.0233	1
11031	123478-HxCDF	70648-26-9	0.0721	JBQ	5.82	0.0185	1
11031	123678-HxCDF	57117-44-9	0.0638	JB	5.82	0.0170	1
11031	123789-HxCDF	72918-21-9	0.162	JBQ	5.82	0.0209	1
11031	234678-HxCDF	60851-34-5	0.0548	JBQ	5.82	0.0174	1
11031	1234678-HpCDF	67562-39-4	0.362	JB	5.82	0.0108	1
11031	1234789-HpCDF	55673-89-7	0.0525	JBQ	5.82	0.0163	1
11031	OCDF	39001-02-0	0.630	JB	11.6	0.0291	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0857				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123469
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 10:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57200 SDG#: PH064-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123469
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 10:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57200 SDG#: PH064-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 09:10	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 03:42	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/17/2013 07:28	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/16/2013 19:28	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06944	Antimony	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06946	Barium	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
07914	Boron	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
01650	Calcium	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06951	Chromium	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06953	Copper	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
01654	Iron	SW-846 6010C	1	131920637001	07/20/2013 08:58	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
01656	Lithium	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06958	Manganese	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06961	Nickel	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
01662	Potassium	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
01667	Sodium	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06969	Tin	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06970	Titanium	SW-846 6010C	1	131920637001	07/20/2013 08:58	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06972	Zinc	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131920637001	07/18/2013 20:57	John P Hook	1
06141	Selenium	SW-846 6020A	1	131920637001B	07/18/2013 19:20	David K Beck	2
06142	Silver	SW-846 6020A	1	131920637001A	07/18/2013 19:20	David K Beck	2
06144	Strontium	SW-846 6020A	1	131920637001A	07/18/2013 19:20	David K Beck	2
06145	Thallium	SW-846 6020A	1	131920637001A	07/18/2013 19:20	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123469
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 10:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57200 SDG#: PH064-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131920638001	07/15/2013 09:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131920637001	07/14/2013 23:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131920638001	07/15/2013 03:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13192039401A	07/11/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401B	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123470
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57240 SDG#: PH064-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.5	10
12969	Acenaphthylene	208-96-8	19	U	19	3.8	10
12969	Anthracene	120-12-7	19	U	19	3.8	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.5	10
12969	Benzo(a)pyrene	50-32-8	19	U	19	7.5	10
12969	Benzo(b)fluoranthene	205-99-2	16	J	19	7.5	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	38	10
12969	Benzo(g,h,i)perylene	191-24-2	19	U	19	7.5	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.5	10
12969	Butylbenzylphthalate	85-68-7	200	U	200	68	10
12969	Di-n-butylphthalate	84-74-2	200	U	200	68	10
12969	Chrysene	218-01-9	16	J	19	3.8	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.5	10
12969	Diethylphthalate	84-66-2	200	U	200	68	10
12969	Dimethylphthalate	131-11-3	200	U	200	68	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	200	U	200	68	10
12969	Fluoranthene	206-44-0	11	J	19	7.5	10
12969	Fluorene	86-73-7	19	U	19	7.5	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.5	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.5	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.5	10
12969	Naphthalene	91-20-3	19	U	19	7.5	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.5	10
12969	Di-n-octylphthalate	117-84-0	200	U	200	68	10
12969	Phenanthrene	85-01-8	14	J	19	7.5	10
12969	Pyrene	129-00-0	13	J	19	7.5	10
Reporting limits were raised due to interference from the sample matrix.							
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.59
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	28	U	28	11	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123470
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57240 SDG#: PH064-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	28	U	28	11	5
12952	EFH (C21-C30)	n.a.	73		28	11	5
12952	EFH (C30-C40)	n.a.	220		57	23	5
12952	EFH (C8-C11)	n.a.	28	U	28	11	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,600		44.1	7.95	1
06944	Antimony	7440-36-0	4.41	U	4.41	0.815	1
06935	Arsenic	7440-38-2	5.76		4.41	0.771	1
06946	Barium	7440-39-3	87.3		1.10	0.0364	1
06947	Beryllium	7440-41-7	0.808	J	1.10	0.0738	1
07914	Boron	7440-42-8	7.40	J	11.0	0.926	1
06949	Cadmium	7440-43-9	0.358	J	1.10	0.0838	1
01650	Calcium	7440-70-2	14,700		22.0	3.68	1
06951	Chromium	7440-47-3	29.2		3.31	0.176	1
06952	Cobalt	7440-48-4	7.76		1.10	0.109	1
06953	Copper	7440-50-8	13.3		2.20	0.320	1
01654	Iron	7439-89-6	28,200		220	19.9	5
06955	Lead	7439-92-1	8.06		3.31	0.551	1
01656	Lithium	7439-93-2	23.3		4.4	0.37	1
01657	Magnesium	7439-95-4	6,170		11.0	1.84	1
06958	Manganese	7439-96-5	366		1.10	0.0915	1
06960	Molybdenum	7439-98-7	0.346	J	2.20	0.187	1
06961	Nickel	7440-02-0	16.6		2.20	0.143	1
10145	Phosphorus	7723-14-0	330		11.0	3.18	1
01662	Potassium	7440-09-7	3,660		110	9.19	1
01667	Sodium	7440-23-5	581		110	18.4	1
06969	Tin	7440-31-5	3.29	J	11.0	0.242	1
06970	Titanium	7440-32-6	1,520		5.51	0.937	5
06971	Vanadium	7440-62-2	52.6		1.10	0.143	1
06972	Zinc	7440-66-6	63.3		4.41	0.220	1
10146	Zirconium	7440-67-7	6.38		5.51	0.926	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.441	U	0.441	0.110	2
06142	Silver	7440-22-4	0.0463	J	0.220	0.0287	2
06144	Strontium	7440-24-6	42.4		0.441	0.0749	2
06145	Thallium	7440-28-0	0.288		0.220	0.0331	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182	U	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.55		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123470
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57240 SDG#: PH064-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	11.9	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123470
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:10 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57240 SDG#: PH064-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0261 JBQ	1.11	0.0235	1
11031	12378-PeCDD	40321-76-4	5.53 U	5.53	0.0262	1
11031	123478-HxCDD	39227-28-6	0.0307 JBQ	5.53	0.0198	1
11031	123678-HxCDD	57653-85-7	0.0747 JBQ	5.53	0.0208	1
11031	123789-HxCDD	19408-74-3	0.0450 JBQ	5.53	0.0202	1
11031	1234678-HpCDD	35822-46-9	0.895 JB	5.53	0.0217	1
11031	OCDD	3268-87-9	6.56 JB	11.1	0.0242	1
11031	2378-TCDF	51207-31-9	1.11 U	1.11	0.0212	1
11031	12378-PeCDF	57117-41-6	0.0477 JB	5.53	0.0177	1
11031	23478-PeCDF	57117-31-4	0.0424 JB	5.53	0.0157	1
11031	123478-HxCDF	70648-26-9	0.0499 JBQ	5.53	0.0117	1
11031	123678-HxCDF	57117-44-9	0.0394 JBQ	5.53	0.0115	1
11031	123789-HxCDF	72918-21-9	0.0285 JBQ	5.53	0.0121	1
11031	234678-HxCDF	60851-34-5	0.0382 JBQ	5.53	0.0108	1
11031	1234678-HpCDF	67562-39-4	0.139 JB	5.53	0.00988	1
11031	1234789-HpCDF	55673-89-7	0.0284 JB	5.53	0.0116	1
11031	OCDF	39001-02-0	0.204 JB	11.1	0.0213	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0269			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	85	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123470
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57240 SDG#: PH064-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123470
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57240 SDG#: PH064-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 09:42	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13193A16A	07/13/2013 00:51	Laura M Krieger	21.59
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319231673	07/11/2013 14:33	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319231673	07/11/2013 14:34	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 04:01	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 18:13	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/16/2013 20:25	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06944	Antimony	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06946	Barium	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
07914	Boron	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
01650	Calcium	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06951	Chromium	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06953	Copper	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
01654	Iron	SW-846 6010C	1	131920637001	07/20/2013 08:36	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
01656	Lithium	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06958	Manganese	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06961	Nickel	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
01662	Potassium	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
01667	Sodium	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06969	Tin	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06970	Titanium	SW-846 6010C	1	131920637001	07/20/2013 08:36	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
06972	Zinc	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131920637001	07/18/2013 20:34	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123470
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57240 SDG#: PH064-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131920637001B	07/18/2013 19:05	David K Beck	2
06142	Silver	SW-846 6020A	1	131920637001A	07/18/2013 19:05	David K Beck	2
06144	Strontium	SW-846 6020A	1	131920637001A	07/18/2013 19:05	David K Beck	2
06145	Thallium	SW-846 6020A	1	131920637001A	07/18/2013 19:05	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131920638001	07/15/2013 09:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131920637001	07/14/2013 23:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131920638001	07/15/2013 03:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13192039401A	07/11/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401B	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123471
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57290 SDG#: PH064-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	0.39	J	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	2.9		1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	2.9		1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	7.5		1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9		1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	2.5		1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	6.0		1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	5.8		1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.3	J	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	5.3		1.8	0.74	1
12969	Pyrene	129-00-0	6.5		1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.98
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	11	U	11	4.4	2
12952	EFH (C15-C20)	n.a.	11	U	11	4.4	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123471
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57290 SDG#: PH064-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	26		11	4.4	2
12952	EFH (C30-C40)	n.a.	88		22	8.8	2
12952	EFH (C8-C11)	n.a.	11	U	11	4.4	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,600		43.5	7.84	1
06944	Antimony	7440-36-0	4.35	U	4.35	0.804	1
06935	Arsenic	7440-38-2	6.06		4.35	0.761	1
06946	Barium	7440-39-3	109		1.09	0.0359	1
06947	Beryllium	7440-41-7	0.573	J	1.09	0.0728	1
07914	Boron	7440-42-8	5.77	J	10.9	0.913	1
06949	Cadmium	7440-43-9	0.408	J	1.09	0.0826	1
01650	Calcium	7440-70-2	20,600		21.7	3.63	1
06951	Chromium	7440-47-3	20.6		3.26	0.174	1
06952	Cobalt	7440-48-4	6.15		1.09	0.108	1
06953	Copper	7440-50-8	9.98		2.17	0.315	1
01654	Iron	7439-89-6	22,700		43.5	3.93	1
06955	Lead	7439-92-1	6.35		3.26	0.543	1
01656	Lithium	7439-93-2	20.0		4.3	0.37	1
01657	Magnesium	7439-95-4	4,780		10.9	1.82	1
06958	Manganese	7439-96-5	322		1.09	0.0902	1
06960	Molybdenum	7439-98-7	0.211	J	2.17	0.185	1
06961	Nickel	7440-02-0	13.0		2.17	0.141	1
10145	Phosphorus	7723-14-0	356		10.9	3.14	1
01662	Potassium	7440-09-7	2,860		109	9.06	1
01667	Sodium	7440-23-5	295		109	18.2	1
06969	Tin	7440-31-5	2.92	J	10.9	0.239	1
06970	Titanium	7440-32-6	1,260		5.43	0.924	5
06971	Vanadium	7440-62-2	41.0		1.09	0.141	1
06972	Zinc	7440-66-6	52.6		4.35	0.217	1
10146	Zirconium	7440-67-7	5.18	J	5.43	0.913	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.435	U	0.435	0.109	2
06142	Silver	7440-22-4	0.217	U	0.217	0.0283	2
06144	Strontium	7440-24-6	34.7		0.435	0.0739	2
06145	Thallium	7440-28-0	0.218		0.217	0.0326	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0180	U	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.61		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.8		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123471
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57290 SDG#: PH064-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123471
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57290 SDG#: PH064-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0178	1
11031	12378-PeCDD	40321-76-4	5.34	U	5.34	0.0196	1
11031	123478-HxCDD	39227-28-6	5.34	U	5.34	0.0166	1
11031	123678-HxCDD	57653-85-7	0.0572	JB	5.34	0.0177	1
11031	123789-HxCDD	19408-74-3	0.0400	JBQ	5.34	0.0171	1
11031	1234678-HpCDD	35822-46-9	1.04	JB	5.34	0.0187	1
11031	OCDD	3268-87-9	8.94	JB	10.7	0.0220	1
11031	2378-TCDF	51207-31-9	1.07	U	1.07	0.0167	1
11031	12378-PeCDF	57117-41-6	0.0612	JBQ	5.34	0.0151	1
11031	23478-PeCDF	57117-31-4	0.0273	JBQ	5.34	0.0134	1
11031	123478-HxCDF	70648-26-9	0.0450	JBQ	5.34	0.00998	1
11031	123678-HxCDF	57117-44-9	0.0214	JBQ	5.34	0.00965	1
11031	123789-HxCDF	72918-21-9	0.0345	JBQ	5.34	0.00998	1
11031	234678-HxCDF	60851-34-5	0.0482	JBQ	5.34	0.00931	1
11031	1234678-HpCDF	67562-39-4	0.208	JBQ	5.34	0.00931	1
11031	1234789-HpCDF	55673-89-7	0.0291	JB	5.34	0.0118	1
11031	OCDF	39001-02-0	0.332	JBQ	10.7	0.0183	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0192				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	88	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	82	26 - 138
13C12-OCDF	87	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123471
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57290 SDG#: PH064-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123471
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57290 SDG#: PH064-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 10:14	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13193A16A	07/13/2013 01:29	Laura M Krieger	22.98
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319231673	07/11/2013 14:34	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319231673	07/11/2013 14:35	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 04:19	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 16:45	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/16/2013 21:21	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06944	Antimony	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06946	Barium	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
07914	Boron	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
01650	Calcium	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06951	Chromium	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06953	Copper	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
01654	Iron	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06955	Lead	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
01656	Lithium	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06958	Manganese	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06961	Nickel	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
01662	Potassium	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
01667	Sodium	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06969	Tin	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06970	Titanium	SW-846 6010C	1	131920637001	07/20/2013 09:02	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
06972	Zinc	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131920637001	07/18/2013 21:01	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123471
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57290 SDG#: PH064-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131920637001B	07/18/2013 19:22	David K Beck	2
06142	Silver	SW-846 6020A	1	131920637001A	07/18/2013 19:22	David K Beck	2
06144	Strontium	SW-846 6020A	1	131920637001A	07/18/2013 19:22	David K Beck	2
06145	Thallium	SW-846 6020A	1	131920637001A	07/18/2013 19:22	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131920638001	07/15/2013 09:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131920637001	07/14/2013 23:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131920638001	07/15/2013 03:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13192039401A	07/11/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401B	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123472
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57214 SDG#: PH064-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.89
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123472
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57214 SDG#: PH064-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,500		43.7	7.87	1
06944	Antimony	7440-36-0	4.37	U	4.37	0.808	1
06935	Arsenic	7440-38-2	6.32		4.37	0.764	1
06946	Barium	7440-39-3	88.1		1.09	0.0360	1
06947	Beryllium	7440-41-7	0.643	J	1.09	0.0731	1
07914	Boron	7440-42-8	5.60	J	10.9	0.917	1
06949	Cadmium	7440-43-9	0.400	J	1.09	0.0830	1
01650	Calcium	7440-70-2	4,930		21.8	3.65	1
06951	Chromium	7440-47-3	23.4		3.27	0.175	1
06952	Cobalt	7440-48-4	6.54		1.09	0.108	1
06953	Copper	7440-50-8	11.0		2.18	0.317	1
01654	Iron	7439-89-6	27,600		43.7	3.95	1
06955	Lead	7439-92-1	6.00		3.27	0.546	1
01656	Lithium	7439-93-2	25.6		4.4	0.37	1
01657	Magnesium	7439-95-4	5,440		10.9	1.82	1
06958	Manganese	7439-96-5	264		1.09	0.0906	1
06960	Molybdenum	7439-98-7	0.224	J	2.18	0.186	1
06961	Nickel	7440-02-0	14.1		2.18	0.142	1
10145	Phosphorus	7723-14-0	401		10.9	3.15	1
01662	Potassium	7440-09-7	2,980		109	9.10	1
01667	Sodium	7440-23-5	249		109	18.2	1
06969	Tin	7440-31-5	3.17	J	10.9	0.240	1
06970	Titanium	7440-32-6	1,460		5.46	0.928	5
06971	Vanadium	7440-62-2	50.9		1.09	0.142	1
06972	Zinc	7440-66-6	60.5		4.37	0.218	1
10146	Zirconium	7440-67-7	5.43	J	5.46	0.917	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.437	U	0.437	0.109	2
06142	Silver	7440-22-4	0.0331	J	0.218	0.0284	2
06144	Strontium	7440-24-6	34.8		0.437	0.0742	2
06145	Thallium	7440-28-0	0.265		0.218	0.0327	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183	U	0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.60		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123472
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57214 SDG#: PH064-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 10:46	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13193A16A	07/13/2013 02:07	Laura M Krieger	22.89
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319231673	07/11/2013 14:36	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319231673	07/11/2013 14:37	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 04:38	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 10:22	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06944	Antimony	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06946	Barium	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
07914	Boron	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
01650	Calcium	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06951	Chromium	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06953	Copper	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
01654	Iron	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06955	Lead	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
01656	Lithium	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06958	Manganese	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06961	Nickel	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
01662	Potassium	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
01667	Sodium	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123472
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 11:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57214 SDG#: PH064-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06970	Titanium	SW-846 6010C	1	131920637001	07/20/2013 09:06	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06972	Zinc	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131920637001	07/18/2013 21:12	John P Hook	1
06141	Selenium	SW-846 6020A	1	131920637001B	07/18/2013 19:29	David K Beck	2
06142	Silver	SW-846 6020A	1	131920637001A	07/18/2013 19:29	David K Beck	2
06144	Strontium	SW-846 6020A	1	131920637001A	07/18/2013 19:29	David K Beck	2
06145	Thallium	SW-846 6020A	1	131920637001A	07/18/2013 19:29	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131920638001	07/15/2013 09:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131920637001	07/14/2013 23:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131920638001	07/15/2013 03:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13192039401A	07/11/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401B	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-18.5-19.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123473
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 12:00 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57218 SDG#: PH064-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	9	J	21	7	0.93
10237	Acrolein	107-02-8	100	U	100	21	0.93
10237	Acrylonitrile	107-13-1	21	U	21	4	0.93
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	0.93
10237	Benzene	71-43-2	5	U	5	0.5	0.93
10237	Bromobenzene	108-86-1	5	U	5	1	0.93
10237	Bromochloromethane	74-97-5	5	U	5	1	0.93
10237	Bromodichloromethane	75-27-4	5	U	5	1	0.93
10237	Bromoform	75-25-2	5	U	5	1	0.93
10237	Bromomethane	74-83-9	5	U	5	2	0.93
10237	2-Butanone	78-93-3	10	U	10	4	0.93
10237	t-Butyl alcohol	75-65-0	52	U	52	21	0.93
10237	n-Butylbenzene	104-51-8	5	U	5	1	0.93
10237	sec-Butylbenzene	135-98-8	5	U	5	1	0.93
10237	tert-Butylbenzene	98-06-6	5	U	5	1	0.93
10237	Carbon Disulfide	75-15-0	5	U	5	1	0.93
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	0.93
10237	Chlorobenzene	108-90-7	5	U	5	1	0.93
10237	Chloroethane	75-00-3	5	U	5	2	0.93
10237	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	0.93
10237	Chloroform	67-66-3	5	U	5	1	0.93
10237	1-Chlorohexane	544-10-5	5	U	5	1	0.93
10237	Chloromethane	74-87-3	5	U	5	2	0.93
10237	2-Chlorotoluene	95-49-8	5	U	5	1	0.93
10237	4-Chlorotoluene	106-43-4	5	U	5	1	0.93
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	0.93
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	0.93
10237	Dibromochloromethane	124-48-1	5	U	5	1	0.93
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	0.93
10237	Dibromomethane	74-95-3	5	U	5	1	0.93
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	0.93
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	0.93
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	0.93
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	0.93
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	0.93
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	0.93
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	0.93
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	0.93
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	0.93
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	0.93
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	0.93
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	0.93
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	0.93
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	0.93
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	0.93
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	0.93
10237	Ethylbenzene	100-41-4	5	U	5	1	0.93
10237	Freon 113	76-13-1	5	U	5	2	0.93
10237	Freon 133a	75-88-7	5	U	5	2	0.93
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	0.93
10237	2-Hexanone	591-78-6	10	U	10	3	0.93

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-18.5-19.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123473
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 12:00 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57218 SDG#: PH064-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	0.93
10237	Isopropylbenzene	98-82-8	5	U	5	1	0.93
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	0.93
10237	Methyl Iodide	74-88-4	5	U	5	3	0.93
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	0.93
10237	4-Methyl-2-pentanone	108-10-1	10	U	10	3	0.93
10237	Methylene Chloride	75-09-2	5	U	5	2	0.93
10237	n-Propylbenzene	103-65-1	5	U	5	1	0.93
10237	Styrene	100-42-5	5	U	5	1	0.93
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	0.93
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	0.93
10237	Tetrachloroethene	127-18-4	5	U	5	1	0.93
10237	Toluene	108-88-3	5	U	5	1	0.93
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	0.93
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	0.93
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	0.93
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	0.93
10237	Trichloroethene	79-01-6	5	U	5	1	0.93
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	0.93
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	0.93
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	0.93
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	0.93
10237	Vinyl Acetate	108-05-4	10	U	10	2	0.93
10237	Vinyl Chloride	75-01-4	5	U	5	1	0.93
10237	m+p-Xylene	179601-23-1	5	U	5	1	0.93
10237	o-Xylene	95-47-6	5	U	5	1	0.93
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-18.5-19.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123473
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 12:00 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57218 SDG#: PH064-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.36
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,100		43.8	7.90	1
06944	Antimony	7440-36-0	4.38	U	4.38	0.811	1
06935	Arsenic	7440-38-2	5.97		4.38	0.767	1
06946	Barium	7440-39-3	72.6		1.10	0.0361	1
06947	Beryllium	7440-41-7	0.584	J	1.10	0.0734	1
07914	Boron	7440-42-8	5.18	J	11.0	0.920	1
06949	Cadmium	7440-43-9	0.289	J	1.10	0.0833	1
01650	Calcium	7440-70-2	5,510		21.9	3.66	1
06951	Chromium	7440-47-3	23.5		3.29	0.175	1
06952	Cobalt	7440-48-4	5.14		1.10	0.108	1
06953	Copper	7440-50-8	9.67		2.19	0.318	1
01654	Iron	7439-89-6	25,300		43.8	3.97	1
06955	Lead	7439-92-1	5.41		3.29	0.548	1
01656	Lithium	7439-93-2	23.4		4.4	0.37	1
01657	Magnesium	7439-95-4	5,220		11.0	1.83	1
06958	Manganese	7439-96-5	309		1.10	0.0909	1
06960	Molybdenum	7439-98-7	2.19	U	2.19	0.186	1
06961	Nickel	7440-02-0	11.4		2.19	0.142	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-18.5-19.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123473
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 12:00 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57218 SDG#: PH064-07

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
10145	Phosphorus		7723-14-0	387		11.0	3.17	1
01662	Potassium		7440-09-7	3,020		110	9.14	1
01667	Sodium		7440-23-5	258		110	18.3	1
06969	Tin		7440-31-5	3.07	J	11.0	0.241	1
06970	Titanium		7440-32-6	1,420		5.48	0.931	5
06971	Vanadium		7440-62-2	44.3		1.10	0.142	1
06972	Zinc		7440-66-6	55.8		4.38	0.219	1
10146	Zirconium		7440-67-7	4.53	J	5.48	0.920	1
		SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium		7782-49-2	0.438	U	0.438	0.110	2
06142	Silver		7440-22-4	0.0509	J	0.219	0.0285	2
06144	Strontium		7440-24-6	33.2		0.438	0.0745	2
06145	Thallium		7440-28-0	0.255		0.219	0.0329	2
		SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A		7439-97-6	0.0184	U	0.0184	0.0110	1
Wet Chemistry		**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.7 C.		n.a.	8.61		0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	10.5		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B131972AA	07/17/2013 00:10	Andrea E Lando	0.93
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319231673	07/11/2013 15:49	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319231673	07/11/2013 15:49	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319231673	07/11/2013 14:39	Mitchell R Washel	n.a.
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 11:18	Mark A Clark	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-572-SA8-SB-18.5-19.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123473
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 12:00 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57218 SDG#: PH064-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13193A16A	07/13/2013 02:45	Laura M Krieger	22.36
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319231673	07/11/2013 14:39	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319231673	07/11/2013 14:39	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 04:56	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 09:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06944	Antimony	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06946	Barium	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
07914	Boron	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
01650	Calcium	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06951	Chromium	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06953	Copper	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
01654	Iron	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06955	Lead	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
01656	Lithium	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06958	Manganese	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06961	Nickel	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
01662	Potassium	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
01667	Sodium	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06969	Tin	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06970	Titanium	SW-846 6010C	1	131920637001	07/20/2013 09:09	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06972	Zinc	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131920637001	07/18/2013 21:16	John P Hook	1
06141	Selenium	SW-846 6020A	1	131920637001B	07/18/2013 19:32	David K Beck	2
06142	Silver	SW-846 6020A	1	131920637001A	07/18/2013 19:32	David K Beck	2
06144	Strontium	SW-846 6020A	1	131920637001A	07/18/2013 19:32	David K Beck	2
06145	Thallium	SW-846 6020A	1	131920637001A	07/18/2013 19:32	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131920638001	07/15/2013 10:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131920637001	07/14/2013 23:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131920638001	07/15/2013 03:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13192039401A	07/11/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401B	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123474
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57300 SDG#: PH064-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	20	U	20	7.9	10
12969	Acenaphthylene	208-96-8	20	U	20	4.0	10
12969	Anthracene	120-12-7	20	U	20	4.0	10
12969	Benzo(a)anthracene	56-55-3	13	J	20	7.9	10
12969	Benzo(a)pyrene	50-32-8	16	J	20	7.9	10
12969	Benzo(b)fluoranthene	205-99-2	46		20	7.9	10
12969	Benzo(e)pyrene	192-97-2	200	U	200	40	10
12969	Benzo(g,h,i)perylene	191-24-2	11	J	20	7.9	10
12969	Benzo(k)fluoranthene	207-08-9	11	J	20	7.9	10
12969	Butylbenzylphthalate	85-68-7	590		210	71	10
12969	Di-n-butylphthalate	84-74-2	210	U	210	71	10
12969	Chrysene	218-01-9	44		20	4.0	10
12969	Dibenz(a,h)anthracene	53-70-3	20	U	20	7.9	10
12969	Diethylphthalate	84-66-2	210	U	210	71	10
12969	Dimethylphthalate	131-11-3	210	U	210	71	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	210	U	210	71	10
12969	Fluoranthene	206-44-0	22		20	7.9	10
12969	Fluorene	86-73-7	20	U	20	7.9	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	20	U	20	7.9	10
12969	1-Methylnaphthalene	90-12-0	20	U	20	7.9	10
12969	2-Methylnaphthalene	91-57-6	20	U	20	7.9	10
12969	Naphthalene	91-20-3	20	U	20	7.9	10
12969	N-Nitrosodimethylamine	62-75-9	20	U	20	7.9	10
12969	Di-n-octylphthalate	117-84-0	210	U	210	71	10
12969	Phenanthrene	85-01-8	19	J	20	7.9	10
12969	Pyrene	129-00-0	29		20	7.9	10
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.2	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	30	U	30	12	5
12952	EFH (C15-C20)	n.a.	30	U	30	12	5
12952	EFH (C21-C30)	n.a.	95		30	12	5
12952	EFH (C30-C40)	n.a.	320		59	24	5
12952	EFH (C8-C11)	n.a.	30	U	30	12	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123474
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57300 SDG#: PH064-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,200		45.8	8.25	1
06944	Antimony	7440-36-0	1.27	J	4.58	0.847	1
06935	Arsenic	7440-38-2	2.91	J	4.58	0.801	1
06946	Barium	7440-39-3	116		1.14	0.0378	1
06947	Beryllium	7440-41-7	0.583	J	1.14	0.0767	1
07914	Boron	7440-42-8	5.75	J	11.4	0.962	1
06949	Cadmium	7440-43-9	0.688	J	1.14	0.0870	1
01650	Calcium	7440-70-2	24,700		22.9	3.82	1
06951	Chromium	7440-47-3	21.4		3.43	0.183	1
06952	Cobalt	7440-48-4	8.85		1.14	0.113	1
06953	Copper	7440-50-8	16.5		2.29	0.332	1
01654	Iron	7439-89-6	32,300		229	20.7	5
06955	Lead	7439-92-1	8.10		3.43	0.572	1
01656	Lithium	7439-93-2	20.6		4.6	0.39	1
01657	Magnesium	7439-95-4	8,470		11.4	1.91	1
06958	Manganese	7439-96-5	438		1.14	0.0950	1
06960	Molybdenum	7439-98-7	0.723	J	2.29	0.195	1
06961	Nickel	7440-02-0	14.4		2.29	0.149	1
10145	Phosphorus	7723-14-0	767		11.4	3.31	1
01662	Potassium	7440-09-7	3,270		114	9.55	1
01667	Sodium	7440-23-5	472		114	19.1	1
06969	Tin	7440-31-5	2.99	J	11.4	0.252	1
06970	Titanium	7440-32-6	1,670		5.72	0.973	5
06971	Vanadium	7440-62-2	63.5		1.14	0.149	1
06972	Zinc	7440-66-6	64.3		4.58	0.229	1
10146	Zirconium	7440-67-7	7.57		5.72	0.962	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.458	U	0.458	0.114	2
06142	Silver	7440-22-4	0.229	U	0.229	0.0298	2
06144	Strontium	7440-24-6	67.1		0.458	0.0778	2
06145	Thallium	7440-28-0	0.181	J	0.229	0.0343	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0198	U	0.0198	0.0119	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	11.4		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	16.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123474
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57300 SDG#: PH064-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.16	U	1.16	0.0226	1
11031	12378-PeCDD	40321-76-4	0.0552	JBQ	5.80	0.0287	1
11031	123478-HxCDD	39227-28-6	5.80	U	5.80	0.0279	1
11031	123678-HxCDD	57653-85-7	0.258	JBQ	5.80	0.0296	1
11031	123789-HxCDD	19408-74-3	0.234	JB	5.80	0.0276	1
11031	1234678-HpCDD	35822-46-9	5.29	JB	5.80	0.0320	1
11031	OCDD	3268-87-9	32.3	B	11.6	0.0362	1
11031	2378-TCDF	51207-31-9	1.16	U	1.16	0.0235	1
11031	12378-PeCDF	57117-41-6	0.117	JBQ	5.80	0.0185	1
11031	23478-PeCDF	57117-31-4	0.0381	JBQ	5.80	0.0169	1
11031	123478-HxCDF	70648-26-9	0.0521	JBQ	5.80	0.0158	1
11031	123678-HxCDF	57117-44-9	0.0576	JB	5.80	0.0156	1
11031	123789-HxCDF	72918-21-9	0.247	JB	5.80	0.0196	1
11031	234678-HxCDF	60851-34-5	0.0778	JB	5.80	0.0146	1
11031	1234678-HpCDF	67562-39-4	0.492	JBQ	5.80	0.0173	1
11031	1234789-HpCDF	55673-89-7	0.0658	JBQ	5.80	0.0248	1
11031	OCDF	39001-02-0	1.04	JB	11.6	0.0379	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.125				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	51	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123474
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57300 SDG#: PH064-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123474
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57300 SDG#: PH064-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 11:50	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 05:15	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 18:35	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/16/2013 22:18	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06944	Antimony	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06946	Barium	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
07914	Boron	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
01650	Calcium	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06951	Chromium	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06953	Copper	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
01654	Iron	SW-846 6010C	1	131920637001	07/20/2013 09:21	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
01656	Lithium	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06958	Manganese	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06961	Nickel	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
01662	Potassium	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
01667	Sodium	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06969	Tin	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06970	Titanium	SW-846 6010C	1	131920637001	07/20/2013 09:21	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06972	Zinc	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131920637001	07/18/2013 21:19	John P Hook	1
06141	Selenium	SW-846 6020A	1	131920637001B	07/18/2013 19:34	David K Beck	2
06142	Silver	SW-846 6020A	1	131920637001A	07/18/2013 19:34	David K Beck	2
06144	Strontium	SW-846 6020A	1	131920637001A	07/18/2013 19:34	David K Beck	2
06145	Thallium	SW-846 6020A	1	131920637001A	07/18/2013 19:34	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123474
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:10 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57300 SDG#: PH064-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131920638001	07/15/2013 10:07	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131920637001	07/14/2013 23:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131920638001	07/15/2013 03:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13192039401A	07/11/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401B	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123475
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57340 SDG#: PH064-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.5	10
12969	Acenaphthylene	208-96-8	19	U	19	3.7	10
12969	Anthracene	120-12-7	19	U	19	3.7	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.5	10
12969	Benzo(a)pyrene	50-32-8	19	U	19	7.5	10
12969	Benzo(b)fluoranthene	205-99-2	16	J	19	7.5	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	37	10
12969	Benzo(g,h,i)perylene	191-24-2	19	U	19	7.5	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.5	10
12969	Butylbenzylphthalate	85-68-7	200	U	200	67	10
12969	Di-n-butylphthalate	84-74-2	200	U	200	67	10
12969	Chrysene	218-01-9	15	J	19	3.7	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.5	10
12969	Diethylphthalate	84-66-2	200	U	200	67	10
12969	Dimethylphthalate	131-11-3	200	U	200	67	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	200	U	200	67	10
12969	Fluoranthene	206-44-0	19	U	19	7.5	10
12969	Fluorene	86-73-7	19	U	19	7.5	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.5	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.5	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.5	10
12969	Naphthalene	91-20-3	19	U	19	7.5	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.5	10
12969	Di-n-octylphthalate	117-84-0	200	U	200	67	10
12969	Phenanthrene	85-01-8	9.8	J	19	7.5	10
12969	Pyrene	129-00-0	8.8	J	19	7.5	10
Reporting limits were raised due to interference from the sample matrix.							
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.94
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	28	U	28	11	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123475
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57340 SDG#: PH064-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	28	U	28	11	5
12952	EFH (C21-C30)	n.a.	100		28	11	5
12952	EFH (C30-C40)	n.a.	310		56	22	5
12952	EFH (C8-C11)	n.a.	28	U	28	11	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,100		43.9	7.91	1
06944	Antimony	7440-36-0	4.39	U	4.39	0.812	1
06935	Arsenic	7440-38-2	5.94		4.39	0.768	1
06946	Barium	7440-39-3	65.8		1.10	0.0362	1
06947	Beryllium	7440-41-7	0.751	J	1.10	0.0735	1
07914	Boron	7440-42-8	6.38	J	11.0	0.922	1
06949	Cadmium	7440-43-9	0.368	J	1.10	0.0834	1
01650	Calcium	7440-70-2	39,800		21.9	3.66	1
06951	Chromium	7440-47-3	24.6		3.29	0.176	1
06952	Cobalt	7440-48-4	5.90		1.10	0.109	1
06953	Copper	7440-50-8	10.9		2.19	0.318	1
01654	Iron	7439-89-6	25,900		43.9	3.97	1
06955	Lead	7439-92-1	6.63		3.29	0.549	1
01656	Lithium	7439-93-2	26.5		4.4	0.37	1
01657	Magnesium	7439-95-4	5,190		11.0	1.83	1
06958	Manganese	7439-96-5	286		1.10	0.0911	1
06960	Molybdenum	7439-98-7	0.285	J	2.19	0.186	1
06961	Nickel	7440-02-0	13.9		2.19	0.143	1
10145	Phosphorus	7723-14-0	238		11.0	3.17	1
01662	Potassium	7440-09-7	3,020		110	9.15	1
01667	Sodium	7440-23-5	554		110	18.3	1
06969	Tin	7440-31-5	3.08	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,170		5.49	0.932	5
06971	Vanadium	7440-62-2	47.0		1.10	0.143	1
06972	Zinc	7440-66-6	52.5		4.39	0.219	1
10146	Zirconium	7440-67-7	5.49		5.49	0.922	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.175	J	0.439	0.110	2
06142	Silver	7440-22-4	0.0576	J	0.219	0.0285	2
06144	Strontium	7440-24-6	53.3		0.439	0.0746	2
06145	Thallium	7440-28-0	0.239		0.219	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0284		0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.60		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123475
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57340 SDG#: PH064-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	11.5	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123475
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57340 SDG#: PH064-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.10 U	1.10	0.0223	1
11031	12378-PeCDD	40321-76-4	0.0392 JBQ	5.51	0.0233	1
11031	123478-HxCDD	39227-28-6	0.0315 JBQ	5.51	0.0200	1
11031	123678-HxCDD	57653-85-7	0.0450 JB	5.51	0.0210	1
11031	123789-HxCDD	19408-74-3	0.0557 JBQ	5.51	0.0200	1
11031	1234678-HpCDD	35822-46-9	0.682 JB	5.51	0.0235	1
11031	OCDD	3268-87-9	5.37 JB	11.0	0.0333	1
11031	2378-TCDF	51207-31-9	1.10 U	1.10	0.0180	1
11031	12378-PeCDF	57117-41-6	0.0614 JBQ	5.51	0.0181	1
11031	23478-PeCDF	57117-31-4	5.51 U	5.51	0.0158	1
11031	123478-HxCDF	70648-26-9	0.0426 JBQ	5.51	0.0111	1
11031	123678-HxCDF	57117-44-9	0.0394 JBQ	5.51	0.0105	1
11031	123789-HxCDF	72918-21-9	0.0595 JBQ	5.51	0.0112	1
11031	234678-HxCDF	60851-34-5	0.0497 JB	5.51	0.0104	1
11031	1234678-HpCDF	67562-39-4	0.0894 JBQ	5.51	0.0108	1
11031	1234789-HpCDF	55673-89-7	0.0197 JBQ	5.51	0.0124	1
11031	OCDF	39001-02-0	0.259 JBQ	11.0	0.0221	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0179			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	85	26 - 138
13C12-OCDF	87	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123475
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57340 SDG#: PH064-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123475
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57340 SDG#: PH064-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 12:22	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13193A16A	07/13/2013 03:23	Laura M Krieger	22.94
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319231673	07/11/2013 15:04	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319231673	07/11/2013 15:04	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 05:33	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 18:57	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/16/2013 23:15	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06944	Antimony	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06946	Barium	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
07914	Boron	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
01650	Calcium	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06951	Chromium	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06953	Copper	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
01654	Iron	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06955	Lead	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
01656	Lithium	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06958	Manganese	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06961	Nickel	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
01662	Potassium	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
01667	Sodium	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06969	Tin	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06970	Titanium	SW-846 6010C	1	131920637001	07/20/2013 09:24	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
06972	Zinc	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131920637001	07/18/2013 21:23	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123475
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:30 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57340 SDG#: PH064-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131920637001B	07/18/2013 19:37	David K Beck	2
06142	Silver	SW-846 6020A	1	131920637001A	07/18/2013 19:37	David K Beck	2
06144	Strontium	SW-846 6020A	1	131920637001A	07/18/2013 19:37	David K Beck	2
06145	Thallium	SW-846 6020A	1	131920637001A	07/18/2013 19:37	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131920638001	07/15/2013 10:09	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131920637001	07/14/2013 23:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131920638001	07/15/2013 03:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13192039401A	07/11/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401B	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-9.5-10.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123476
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57395 SDG#: PH064-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	22	U	22	8	1.02
10237	Acrolein	107-02-8	110	U	110	22	1.02
10237	Acrylonitrile	107-13-1	22	U	22	4	1.02
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	1.02
10237	Benzene	71-43-2	5	U	5	0.5	1.02
10237	Bromobenzene	108-86-1	5	U	5	1	1.02
10237	Bromochloromethane	74-97-5	5	U	5	1	1.02
10237	Bromodichloromethane	75-27-4	5	U	5	1	1.02
10237	Bromoform	75-25-2	5	U	5	1	1.02
10237	Bromomethane	74-83-9	5	U	5	2	1.02
10237	2-Butanone	78-93-3	11	U	11	4	1.02
10237	t-Butyl alcohol	75-65-0	54	U	54	22	1.02
10237	n-Butylbenzene	104-51-8	5	U	5	1	1.02
10237	sec-Butylbenzene	135-98-8	5	U	5	1	1.02
10237	tert-Butylbenzene	98-06-6	5	U	5	1	1.02
10237	Carbon Disulfide	75-15-0	5	U	5	1	1.02
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	1.02
10237	Chlorobenzene	108-90-7	5	U	5	1	1.02
10237	Chloroethane	75-00-3	5	U	5	2	1.02
10237	2-Chloroethyl Vinyl Ether	110-75-8	11	U	11	2	1.02
10237	Chloroform	67-66-3	5	U	5	1	1.02
10237	1-Chlorohexane	544-10-5	5	U	5	1	1.02
10237	Chloromethane	74-87-3	5	U	5	2	1.02
10237	2-Chlorotoluene	95-49-8	5	U	5	1	1.02
10237	4-Chlorotoluene	106-43-4	5	U	5	1	1.02
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	1.02
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1.02
10237	Dibromochloromethane	124-48-1	5	U	5	1	1.02
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	1.02
10237	Dibromomethane	74-95-3	5	U	5	1	1.02
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1.02
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1.02
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1.02
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	1.02
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	1.02
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	1.02
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	1.02
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	1.02
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	1.02
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	1.02
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	1.02
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	1.02
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	1.02
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1.02
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1.02
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	1.02
10237	Ethylbenzene	100-41-4	5	U	5	1	1.02
10237	Freon 113	76-13-1	5	U	5	2	1.02
10237	Freon 133a	75-88-7	5	U	5	2	1.02
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	1.02
10237	2-Hexanone	591-78-6	11	U	11	3	1.02

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-9.5-10.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123476
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57395 SDG#: PH064-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	1.02
10237	Isopropylbenzene	98-82-8	5	U	5	1	1.02
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	1.02
10237	Methyl Iodide	74-88-4	5	U	5	3	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1.02
10237	4-Methyl-2-pentanone	108-10-1	11	U	11	3	1.02
10237	Methylene Chloride	75-09-2	5	U	5	2	1.02
10237	n-Propylbenzene	103-65-1	5	U	5	1	1.02
10237	Styrene	100-42-5	5	U	5	1	1.02
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1.02
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1.02
10237	Tetrachloroethene	127-18-4	5	U	5	1	1.02
10237	Toluene	108-88-3	5	U	5	1	1.02
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1.02
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1.02
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	1.02
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	1.02
10237	Trichloroethene	79-01-6	5	U	5	1	1.02
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	1.02
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1.02
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1.02
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1.02
10237	Vinyl Acetate	108-05-4	11	U	11	2	1.02
10237	Vinyl Chloride	75-01-4	5	U	5	1	1.02
10237	m+p-Xylene	179601-23-1	5	U	5	1	1.02
10237	o-Xylene	95-47-6	5	U	5	1	1.02
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.0	J	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	2.0		1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	2.8		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.0	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	0.92	J	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	3.4		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8		1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-9.5-10.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123476
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57395 SDG#: PH064-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	3.3		1.8	0.70	1
12969	Pyrene	129-00-0	2.4		1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.98
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	11	U	11	4.2	2
12952	EFH (C15-C20)	n.a.	11	U	11	4.2	2
12952	EFH (C21-C30)	n.a.	19		11	4.2	2
12952	EFH (C30-C40)	n.a.	86		21	8.5	2
12952	EFH (C8-C11)	n.a.	11	U	11	4.2	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,000		41.4	7.45	1
06944	Antimony	7440-36-0	4.14	U	4.14	0.765	1
06935	Arsenic	7440-38-2	5.77		4.14	0.724	1
06946	Barium	7440-39-3	48.1		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.422	J	1.03	0.0693	1
07914	Boron	7440-42-8	3.25	J	10.3	0.869	1
06949	Cadmium	7440-43-9	0.256	J	1.03	0.0786	1
01650	Calcium	7440-70-2	4,590		20.7	3.45	1
06951	Chromium	7440-47-3	14.0		3.10	0.165	1
06952	Cobalt	7440-48-4	5.66		1.03	0.102	1
06953	Copper	7440-50-8	6.77		2.07	0.300	1
01654	Iron	7439-89-6	18,000		41.4	3.74	1
06955	Lead	7439-92-1	3.70		3.10	0.517	1
01656	Lithium	7439-93-2	18.3		4.1	0.35	1
01657	Magnesium	7439-95-4	3,790		10.3	1.73	1
06958	Manganese	7439-96-5	300		1.03	0.0858	1
06960	Molybdenum	7439-98-7	0.194	J	2.07	0.176	1
06961	Nickel	7440-02-0	10.2		2.07	0.134	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-9.5-10.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123476
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57395 SDG#: PH064-10

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
10145	Phosphorus		7723-14-0	332		10.3	2.99	1
01662	Potassium		7440-09-7	2,700		103	8.62	1
01667	Sodium		7440-23-5	125		103	17.3	1
06969	Tin		7440-31-5	2.70	J	10.3	0.227	1
06970	Titanium		7440-32-6	1,110		5.17	0.879	5
06971	Vanadium		7440-62-2	29.3		1.03	0.134	1
06972	Zinc		7440-66-6	42.8		4.14	0.207	1
10146	Zirconium		7440-67-7	3.15	J	5.17	0.869	1
		SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium		7782-49-2	0.414	U	0.414	0.103	2
06142	Silver		7440-22-4	0.207	U	0.207	0.0269	2
06144	Strontium		7440-24-6	17.3		0.414	0.0703	2
06145	Thallium		7440-28-0	0.223		0.207	0.0310	2
		SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A		7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry		**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.7 C.		n.a.	8.28		0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.		n.a.	6.1		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B131972AA	07/17/2013 00:32	Andrea E Lando	1.02
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319231673	07/11/2013 15:50	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319231673	07/11/2013 15:50	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319231673	07/11/2013 15:41	Mitchell R Washel	n.a.
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/18/2013 05:45	Mark A Clark	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-573-SA8-SB-9.5-10.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123476
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 09:45 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57395 SDG#: PH064-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13193A16A	07/13/2013 04:01	Laura M Krieger	22.98
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319231673	07/11/2013 15:08	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319231673	07/11/2013 15:09	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 05:52	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 17:07	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06944	Antimony	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06946	Barium	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
07914	Boron	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
01650	Calcium	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06951	Chromium	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06953	Copper	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
01654	Iron	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06955	Lead	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
01656	Lithium	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06958	Manganese	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06961	Nickel	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
01662	Potassium	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
01667	Sodium	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06969	Tin	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06970	Titanium	SW-846 6010C	1	131920637001	07/20/2013 09:28	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06972	Zinc	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131920637001	07/18/2013 21:27	John P Hook	1
06141	Selenium	SW-846 6020A	1	131920637001B	07/18/2013 19:39	David K Beck	2
06142	Silver	SW-846 6020A	1	131920637001A	07/18/2013 19:39	David K Beck	2
06144	Strontium	SW-846 6020A	1	131920637001A	07/18/2013 19:39	David K Beck	2
06145	Thallium	SW-846 6020A	1	131920637001A	07/18/2013 19:39	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131920638001	07/15/2013 10:11	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131920637001	07/14/2013 23:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131920638001	07/15/2013 03:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13192039401A	07/11/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401B	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123477
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 08:00

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10TB1 SDG#: PH064-11TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	20	U	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123477
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 08:00

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10TB1 SDG#: PH064-11TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y131973AA	07/17/2013 00:06	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y131973AA	07/17/2013 00:06	Brett W Kenyon	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13192A20A	07/11/2013 19:09	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7123477
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 08:00

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10TB1 SDG#: PH064-11TB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01146	GC VOA Water Prep	SW-846 5030B	1	13192A20A	07/11/2013 19:09	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123478
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:15 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH064-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.6	10
12969	Acenaphthylene	208-96-8	19	U	19	3.8	10
12969	Anthracene	120-12-7	19	U	19	3.8	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.6	10
12969	Benzo(a)pyrene	50-32-8	19	U	19	7.6	10
12969	Benzo(b)fluoranthene	205-99-2	13	J	19	7.6	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	38	10
12969	Benzo(g,h,i)perylene	191-24-2	19	U	19	7.6	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.6	10
12969	Butylbenzylphthalate	85-68-7	200	U	200	68	10
12969	Di-n-butylphthalate	84-74-2	200	U	200	68	10
12969	Chrysene	218-01-9	13	J	19	3.8	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.6	10
12969	Diethylphthalate	84-66-2	200	U	200	68	10
12969	Dimethylphthalate	131-11-3	200	U	200	68	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	200	U	200	68	10
12969	Fluoranthene	206-44-0	19	U	19	7.6	10
12969	Fluorene	86-73-7	19	U	19	7.6	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.6	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.6	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.6	10
12969	Naphthalene	91-20-3	19	U	19	7.6	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.6	10
12969	Di-n-octylphthalate	117-84-0	200	U	200	68	10
12969	Phenanthrene	85-01-8	7.8	J	19	7.6	10
12969	Pyrene	129-00-0	8.8	J	19	7.6	10
Reporting limits were raised due to interference from the sample matrix.							
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	11	U	11	4.5	2
12952	EFH (C15-C20)	n.a.	11	U	11	4.5	2
12952	EFH (C21-C30)	n.a.	35		11	4.5	2
12952	EFH (C30-C40)	n.a.	110		23	9.1	2
12952	EFH (C8-C11)	n.a.	11	U	11	4.5	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123478
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:15 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH064-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,400		44.9	8.09	1
06944	Antimony	7440-36-0	4.49	U	4.49	0.831	1
06935	Arsenic	7440-38-2	7.02		4.49	0.786	1
06946	Barium	7440-39-3	116		1.12	0.0370	1
06947	Beryllium	7440-41-7	0.524	J	1.12	0.0752	1
07914	Boron	7440-42-8	5.51	J	11.2	0.943	1
06949	Cadmium	7440-43-9	0.407	J	1.12	0.0853	1
01650	Calcium	7440-70-2	29,900		22.5	3.75	1
06951	Chromium	7440-47-3	18.4		3.37	0.180	1
06952	Cobalt	7440-48-4	4.31		1.12	0.111	1
06953	Copper	7440-50-8	10.1		2.25	0.326	1
01654	Iron	7439-89-6	19,700		44.9	4.06	1
06955	Lead	7439-92-1	6.18		3.37	0.561	1
01656	Lithium	7439-93-2	18.2		4.5	0.38	1
01657	Magnesium	7439-95-4	4,290		11.2	1.87	1
06958	Manganese	7439-96-5	232		1.12	0.0932	1
06960	Molybdenum	7439-98-7	0.611	J	2.25	0.191	1
06961	Nickel	7440-02-0	10.5		2.25	0.146	1
10145	Phosphorus	7723-14-0	361		11.2	3.24	1
01662	Potassium	7440-09-7	2,800		112	9.36	1
01667	Sodium	7440-23-5	335		112	18.7	1
06969	Tin	7440-31-5	2.79	J	11.2	0.247	1
06970	Titanium	7440-32-6	917		1.12	0.191	1
06971	Vanadium	7440-62-2	35.9		1.12	0.146	1
06972	Zinc	7440-66-6	48.2		4.49	0.225	1
10146	Zirconium	7440-67-7	5.61	J	5.61	0.943	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.449	U	0.449	0.112	2
06142	Silver	7440-22-4	0.0750	J	0.225	0.0292	2
06144	Strontium	7440-24-6	62.8		0.449	0.0763	2
06145	Thallium	7440-28-0	0.206	J	0.225	0.0337	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184	U	0.0184	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.06		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123478
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:15 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH064-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.12	U	1.12	0.0198	1
11031	12378-PeCDD	40321-76-4	0.141	JB	5.60	0.0222	1
11031	123478-HxCDD	39227-28-6	0.0645	JBQ	5.60	0.0230	1
11031	123678-HxCDD	57653-85-7	0.184	JB	5.60	0.0246	1
11031	123789-HxCDD	19408-74-3	0.141	JBQ	5.60	0.0237	1
11031	1234678-HpCDD	35822-46-9	2.93	JB	5.60	0.0220	1
11031	OCDD	3268-87-9	24.3	B	11.2	0.0227	1
11031	2378-TCDF	51207-31-9	0.0577	JQ	1.12	0.0223	1
11031	12378-PeCDF	57117-41-6	0.335	JB	5.60	0.0204	1
11031	23478-PeCDF	57117-31-4	0.101	JBQ	5.60	0.0187	1
11031	123478-HxCDF	70648-26-9	0.135	JBQ	5.60	0.0163	1
11031	123678-HxCDF	57117-44-9	0.108	JB	5.60	0.0158	1
11031	123789-HxCDF	72918-21-9	0.0961	JB	5.60	0.0167	1
11031	234678-HxCDF	60851-34-5	0.0901	JB	5.60	0.0147	1
11031	1234678-HpCDF	67562-39-4	0.425	JB	5.60	0.0170	1
11031	1234789-HpCDF	55673-89-7	0.0682	JBQ	5.60	0.0209	1
11031	OCDF	39001-02-0	0.728	JB	11.2	0.0197	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.240				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	84	25 - 164
13C12-12378-PeCDD	90	25 - 181
13C12-123478-HxCDD	92	32 - 141
13C12-123678-HxCDD	92	28 - 130
13C12-123789-HxCDD	91	28 - 130
13C12-1234678-HpCDD	101	23 - 140
13C12-OCDD	106	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	89	21 - 178
13C12-123478-HxCDF	90	26 - 152
13C12-123678-HxCDF	92	26 - 123
13C12-234678-HxCDF	93	28 - 136
13C12-123789-HxCDF	96	29 - 147
13C12-1234678-HpCDF	107	28 - 143
13C12-1234789-HpCDF	99	26 - 138
13C12-OCDF	102	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123478
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:15 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH064-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123478
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:15 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH064-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 13:27	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 06:10	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 17:29	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/17/2013 00:11	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06944	Antimony	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06946	Barium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
07914	Boron	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
01650	Calcium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06951	Chromium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06953	Copper	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
01654	Iron	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06955	Lead	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
01656	Lithium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06958	Manganese	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06961	Nickel	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
01662	Potassium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
01667	Sodium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06969	Tin	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06970	Titanium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06972	Zinc	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131920637001	07/18/2013 21:31	John P Hook	1
06141	Selenium	SW-846 6020A	1	131920637001B	07/18/2013 19:41	David K Beck	2
06142	Silver	SW-846 6020A	1	131920637001A	07/18/2013 19:41	David K Beck	2
06144	Strontium	SW-846 6020A	1	131920637001A	07/18/2013 19:41	David K Beck	2
06145	Thallium	SW-846 6020A	1	131920637001A	07/18/2013 19:41	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123478
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:15 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57100 SDG#: PH064-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131920638001	07/15/2013 10:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131920637001	07/14/2013 23:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131920638001	07/15/2013 03:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13192039401A	07/11/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401B	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123479
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:50 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57165 SDG#: PH064-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.1	J	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.1	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.4	J	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.3	J	1.8	0.73	1
12969	Naphthalene	91-20-3	0.93	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.4	J	1.8	0.73	1
12969	Pyrene	129-00-0	0.85	J	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.85
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123479
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:50 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57165 SDG#: PH064-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	6.6		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	18		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,000		43.1	7.77	1
06944	Antimony	7440-36-0	4.31	U	4.31	0.797	1
06935	Arsenic	7440-38-2	5.87		4.31	0.754	1
06946	Barium	7440-39-3	54.0		1.08	0.0356	1
06947	Beryllium	7440-41-7	0.590	J	1.08	0.0722	1
07914	Boron	7440-42-8	4.64	J	10.8	0.905	1
06949	Cadmium	7440-43-9	0.288	J	1.08	0.0819	1
01650	Calcium	7440-70-2	4,470		21.6	3.60	1
06951	Chromium	7440-47-3	20.0		3.23	0.172	1
06952	Cobalt	7440-48-4	6.61		1.08	0.107	1
06953	Copper	7440-50-8	9.85		2.16	0.312	1
01654	Iron	7439-89-6	25,300		43.1	3.90	1
06955	Lead	7439-92-1	5.48		3.23	0.539	1
01656	Lithium	7439-93-2	23.2		4.3	0.37	1
01657	Magnesium	7439-95-4	5,030		10.8	1.80	1
06958	Manganese	7439-96-5	379		1.08	0.0894	1
06960	Molybdenum	7439-98-7	0.538	J	2.16	0.183	1
06961	Nickel	7440-02-0	13.1		2.16	0.140	1
10145	Phosphorus	7723-14-0	383		10.8	3.11	1
01662	Potassium	7440-09-7	3,240		108	8.99	1
01667	Sodium	7440-23-5	336		108	18.0	1
06969	Tin	7440-31-5	2.96	J	10.8	0.237	1
06970	Titanium	7440-32-6	1,380		5.39	0.916	5
06971	Vanadium	7440-62-2	42.5		1.08	0.140	1
06972	Zinc	7440-66-6	54.3		4.31	0.216	1
10146	Zirconium	7440-67-7	4.77	J	5.39	0.905	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.431	U	0.431	0.108	2
06142	Silver	7440-22-4	0.216	U	0.216	0.0280	2
06144	Strontium	7440-24-6	26.3		0.431	0.0733	2
06145	Thallium	7440-28-0	0.281		0.216	0.0323	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183	U	0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.20		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123479
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:50 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57165 SDG#: PH064-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123479
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:50 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57165 SDG#: PH064-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0441 JBQ	1.06	0.0198	1
11031	12378-PeCDD	40321-76-4	0.118 JBQ	5.32	0.0214	1
11031	123478-HxCDD	39227-28-6	0.0624 JB	5.32	0.0164	1
11031	123678-HxCDD	57653-85-7	0.0627 JBQ	5.32	0.0176	1
11031	123789-HxCDD	19408-74-3	0.0682 JB	5.32	0.0168	1
11031	1234678-HpCDD	35822-46-9	0.296 JB	5.32	0.0216	1
11031	OCDD	3268-87-9	3.66 JB	10.6	0.0273	1
11031	2378-TCDF	51207-31-9	0.0589 JQ	1.06	0.0169	1
11031	12378-PeCDF	57117-41-6	0.234 JB	5.32	0.0138	1
11031	23478-PeCDF	57117-31-4	0.155 JBQ	5.32	0.0133	1
11031	123478-HxCDF	70648-26-9	0.131 JB	5.32	0.0107	1
11031	123678-HxCDF	57117-44-9	0.101 JBQ	5.32	0.0101	1
11031	123789-HxCDF	72918-21-9	0.0970 JB	5.32	0.0131	1
11031	234678-HxCDF	60851-34-5	0.0596 JB	5.32	0.0101	1
11031	1234678-HpCDF	67562-39-4	0.109 JBQ	5.32	0.00744	1
11031	1234789-HpCDF	55673-89-7	0.0437 JB	5.32	0.0134	1
11031	OCDF	39001-02-0	0.218 JB	10.6	0.0336	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0534			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	51	26 - 138
13C12-OCDF	47	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123479
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:50 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57165 SDG#: PH064-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123479
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:50 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57165 SDG#: PH064-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/17/2013 13:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13193A16A	07/13/2013 04:39	Laura M Krieger	24.85
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319231673	07/11/2013 15:05	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319231673	07/11/2013 15:06	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 07:43	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 14:56	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/17/2013 01:08	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06944	Antimony	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06946	Barium	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
07914	Boron	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
01650	Calcium	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06951	Chromium	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06953	Copper	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
01654	Iron	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06955	Lead	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
01656	Lithium	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06958	Manganese	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06961	Nickel	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
01662	Potassium	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
01667	Sodium	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06969	Tin	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06970	Titanium	SW-846 6010C	1	131920637001	07/20/2013 09:32	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
06972	Zinc	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131920637001	07/18/2013 21:35	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123479
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 14:50 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57165 SDG#: PH064-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131920637001B	07/18/2013 19:44	David K Beck	2
06142	Silver	SW-846 6020A	1	131920637001A	07/18/2013 19:44	David K Beck	2
06144	Strontium	SW-846 6020A	1	131920637001A	07/18/2013 19:44	David K Beck	2
06145	Thallium	SW-846 6020A	1	131920637001A	07/18/2013 19:44	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131920638001	07/15/2013 10:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131920637001	07/14/2013 23:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131920638001	07/15/2013 03:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13192039401B	07/11/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401B	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-12.5-13.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123480
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:05 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57112 SDG#: PH064-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.70	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.94
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-12.5-13.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123480
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:05 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57112 SDG#: PH064-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.1	J	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	16		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,800		42.0	7.58	1
06944	Antimony	7440-36-0	4.20	U	4.20	0.778	1
06935	Arsenic	7440-38-2	5.28		4.20	0.736	1
06946	Barium	7440-39-3	69.6		1.05	0.0347	1
06947	Beryllium	7440-41-7	0.525	J	1.05	0.0704	1
07914	Boron	7440-42-8	3.81	J	10.5	0.883	1
06949	Cadmium	7440-43-9	0.314	J	1.05	0.0799	1
01650	Calcium	7440-70-2	4,350		21.0	3.51	1
06951	Chromium	7440-47-3	21.0		3.15	0.168	1
06952	Cobalt	7440-48-4	6.68		1.05	0.104	1
06953	Copper	7440-50-8	7.95		2.10	0.305	1
01654	Iron	7439-89-6	24,500		42.0	3.80	1
06955	Lead	7439-92-1	4.54		3.15	0.525	1
01656	Lithium	7439-93-2	25.2		4.2	0.36	1
01657	Magnesium	7439-95-4	5,210		10.5	1.75	1
06958	Manganese	7439-96-5	303		1.05	0.0872	1
06960	Molybdenum	7439-98-7	0.200	J	2.10	0.179	1
06961	Nickel	7440-02-0	13.6		2.10	0.137	1
10145	Phosphorus	7723-14-0	447		10.5	3.04	1
01662	Potassium	7440-09-7	3,560		105	8.76	1
01667	Sodium	7440-23-5	112		105	17.5	1
06969	Tin	7440-31-5	2.93	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,520		5.25	0.893	5
06971	Vanadium	7440-62-2	41.5		1.05	0.137	1
06972	Zinc	7440-66-6	53.9		4.20	0.210	1
10146	Zirconium	7440-67-7	4.13	J	5.25	0.883	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.420	U	0.420	0.105	2
06142	Silver	7440-22-4	0.210	U	0.210	0.0273	2
06144	Strontium	7440-24-6	31.4		0.420	0.0715	2
06145	Thallium	7440-28-0	0.220		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.15		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-12.5-13.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123480
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:05 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57112 SDG#: PH064-14*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-12.5-13.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123480
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Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57112 SDG#: PH064-14*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0410 JBQ	1.07	0.0210	1
11031	12378-PeCDD	40321-76-4	5.37 U	5.37	0.0203	1
11031	123478-HxCDD	39227-28-6	0.0378 JB	5.37	0.0158	1
11031	123678-HxCDD	57653-85-7	0.0630 JBQ	5.37	0.0167	1
11031	123789-HxCDD	19408-74-3	0.0685 JBQ	5.37	0.0165	1
11031	1234678-HpCDD	35822-46-9	0.616 JB	5.37	0.0202	1
11031	OCDD	3268-87-9	8.87 JB	10.7	0.0183	1
11031	2378-TCDF	51207-31-9	0.0241 JQ	1.07	0.0170	1
11031	12378-PeCDF	57117-41-6	0.0920 JBQ	5.37	0.0128	1
11031	23478-PeCDF	57117-31-4	0.0530 JBQ	5.37	0.0127	1
11031	123478-HxCDF	70648-26-9	0.0558 JBQ	5.37	0.00929	1
11031	123678-HxCDF	57117-44-9	0.0439 JBQ	5.37	0.00907	1
11031	123789-HxCDF	72918-21-9	0.0800 JBQ	5.37	0.0105	1
11031	234678-HxCDF	60851-34-5	0.0367 JBQ	5.37	0.00885	1
11031	1234678-HpCDF	67562-39-4	0.130 JB	5.37	0.00656	1
11031	1234789-HpCDF	55673-89-7	0.0463 JB	5.37	0.00984	1
11031	OCDF	39001-02-0	0.367 JB	10.7	0.0179	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0144			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-12.5-13.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123480
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:05 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57112 SDG#: PH064-14*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-12.5-13.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123480
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:05 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57112 SDG#: PH064-14*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13193SLA026	07/18/2013 06:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13193SLA026	07/13/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13193A16A	07/13/2013 05:17	Laura M Krieger	22.94
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319231673	07/11/2013 15:07	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319231673	07/11/2013 15:07	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131940014A	07/16/2013 08:01	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131940014A	07/15/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131940007A	07/16/2013 15:17	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131940007A	07/14/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/17/2013 05:02	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06944	Antimony	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06946	Barium	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
07914	Boron	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
01650	Calcium	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06951	Chromium	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06953	Copper	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
01654	Iron	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06955	Lead	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
01656	Lithium	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06958	Manganese	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06961	Nickel	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
01662	Potassium	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
01667	Sodium	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06969	Tin	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06970	Titanium	SW-846 6010C	1	131920637001	07/20/2013 09:36	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
06972	Zinc	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131920637001	07/18/2013 21:39	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-571-SA8-SB-12.5-13.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7123480
LL Group # 1403202
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/10/2013 15:05 by VC

Submitted: 07/11/2013 09:20
Reported: 07/25/2013 14:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57112 SDG#: PH064-14*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131920637001B	07/18/2013 19:46	David K Beck	2
06142	Silver	SW-846 6020A	1	131920637001A	07/18/2013 19:46	David K Beck	2
06144	Strontium	SW-846 6020A	1	131920637001A	07/18/2013 19:46	David K Beck	2
06145	Thallium	SW-846 6020A	1	131920637001A	07/18/2013 19:46	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131920638001	07/15/2013 10:17	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131920637001	07/14/2013 23:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131920638001	07/15/2013 03:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13192039401B	07/11/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13197162401B	07/16/2013 22:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B131972AA	Sample number(s): 7123473,7123476								
Acetone	20 U	20.	7	ug/kg	116		18-197		
Acrolein	100 U	100.	20	ug/kg	86		50-137		
Acrylonitrile	20 U	20.	4	ug/kg	111		60-133		
t-Amyl methyl ether	5 U	5.	1	ug/kg	103		63-130		
Benzene	5 U	5.	0.5	ug/kg	94		80-120		
Bromobenzene	5 U	5.	1	ug/kg	93		79-120		
Bromochloromethane	5 U	5.	1	ug/kg	101		82-133		
Bromodichloromethane	5 U	5.	1	ug/kg	93		75-114		
Bromoform	5 U	5.	1	ug/kg	102		70-120		
Bromomethane	5 U	5.	2	ug/kg	89		32-162		
2-Butanone	10 U	10.	4	ug/kg	124		38-146		
t-Butyl alcohol	50 U	50.	20	ug/kg	95		60-149		
n-Butylbenzene	5 U	5.	1	ug/kg	87		72-120		
sec-Butylbenzene	5 U	5.	1	ug/kg	89		75-120		
tert-Butylbenzene	5 U	5.	1	ug/kg	87		75-120		
Carbon Disulfide	5 U	5.	1	ug/kg	89		59-129		
Carbon Tetrachloride	5 U	5.	1	ug/kg	89		69-122		
Chlorobenzene	5 U	5.	1	ug/kg	94		80-120		
Chloroethane	5 U	5.	2	ug/kg	80		37-154		
2-Chloroethyl Vinyl Ether	10 U	10.	2	ug/kg	114		44-137		
Chloroform	5 U	5.	1	ug/kg	96		80-120		
1-Chlorohexane	5 U	5.	1	ug/kg	93		70-130		
Chloromethane	5 U	5.	2	ug/kg	86		56-120		
2-Chlorotoluene	5 U	5.	1	ug/kg	90		78-120		
4-Chlorotoluene	5 U	5.	1	ug/kg	89		79-120		
Chlorotrifluoroethene	5 U	5.	2	ug/kg	70	74	22-131	5	30
1,2-Dibromo-3-chloropropane	5 U	5.	2	ug/kg	112		55-128		
Dibromochloromethane	5 U	5.	1	ug/kg	97		77-120		
1,2-Dibromoethane	5 U	5.	1	ug/kg	104		80-120		
Dibromomethane	5 U	5.	1	ug/kg	101		80-120		
1,2-Dichlorobenzene	5 U	5.	1	ug/kg	97		80-120		
1,3-Dichlorobenzene	5 U	5.	1	ug/kg	92		80-120		
1,4-Dichlorobenzene	5 U	5.	1	ug/kg	92		80-120		
Dichlorodifluoromethane	5 U	5.	2	ug/kg	81		32-120		
1,1-Dichloroethane	5 U	5.	1	ug/kg	94		80-120		
1,2-Dichloroethane	5 U	5.	1	ug/kg	103		72-126		
1,1-Dichloroethene	5 U	5.	1	ug/kg	92		73-129		
cis-1,2-Dichloroethene	5 U	5.	1	ug/kg	96		80-120		
trans-1,2-Dichloroethene	5 U	5.	1	ug/kg	96		79-120		
1,2-Dichloropropane	5 U	5.	1	ug/kg	99		77-120		
1,3-Dichloropropane	5 U	5.	1	ug/kg	101		80-120		
2,2-Dichloropropane	5 U	5.	1	ug/kg	89		72-123		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloropropene	5	U	5.	1	ug/kg	93		77-120		
cis-1,3-Dichloropropene	5	U	5.	1	ug/kg	98		74-120		
trans-1,3-Dichloropropene	5	U	5.	1	ug/kg	98		77-120		
Ethyl t-butyl ether	5	U	5.	1	ug/kg	101		64-124		
Ethylbenzene	5	U	5.	1	ug/kg	90		80-120		
Freon 113	5	U	5.	2	ug/kg	86		64-137		
Freon 133a	5	U	5.	2	ug/kg	90	90	78-120	1	30
Hexachlorobutadiene	5	U	5.	2	ug/kg	83		46-130		
2-Hexanone	10	U	10.	3	ug/kg	112		40-129		
di-Isopropyl ether	5	U	5.	1	ug/kg	100		68-128		
Isopropylbenzene	5	U	5.	1	ug/kg	91		76-120		
p-Isopropyltoluene	5	U	5.	1	ug/kg	86		75-120		
Methyl Iodide	5	U	5.	3	ug/kg	98		72-130		
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/kg	107		74-121		
4-Methyl-2-pentanone	10	U	10.	3	ug/kg	129*		52-125		
Methylene Chloride	5	U	5.	2	ug/kg	93		76-124		
n-Propylbenzene	5	U	5.	1	ug/kg	89		77-120		
Styrene	5	U	5.	1	ug/kg	93		76-120		
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/kg	93		80-120		
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/kg	108		71-123		
Tetrachloroethene	5	U	5.	1	ug/kg	90		78-126		
Toluene	5	U	5.	1	ug/kg	91		80-120		
1,2,3-Trichlorobenzene	5	U	5.	1	ug/kg	92		64-120		
1,2,4-Trichlorobenzene	5	U	5.	1	ug/kg	92		68-113		
1,1,1-Trichloroethane	5	U	5.	1	ug/kg	89		71-125		
1,1,2-Trichloroethane	5	U	5.	1	ug/kg	106		80-120		
Trichloroethene	5	U	5.	1	ug/kg	94		80-120		
Trichlorofluoromethane	5	U	5.	2	ug/kg	84		58-133		
1,2,3-Trichloropropane	5	U	5.	1	ug/kg	112		71-123		
1,2,4-Trimethylbenzene	5	U	5.	1	ug/kg	90		79-120		
1,3,5-Trimethylbenzene	5	U	5.	1	ug/kg	91		78-120		
Vinyl Acetate	10	U	10.	2	ug/kg	135*	127*	29-111	6	30
Vinyl Chloride	5	U	5.	1	ug/kg	91		53-120		
m+p-Xylene	5	U	5.	1	ug/kg	91		80-120		
o-Xylene	5	U	5.	1	ug/kg	91		80-120		
Batch number: Y131973AA	Sample number(s): 7123467-7123468,7123477									
Acetone	20	U	20.	6	ug/l	92	92	35-181	0	30
Acrolein	100 U		100.	40	ug/l	111	106	46-146	5	30
Acrylonitrile	20	U	20.	4	ug/l	85	86	61-130	1	30
t-Amyl methyl ether	5	U	5.	0.8	ug/l	105	105	66-120	0	30
Benzene	5	U	5.	0.5	ug/l	106	104	77-121	2	30
Bromobenzene	5	U	5.	1	ug/l	101	100	80-120	1	30
Bromochloromethane	5	U	5.	1	ug/l	114	111	80-121	2	30
Bromodichloromethane	5	U	5.	1	ug/l	107	106	73-120	1	30
Bromoform	5	U	5.	1	ug/l	100	96	61-120	4	30
Bromomethane	5	U	5.	1	ug/l	96	95	51-120	1	30
2-Butanone	10	U	10.	3	ug/l	93	93	57-141	1	30
t-Butyl alcohol	50	U	50.	10	ug/l	112	106	75-120	5	30
n-Butylbenzene	5	U	5.	1	ug/l	108	107	73-130	1	30
sec-Butylbenzene	5	U	5.	1	ug/l	109	108	74-124	1	30
tert-Butylbenzene	5	U	5.	1	ug/l	103	102	80-120	1	30
Carbon Disulfide	5	U	5.	1	ug/l	73	74	68-121	1	30
Carbon Tetrachloride	5	U	5.	1	ug/l	114	110	65-137	3	30
Chlorobenzene	5	U	5.	0.8	ug/l	112	109	80-120	3	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chloroethane	5	U	5.	1	ug/l	83	85	60-120	2	30
2-Chloroethyl Vinyl Ether	10	U	10.	2	ug/l	99	97	52-127	2	30
Chloroform	5	U	5.	0.8	ug/l	115	113	77-122	2	30
1-Chlorohexane	5	U	5.	1	ug/l	110	107	70-130	2	30
Chloromethane	5	U	5.	1	ug/l	97	99	54-123	2	30
2-Chlorotoluene	5	U	5.	1	ug/l	104	102	80-120	1	30
4-Chlorotoluene	5	U	5.	1	ug/l	103	102	80-120	2	30
Chlorotrifluoroethene	5	U	5.	2	ug/l	74	74	47-120	0	30
1,2-Dibromo-3-chloropropane	5	U	5.	2	ug/l	99	100	56-120	1	30
Dibromochloromethane	5	U	5.	1	ug/l	100	97	72-120	3	30
1,2-Dibromoethane	5	U	5.	1	ug/l	110	106	76-120	3	30
Dibromomethane	5	U	5.	1	ug/l	109	107	80-120	2	30
1,2-Dichlorobenzene	5	U	5.	1	ug/l	111	109	80-120	1	30
1,3-Dichlorobenzene	5	U	5.	1	ug/l	107	105	80-120	2	30
1,4-Dichlorobenzene	5	U	5.	1	ug/l	108	107	80-120	1	30
Dichlorodifluoromethane	5	U	5.	2	ug/l	106	105	35-122	1	30
1,1-Dichloroethane	5	U	5.	1	ug/l	104	103	79-120	0	30
1,2-Dichloroethane	5	U	5.	1	ug/l	119	116	64-130	2	30
1,1-Dichloroethene	5	U	5.	0.8	ug/l	96	95	76-124	1	30
cis-1,2-Dichloroethene	5	U	5.	0.8	ug/l	108	107	80-120	2	30
trans-1,2-Dichloroethene	5	U	5.	0.8	ug/l	105	105	80-120	0	30
1,2-Dichloropropane	5	U	5.	1	ug/l	109	108	80-120	1	30
1,3-Dichloropropane	5	U	5.	1	ug/l	104	102	80-120	1	30
2,2-Dichloropropane	5	U	5.	1	ug/l	108	107	67-124	2	30
1,1-Dichloropropene	5	U	5.	1	ug/l	110	109	80-120	1	30
cis-1,3-Dichloropropene	5	U	5.	1	ug/l	109	109	78-120	0	30
trans-1,3-Dichloropropene	5	U	5.	1	ug/l	99	97	66-124	2	30
Ethyl t-butyl ether	5	U	5.	0.8	ug/l	102	102	66-120	0	30
Ethylbenzene	5	U	5.	0.8	ug/l	107	105	79-120	2	30
Freon 113	5	U	5.	2	ug/l	105	103	69-128	2	30
Freon 133a	5	U	5.	2	ug/l	95	97	64-120	2	30
Hexachlorobutadiene	5	U	5.	2	ug/l	112	112	58-120	1	30
2-Hexanone	10	U	10.	3	ug/l	92	91	59-125	1	30
di-Isopropyl ether	5	U	5.	0.8	ug/l	99	100	65-120	1	30
Isopropylbenzene	5	U	5.	1	ug/l	111	108	77-120	2	30
p-Isopropyltoluene	5	U	5.	1	ug/l	107	106	77-121	1	30
Methyl Iodide	5	U	5.	1	ug/l	99	98	71-122	2	30
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/l	104	105	68-121	0	30
4-Methyl-2-pentanone	10	U	10.	3	ug/l	96	95	65-122	1	30
Methylene Chloride	5	U	5.	2	ug/l	105	105	84-118	0	30
n-Propylbenzene	5	U	5.	1	ug/l	108	106	77-130	2	30
Styrene	5	U	5.	1	ug/l	108	106	77-120	2	30
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/l	111	108	79-120	3	30
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/l	101	101	70-129	1	30
Tetrachloroethene	5	U	5.	0.8	ug/l	110	108	79-120	2	30
Toluene	5	U	5.	0.7	ug/l	108	105	79-120	3	30
1,2,3-Trichlorobenzene	5	U	5.	1	ug/l	116	113	67-120	2	30
1,2,4-Trichlorobenzene	5	U	5.	1	ug/l	114	113	65-120	1	30
1,1,1-Trichloroethane	5	U	5.	0.8	ug/l	111	109	66-126	2	30
1,1,2-Trichloroethane	5	U	5.	0.8	ug/l	108	107	80-120	1	30
Trichloroethene	5	U	5.	1	ug/l	114	113	80-120	1	30
Trichlorofluoromethane	5	U	5.	2	ug/l	112	110	65-130	2	30
1,2,3-Trichloropropane	5	U	5.	1	ug/l	103	101	76-120	2	30
1,2,4-Trimethylbenzene	5	U	5.	1	ug/l	110	107	69-122	3	30
1,3,5-Trimethylbenzene	5	U	5.	1	ug/l	108	106	68-124	1	30
Vinyl Acetate	10	U	10.	2	ug/l	119	122	57-147	2	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Vinyl Chloride	5	U	5.	1	ug/l	98	99	63-120	2	30
m+p-Xylene	5	U	5.	0.8	ug/l	108	106	77-120	2	30
o-Xylene	5	U	5.	0.8	ug/l	109	105	77-120	3	30
Batch number: 13193SLA026	Sample number(s): 7123469-7123476,7123478-7123480									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	96		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	96		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	99		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	103		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	115		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	99		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	104		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	101		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	111		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	125		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	103		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	106		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	122		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	110		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	106		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	106		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	105		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	97		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	84		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	110		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	96		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		71-120		
Batch number: 13197WAC026	Sample number(s): 7123467-7123468									
Acenaphthene	0.050	U	0.050	0.010	ug/l	101	101	65-124	1	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	103	104	72-113	1	30
Anthracene	0.050	U	0.050	0.010	ug/l	103	102	70-117	1	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	101	101	75-115	0	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	103	104	72-120	1	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	106	112	74-130	6	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	98	99	70-130	1	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	106	105	63-121	1	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	110	108	74-118	3	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	87	87	40-138	1	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	101	104	70-145	3	30
Chrysene	0.050	U	0.050	0.010	ug/l	103	101	75-112	1	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	107	105	66-122	1	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	100	101	74-129	1	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	97	99	40-119	2	30
Bis(2-Ethylhexyl)phthalate	0.31	J	1.0	0.050	ug/l	91	88	70-143	3	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	101	103	73-116	2	30
Fluorene	0.050	U	0.050	0.010	ug/l	99	99	74-115	0	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	140*	138*	66-122	1	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	105	105	71-120	0	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	102	103	74-119	0	30
Naphthalene	0.050	U	0.050	0.030	ug/l	103	101	67-118	2	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	77	75	36-120	3	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	81	78	57-145	4	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	101	101	72-109	0	30
Pyrene	0.050	U	0.050	0.010	ug/l	102	100	71-116	2	30
Batch number: 13192A20A	Sample number(s): 7123467-7123468,7123477									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	106	101	75-135	5	30
Batch number: 13193A16A	Sample number(s): 7123470-7123473,7123475-7123476,7123479-7123480									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	86	81	67-119	7	30
Batch number: 131940016A	Sample number(s): 7123467									
2,4-D	0.50	U	0.50	0.16	ug/l	118	120	68-155	2	30
Dalapon	1.3	U	1.3	0.25	ug/l	73	86	39-115	15	30
2,4-DB	1.0	U	1.0	0.30	ug/l	124	124	50-163	1	30
Dicamba	0.30	U	0.30	0.080	ug/l	111	117	55-163	6	30
Dinoseb	0.50	U	0.50	0.12	ug/l	119	119	16-163	0	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	136	144	89-162	5	30
MCPA	200 U		200.	50	ug/l	106	111	68-154	5	30
MCPP	200 U		200.	50	ug/l	105	110	46-173	5	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	124	125	55-169	1	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	133	139	58-155	4	30
Batch number: 131990011A	Sample number(s): 7123468									
2,4-D	0.50	U	0.50	0.16	ug/l	152	161*	68-155	6	30
Dalapon	1.3	U	1.3	0.25	ug/l					
2,4-DB	1.0	U	1.0	0.30	ug/l	127	141	50-163	11	30
Dicamba	0.30	U	0.30	0.080	ug/l	142	140	55-163	1	30
Dinoseb	0.50	U	0.50	0.12	ug/l	151	159	16-163	5	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	182*	182*	89-162	0	30
MCPA	200 U		200.	50	ug/l	135	142	68-154	5	30
MCPP	200 U		200.	50	ug/l	143	142	46-173	1	30
2,4,5-T	0.099		0.050	0.015	ug/l	135	149	55-169	10	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	146	161*	58-155	10	30
Batch number: 131970017A	Sample number(s): 7123467-7123468									
6b Perchlorate (Method 6850)	1.0	U	1.0	0.20	ug/l	95		85-115		
Batch number: 131940014A	Sample number(s): 7123469-7123476,7123478-7123480									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	70	71	36-106	2	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	93		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	98		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 131980014A	Sample number(s): 7123467-7123468									

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aldrin	0.0080	U	0.0080	0.0016	ug/l	91	78	55-126	15	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	100	86	63-132	16	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	90	79	63-132	13	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	97	87	68-128	11	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	104	88	62-143	16	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	97	83	56-137	15	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	100	84	45-134	17	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	91	79	63-131	15	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	105	90	65-135	15	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	94	82	48-124	14	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	85	81	53-123	6	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	85	74	60-129	14	30
Endrin	0.016	U	0.016	0.0065	ug/l	85	87	43-139	3	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	82	69	55-123	18	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	91	75	51-138	20	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	98	84	57-126	16	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	91	79	65-128	14	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	95	85	46-134	11	30
Mirex	0.20	U	0.20	0.068	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 131980015A	Sample number(s): 7123467-7123468									
PCB-1016	0.40	U	0.40	0.080	ug/l	89	93	69-120	5	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	83	94	69-128	11	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132000013A	Sample number(s): 7123467-7123468									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	58	60	35-84	3	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
Batch number: 131940007A	Sample number(s): 7123469-7123476,7123478-7123480									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	100		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	104		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	104		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	112		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 131960020A	Sample number(s): 7123467-7123468									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	97	95	70-130	2	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	104	104	70-130	0	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	105	104	70-130	2	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	101	101	70-130	0	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	77	76	70-130	0	30
Batch number: 131920637001	Sample number(s): 7123469-7123476,7123478-7123480									
Aluminum	40.0	U	40.0	7.21	mg/kg	107		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	103		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	106		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	104		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	101		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	100		80-120		
Calcium	8.96	J	20.0	3.34	mg/kg	106		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	103		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	105		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	105		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	106		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	101		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	105		80-120		
Magnesium	2.47	J	10.0	1.67	mg/kg	104		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	104		80-120		
Potassium	100 U		100.	8.34	mg/kg	104		80-120		
Sodium	100 U		100.	16.7	mg/kg	104		80-120		
Tin	1.45	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	101		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	106		80-120		
Zinc	0.430	J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	103		80-120		
Batch number: 131920637001A	Sample number(s): 7123469-7123476,7123478-7123480									
Silver	0.200	U	0.200	0.0260	mg/kg	106		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	106		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	91		80-120		
Batch number: 131920637001B	Sample number(s): 7123469-7123476,7123478-7123480									
Selenium	0.400	U	0.400	0.100	mg/kg	99		80-120		
Batch number: 131920638001	Sample number(s): 7123469-7123476,7123478-7123480									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	107		85-120		
Batch number: 131925713006	Sample number(s): 7123467-7123468									
3b Mercury 7470A	0.00020	U	0.00020	0.00006 0	mg/l	102	101	90-115	1	20
Batch number: 131970635001	Sample number(s): 7123467-7123468									
Aluminum	0.400	U	0.400	0.0828	mg/l	102	100	90-112	1	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	101	102	88-111	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	102	102	90-113	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	103	103	90-110	0	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	99	99	88-110	0	20
Boron	0.100	U	0.100	0.0084	mg/l	96	97	89-110	1	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	102	102	90-112	0	20
Calcium	0.400	U	0.400	0.0334	mg/l	100	100	90-110	0	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	101	101	90-110	0	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	105	105	90-110	0	20
Copper	0.0034	J	0.0200	0.0027	mg/l	106	106	90-112	0	20
Iron	0.400	U	0.400	0.0430	mg/l	101	99	90-112	1	20
Lead	0.0300	U	0.0300	0.0047	mg/l	107	108	88-110	1	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	102	101	90-110	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Magnesium	0.200 U	0.200	0.0167	mg/l	100	99	90-110	1	20
Manganese	0.0100 U	0.0100	0.00083	mg/l	101	101	90-110	0	20
Molybdenum	0.0200 U	0.0200	0.0017	mg/l	103	104	90-110	1	20
Nickel	0.0200 U	0.0200	0.0015	mg/l	106	106	90-111	0	20
Phosphorus	0.200 U	0.200	0.0418	mg/l	101	102	90-110	0	20
Potassium	1.00 U	1.00	0.0980	mg/l	100	99	85-115	0	20
Sodium	2.00 U	2.00	0.167	mg/l	100	99	87-114	1	20
Tin	0.0400 U	0.0400	0.0029	mg/l	100	100	90-110	0	20
Titanium	0.0200 U	0.0200	0.0017	mg/l	102	102	90-113	0	20
Vanadium	0.0100 U	0.0100	0.0020	mg/l	104	103	90-110	1	20
Zinc	0.0400 U	0.0400	0.0020	mg/l	104	104	90-110	0	20
Zirconium	0.100 U	0.100	0.0084	mg/l	103	103	90-110	0	20
Batch number: 131970639001A	Sample number(s): 7123467-7123468								
Silver	0.0010 U	0.0010	0.00011	mg/l	101	98	90-115	2	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	103	102	80-120	1	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	108	107	80-120	0	20
Batch number: 131970639001B	Sample number(s): 7123467-7123468								
Selenium	0.0040 U	0.0040	0.00050	mg/l	99	99	80-120	1	20
Batch number: 13192004101A	Sample number(s): 7123467-7123468								
28b pH (9040B and 9040C)					99		99-103		
Batch number: 13192039401A	Sample number(s): 7123469-7123476,7123478								
15a pH by 9045D					100		95-105		
Batch number: 13192039401B	Sample number(s): 7123479-7123480								
15a pH by 9045D					100		95-105		
Batch number: 13197162401B	Sample number(s): 7123469-7123476,7123478-7123480								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13196002	Sample number(s): 7123469-7123471,7123474-7123475,7123478-7123480								
2378-TCDD	0.0400 J	1.00	0.0216	ng/kg	89		67-158		
12378-PeCDD	0.0613 J	5.00	0.0242	ng/kg	94		70-142		
123478-HxCDD	0.0220 J	5.00	0.0167	ng/kg	98		70-164		
123678-HxCDD	0.0258 J	5.00	0.0179	ng/kg	96		76-134		
123789-HxCDD	0.0474 J	5.00	0.0172	ng/kg	96		64-162		
1234678-HpCDD	0.0478 J	5.00	0.0155	ng/kg	95		70-140		
OCDD	0.263 J	10.0	0.0205	ng/kg	96		78-144		
2378-TCDF	1.00 U	1.00	0.0196	ng/kg	93		75-158		
12378-PeCDF	0.0646 J	5.00	0.0138	ng/kg	94		80-134		
23478-PeCDF	0.0232 J	5.00	0.0137	ng/kg	95		68-160		
123478-HxCDF	0.0412 J	5.00	0.00990	ng/kg	98		72-134		
123678-HxCDF	0.0216 J	5.00	0.00910	ng/kg	95		84-130		
123789-HxCDF	0.0394 J	5.00	0.0120	ng/kg	98		78-130		
234678-HxCDF	0.0356 J	5.00	0.00910	ng/kg	97		70-156		
1234678-HpCDF	0.0258 J	5.00	0.00620	ng/kg	96		82-122		
1234789-HpCDF	0.0609 J	5.00	0.0120	ng/kg	96		78-138		
OCDF	0.106 J	10.0	0.0316	ng/kg	94		63-170		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13200001	Sample number(s): 7123467-7123468									
2378-TCDD	2.00	U	2.00	0.290	pg/l	93		60-150		
12378-PeCDD	10.0	U	10.0	0.263	pg/l	98		60-150		
123478-HxCDD	0.368	J	10.0	0.195	pg/l	101		60-150		
123678-HxCDD	0.364	J	10.0	0.202	pg/l	99		60-150		
123789-HxCDD	0.327	J	10.0	0.202	pg/l	99		60-150		
1234678-HpCDD	0.373	J	10.0	0.233	pg/l	97		60-150		
OCDD	1.18	J	20.0	0.179	pg/l	98		60-150		
2378-TCDF	2.00	U	2.00	0.237	pg/l	92		60-150		
12378-PeCDF	0.465	J	10.0	0.197	pg/l	97		60-150		
23478-PeCDF	0.511	J	10.0	0.177	pg/l	99		60-150		
123478-HxCDF	0.527	J	10.0	0.106	pg/l	100		60-150		
123678-HxCDF	0.476	J	10.0	0.114	pg/l	95		60-150		
123789-HxCDF	0.586	J	10.0	0.123	pg/l	99		60-150		
234678-HxCDF	0.238	J	10.0	0.102	pg/l	100		60-150		
1234678-HpCDF	0.413	J	10.0	0.0783	pg/l	99		60-150		
1234789-HpCDF	0.325	J	10.0	0.0899	pg/l	98		60-150		
OCDF	0.838	J	20.0	0.243	pg/l	98		60-150		
Batch number: 13196002	Sample number(s): 7123469-7123471,7123474-7123475,7123478-7123480									
TEQ WHO 2005 - EDLx0.0	0.00230				ng/kg					
Batch number: 13200001	Sample number(s): 7123467-7123468									
TEQ WHO 2005 - EDLx0.0	0.0660				pg/l					

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B131972AA	Sample number(s): 7123473,7123476 UNSPK: P125061								
Acetone	111	94	31-195	9	30				
Acrolein	102	107	10-165	13	30				
Acrylonitrile	101	83	48-139	12	30				
t-Amyl methyl ether	102	91	39-147	4	30				
Benzene	102	94	55-143	0	30				
Bromobenzene	101	92	43-139	2	30				
Bromochloromethane	104	96	60-137	0	30				
Bromodichloromethane	98	89	53-136	2	30				
Bromoform	100	88	38-124	6	30				
Bromomethane	94	90	42-168	3	30				
2-Butanone	116	96	37-163	11	30				
t-Butyl alcohol	110	112	47-153	9	30				
n-Butylbenzene	94	87	30-146	1	30				
sec-Butylbenzene	98	93	33-157	3	30				
tert-Butylbenzene	98	93	41-152	2	30				
Carbon Disulfide	101	96	48-146	2	30				

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Quality Control Summary

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Reported: 07/25/13 at 02:52 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Carbon Tetrachloride	104	98	45-153	2	30				
Chlorobenzene	102	93	49-135	2	30				
Chloroethane	84	83	39-152	6	30				
2-Chloroethyl Vinyl Ether	100	91	32-139	2	30				
Chloroform	106	96	61-142	3	30				
1-Chlorohexane	105	103	70-130	5	30				
Chloromethane	92	91	36-143	7	30				
2-Chlorotoluene	97	90	42-146	0	30				
4-Chlorotoluene	99	90	39-145	1	30				
1,2-Dibromo-3-chloropropane	97	83	30-139	8	30				
Dibromochloromethane	102	88	51-128	7	30				
1,2-Dibromoethane	105	91	54-129	7	30				
Dibromomethane	103	91	57-130	4	30				
1,2-Dichlorobenzene	99	91	36-133	2	30				
1,3-Dichlorobenzene	100	91	34-134	3	30				
1,4-Dichlorobenzene	99	91	35-136	2	30				
Dichlorodifluoromethane	97	95	26-151	6	30				
1,1-Dichloroethane	102	95	63-142	0	30				
1,2-Dichloroethane	108	95	49-150	5	30				
1,1-Dichloroethene	106	100	61-149	1	30				
cis-1,2-Dichloroethene	104	96	49-153	1	30				
trans-1,2-Dichloroethene	106	98	51-153	1	30				
1,2-Dichloropropane	106	96	48-145	2	30				
1,3-Dichloropropane	105	91	45-150	7	30				
2,2-Dichloropropane	99	94	53-147	2	30				
1,1-Dichloropropene	107	98	54-145	1	30				
cis-1,3-Dichloropropene	103	93	35-151	3	30				
trans-1,3-Dichloropropene	100	89	30-149	5	30				
Ethyl t-butyl ether	100	92	58-124	1	30				
Ethylbenzene	99	91	44-141	2	30				
Freon 113	97	99	56-156	10	30				
Hexachlorobutadiene	75	83	10-155	17	30				
2-Hexanone	104	86	32-160	11	30				
di-Isopropyl ether	104	96	59-133	0	30				
Isopropylbenzene	98	91	38-144	1	30				
p-Isopropyltoluene	94	89	29-152	2	30				
Methyl Iodide	108	101	52-139	0	30				
Methyl Tertiary Butyl Ether	105	91	55-129	7	30				
4-Methyl-2-pentanone	113	95	46-139	10	30				
Methylene Chloride	101	92	49-160	1	30				
n-Propylbenzene	100	97	39-157	4	30				
Styrene	100	90	35-134	3	30				
1,1,1,2-Tetrachloroethane	101	91	39-150	3	30				
1,1,2,2-Tetrachloroethane	103	90	40-152	6	30				
Tetrachloroethene	105	97	42-149	1	30				
Toluene	102	94	50-146	1	30				
1,2,3-Trichlorobenzene	91	81	10-140	4	30				
1,2,4-Trichlorobenzene	90	82	10-136	2	30				
1,1,1-Trichloroethane	101	95	43-150	2	30				
1,1,2-Trichloroethane	108	94	47-161	7	30				
Trichloroethene	105	96	53-144	1	30				
Trichlorofluoromethane	103	101	47-163	5	30				

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Quality Control Summary

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,2,3-Trichloropropane	110	91	45-154	11	30				
1,2,4-Trimethylbenzene	99	92	37-149	0	30				
1,3,5-Trimethylbenzene	100	92	38-150	0	30				
Vinyl Chloride	98	97	50-154	6	30				
m+p-Xylene	100	91	44-137	1	30				
o-Xylene	99	90	42-137	1	30				
Batch number: 13193SLA026	Sample number(s): 7123469-7123476,7123478-7123480 UNSPK: P122288								
Acenaphthene	89	93	48-127	4	30				
Acenaphthylene	80	84	49-121	5	30				
Anthracene	81	85	52-126	5	30				
Benzo(a)anthracene	81	87	32-135	7	30				
Benzo(a)pyrene	77	80	36-138	4	30				
Benzo(b)fluoranthene	85	101	26-142	16	30				
Benzo(e)pyrene	79	84	70-130	5	30				
Benzo(g,h,i)perylene	54	52	33-141	3	30				
Benzo(k)fluoranthene	78	82	47-129	4	30				
Butylbenzylphthalate	112	119	59-153	6	30				
Di-n-butylphthalate	112	121	62-154	7	30				
Chrysene	80	84	29-148	3	30				
Dibenz(a,h)anthracene	65	64	34-125	2	30				
Diethylphthalate	111	117	76-127	5	30				
Dimethylphthalate	90	95	62-136	4	30				
Bis(2-Ethylhexyl)phthalate	97	107	39-167	8	30				
Fluoranthene	83	92	47-135	9	30				
Fluorene	82	86	50-129	4	30				
Indeno(1,2,3-cd)pyrene	61	60	17-136	2	30				
1-Methylnaphthalene	92	96	50-131	4	30				
2-Methylnaphthalene	87	92	28-144	4	30				
Naphthalene	84	89	31-148	6	30				
N-Nitrosodimethylamine	69	73	48-113	5	30				
Di-n-octylphthalate	113	124	52-162	9	30				
Phenanthrene	82	88	29-142	6	30				
Pyrene	80	87	26-143	7	30				
Batch number: 131970017A	Sample number(s): 7123467-7123468 UNSPK: 7123467								
6b Perchlorate (Method 6850)	96	99	80-120	3	20				
Batch number: 131940014A	Sample number(s): 7123469-7123476,7123478-7123480 UNSPK: P122288								
PCB-1016	84	81	16-146	3	50				
PCB-1260	90	85	40-134	6	50				
Batch number: 131940007A	Sample number(s): 7123469-7123476,7123478-7123480 UNSPK: P120502								
EFH (C12-C14)	101	102	49-123	1	20				
EFH (C15-C20)	173*	132*	49-123	27*	20				
EFH (C21-C30)	162*	82	49-123	24*	20				
EFH (C30-C40)	388 (2)	182 (2)	49-123	26*	20				
EFH (C8-C11)	89	86	49-123	5	20				
Batch number: 131920637001	Sample number(s): 7123469-7123476,7123478-7123480 UNSPK: 7123470 BKG: 7123470								
Aluminum	1834 (2)	1927 (2)	75-125	1	20	23,400	22,100	6	20

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Antimony	60*	58*	75-125	3	20	3.88	U	0.948	J	200* (1)	20
Arsenic	100	100	75-125	0	20	5.08		5.21		3 (1)	20
Barium	124	105	75-125	12	20	76.9		72.9		5	20
Beryllium	104	102	75-125	1	20	0.712	J	0.696	J	2 (1)	20
Boron	100	99	75-125	1	20	6.52	J	6.18	J	5 (1)	20
Cadmium	92	92	75-125	0	20	0.316	J	0.340	J	7 (1)	20
Calcium	-365 (2)	-585 (2)	75-125	8	20	13,000		13,300		2	20
Chromium	111	108	75-125	1	20	25.7		25.0		3	20
Cobalt	94	95	75-125	0	20	6.84		6.59		4	20
Copper	107	108	75-125	1	20	11.7		11.4		3	20
Iron	1182 (2)	1485 (2)	75-125	1	20	24,800		25,700		3	20
Lead	86	88	75-125	1	20	7.10		6.84		4 (1)	20
Lithium	103	103	75-125	0	20	20.6		20.0		3	20
Magnesium	229 (2)	277 (2)	75-125	2	20	5,440		5,210		4	20
Manganese	95 (2)	99 (2)	75-125	1	20	322		310		4	20
Molybdenum	93	93	75-125	0	20	0.305	J	0.300	J	2 (1)	20
Nickel	94	95	75-125	1	20	14.6		14.1		4	20
Phosphorus	64*	96	75-125	8	20	290		257		12	20
Potassium	135*	148*	75-125	3	20	3,220		3,040		6	20
Sodium	101	102	75-125	1	20	512		491		4	20
Tin	89	89	75-125	0	20	2.90	J	2.75	J	5 (1)	20
Titanium	274 (2)	360 (2)	75-125	5	20	1,340		1,250		7	20
Vanadium	112	112	75-125	0	20	46.3		45.0		3	20
Zinc	100	101	75-125	1	20	55.8		54.7		2	20
Zirconium	98	98	75-125	0	20	5.62		6.16		9 (1)	20
Batch number: 131920637001A	Sample number(s): 7123469-7123476,7123478-7123480 UNSPK: 7123470 BKG: 7123470										
Silver	99	101	75-125	3	20	0.0408	J	0.194	U	200* (1)	20
Strontium	65 (2)	197 (2)	75-125	22*	20	37.3		34.9		7	20
Thallium	96	104	75-125	5	20	0.254		0.258		2 (1)	20
Batch number: 131920637001B	Sample number(s): 7123469-7123476,7123478-7123480 UNSPK: 7123470 BKG: 7123470										
Selenium	94	102	75-125	8	20	0.388	U	0.388	U	0 (1)	20
Batch number: 131920638001	Sample number(s): 7123469-7123476,7123478-7123480 UNSPK: 7123469 BKG: 7123469										
3a Mercury 7471A	118	112	65-135	5	20	0.0158	U	0.0101	J	200* (1)	20
Batch number: 13192004101A	Sample number(s): 7123467-7123468 BKG: P121860										
28b pH (9040B and 9040C)						7.4		7.5		0	3
Batch number: 13192039401A	Sample number(s): 7123469-7123476,7123478 BKG: 7123469										
15a pH by 9045D						9.70		9.67		0	3
Batch number: 13192039401B	Sample number(s): 7123479-7123480 BKG: 7123479										
15a pH by 9045D						8.20		8.25		1	3
Batch number: 13197162401B	Sample number(s): 7123469-7123476,7123478-7123480 BKG: 7123472										
14a Moisture Content by 160.3						9.3		10.3		10	20
Batch number: 13196002	Sample number(s): 7123469-7123471,7123474-7123475,7123478-7123480 UNSPK: P125334										

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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDD	91	90	40-135	2	20				
12378-PeCDD	95	93	40-135	3	20				
123478-HxCDD	99	99	40-135	2	20				
123678-HxCDD	97	98	40-135	1	20				
123789-HxCDD	97	96	40-135	3	20				
1234678-HpCDD	106	77	40-135	23*	20				
OCDD	166*	11*	40-135	43*	20				
2378-TCDF	95	91	40-135	5	20				
12378-PeCDF	95	95	40-135	2	20				
23478-PeCDF	97	97	40-135	2	20				
123478-HxCDF	98	99	40-135	0	20				
123678-HxCDF	95	95	40-135	2	20				
123789-HxCDF	97	97	40-135	2	20				
234678-HxCDF	98	97	40-135	2	20				
1234678-HpCDF	98	95	40-135	4	20				
1234789-HpCDF	96	95	40-135	2	20				
OCDF	98	92	40-135	7	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 12a Volatile Organics EPA8260B
Batch number: B131972AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7123473	104	110	98	98
7123476	100	102	98	95
Blank	99	103	98	97
LCS	101	109	99	101
LCSD	97	98	97	95
MS	102	104	100	102
MSD	102	100	100	99
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 12b Volatile Organics EPA8260B
Batch number: Y131973AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7123467	106	102	95	94
7123468	108	102	95	93
7123477	107	102	95	93
Blank	103	101	97	95
LCS	103	104	99	102
LCSD	102	103	98	102
Limits:	86-118	80-120	88-110	86-115

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Surrogate Quality Control

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13193SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7123469	84	90	100
7123470	84	95	104
7123471	74	83	88
7123472	82	89	95
7123473	76	83	90
7123474	80	91	94
7123475	90	93	98
7123476	81	87	95
7123478	88	94	101
7123479	88	96	99
7123480	76	83	91
Blank	87	93	102
LCS	87	93	101
MS	72	71	87
MSD	77	76	94
Limits:	54-129	61-134	55-129

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13197WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7123467	93	99	99
7123468	91	96	95
Blank	93	102	98
LCS	91	101	102
LCSD	92	102	101
Limits:	64-120	62-141	58-134

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13192A20A

	Trifluorotoluene-F
7123467	87
7123468	86
7123477	87
Blank	87
LCS	121
LCSD	118
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13193A16A

	Trifluorotoluene-F
7123470	75
7123471	74

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Surrogate Quality Control

7123472	77
7123473	79
7123475	81
7123476	76
7123479	92
7123480	78
Blank	81
LCS	76
LCSD	75
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 131940014A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7123469	105	83
7123470	91	64
7123471	102	74
7123472	106	91
7123473	111	95
7123474	96	60
7123475	104	61
7123476	106	70
7123478	102	68
7123479	98	76
7123480	102	88
Blank	102	95
LCS	102	101
LCSD	106	104
MS	93	90
MSD	93	86
Limits:	45-120	45-120

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 131940016A

	2,4-Dichlorophenylacetic acid
7123467	76
Blank	80
LCS	110
LCSD	117
Limits:	50-150

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 131980014A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7123467	73	50
7123468	74	55
Blank	81	65
LCS	84	71
LCSD	74	58

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Surrogate Quality Control

Limits:	60-140	20-120

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 131980015A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7123467	98	56
7123468	99	60
Blank	103	70
LCS	99	37*
LCSD	106	54
Limits:	45-120	45-120

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 131990011A

	2,4-Dichlorophenylacetic acid
7123468	52
Blank	42*
LCS	138
LCSD	143
Limits:	50-150

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131940007A

	Chlorobenzene	Orthoterphenyl
7123469	95	86
7123470	96	101
7123471	94	99
7123472	96	103
7123473	89	93
7123474	87	96
7123475	99	103
7123476	85	91
7123478	84	83
7123479	94	100
7123480	91	97
Blank	96	103
LCS	93	100
MS	90	102
MSD	94	101
Limits:	37-125	66-123

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 131960020A

	Chlorobenzene	Orthoterphenyl
7123467	95	92
7123468	90	90
Blank	93	90

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Surrogate Quality Control

LCS	100	99
LCSD	97	96
Limits:	45-126	69-119

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13196002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7123469	77	80	82	85	83	78
7123470	67	72	75	75	75	76
7123471	67	71	74	75	75	79
7123474	74	79	78	80	80	71
7123475	73	75	78	79	79	82
7123478	84	89	90	92	93	96
7123479	68	69	73	76	73	65
7123480	68	75	74	78	77	76
Blank	68	71	75	84	80	72
MS	77	84	83	84	82	82
MSD	81	85	86	87	85	75
OPR	54	57	64	69	65	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7123469	101	77	75	81	80	85
7123470	83	80	85	72	73	74
7123471	87	82	87	73	74	74
7123474	79	61	51	79	77	78
7123475	86	85	87	76	75	80
7123478	107	99	102	90	92	92
7123479	80	51	47	72	75	75
7123480	88	69	72	78	75	79
Blank	98	59	57	74	80	82
MS	85	67	63	83	79	80
MSD	79	57	50	85	81	83
OPR	84	53	51	59	66	67
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7123469	82	89	95	72	80
7123470	72	79	83	64	71
7123471	73	83	88	61	69
7123474	78	76	74	69	77
7123475	78	86	87	69	73
7123478	91	101	106	79	88
7123479	74	72	71	61	71
7123480	76	81	90	61	73
Blank	80	81	88	59	74
MS	79	77	77	74	84
MSD	82	75	71	76	83
OPR	65	69	75	50	59

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403202
Reported: 07/25/13 at 02:52 PM

Surrogate Quality Control

Limits: 28-130 23-140 17-157 24-169 24-185

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13200001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7123467	68	72	76	77	78	79
7123468	67	75	78	78	79	79
Blank	70	75	79	80	81	83
OPR	75	81	82	83	83	85
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7123467	79	78	80	73	75	77
7123468	81	79	83	74	75	78
Blank	84	86	92	76	78	82
OPR	85	85	90	81	81	85
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7123467	75	77	76	62	70
7123468	76	77	79	63	71
Blank	80	83	89	66	71
OPR	82	85	88	70	77
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1403202 7123467-80

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/10/2013
CarrierName: FedEx
AirbillNo: 796201570730

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130710-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-071013	7/10/13 15:00	WQ	None	4 - 1 L Amber	10 day										X						X															
EB1-071013	7/10/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB1-071013	7/10/13 15:00	WQ	HCl	6 - 40 mL Vial	10 day																		X	X												
EB1-071013	7/10/13 15:00	WQ	None	1 - 40 mL Vial	10 day												X																			
EB2-071013	7/10/13 15:30	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB2-071013	7/10/13 15:30	WQ	None	1 - 40 mL Vial	10 day												X																			
EB2-071013	7/10/13 15:30	WQ	HCl	6 - 40 mL Vial	10 day																		X	X												

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stan Stupel	07/10/2013	1600							Brandy Barclay	7.11.13	920

13013 1403202 7123467-80

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/10/2013
CarrierName: FedEx
AirbillNo: 796201570730

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130710-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB2-071013	7/10/13 15:30	WQ	None	4 - 1 L Amber	10 day									X						X																
EB2-071013	7/10/13 15:30	WQ	None	3 - 250 mL Amber	10 day							X			X						X															
EB2-071013	7/10/13 15:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X	X																													
EB2-071013	7/10/13 15:30	WQ	None	1 - 250 mL Poly	10 day														X																	
EB1-071013	7/10/13 15:00	WQ	None	3 - 250 mL Amber	10 day							X			X						X															
EB1-071013	7/10/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X	X																													
EB2-071013	7/10/13 15:30	WQ	None	1 - 250 mL Poly	10 day														X																	

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Hyper	07/10/2013	1600									
									Brandy Barclay	7.11.13	920

COC Rev 2

COC: 20130710-02, Page 1 of 1

13013 1403202 7123467-80

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/10/2013
CarrierName: FedEx
AirbillNo: 796201570730

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130710-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-572-SA8-SB-0.0-0.5	7/10/13 10:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-572-SA8-SB-0.0-0.5	7/10/13 10:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-572-SA8-SB-4.0-5.0	7/10/13 11:10	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X							X											
SL-572-SA8-SB-9.0-10.0	7/10/13 11:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X							X											
SL-572-SA8-SB-14.0-15.0	7/10/13 11:45	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											
SL-572-SA8-SB-18.5-19.5	7/10/13 12:00	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											
SL-573-SA8-SB-0.0-0.5	7/10/13 09:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-573-SA8-SB-0.0-0.5	7/10/13 09:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-573-SA8-SB-4.0-5.0	7/10/13 09:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X							X											
SL-573-SA8-SB-9.5-10.5	7/10/13 09:45	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X							X											

Special Instructions:

Sampler: K. Cordes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Lloyd	07/10/2013	1600							Brenely Bandy	7.11.13	920

13013 1403202 7123467-80

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/10/2013
CarrierName: FedEx
AirbillNo: 796201570730

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130710-04
Cooler #: 4
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-071012	7/10/12 08:00	WQ	HCl	6 - 40 mL Vial	10 day																	X		X												
SL-572-SA8-SB-4.0-5.0	7/10/13 11:10	SO	None	2 - Encore	10 day																			X												
SL-572-SA8-SB-9.0-10.0	7/10/13 11:30	SO	None	2 - Encore	10 day																			X												
SL-572-SA8-SB-14.0-15.0	7/10/13 11:45	SO	None	2 - Encore	10 day																			X												
SL-572-SA8-SB-18.5-19.5	7/10/13 12:00	SO	None	5 - Encore	10 day																	X		X												
SL-573-SA8-SB-4.0-5.0	7/10/13 09:30	SO	None	2 - Encore	10 day																			X												
SL-573-SA8-SB-9.5-10.5	7/10/13 09:45	SO	None	2 - Encore	10 day																	X		X												
SL-571-SA8-SB-0.0-0.5	7/10/13 14:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-571-SA8-SB-0.0-0.5	7/10/13 14:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-571-SA8-SB-6.5-7.5	7/10/13 14:50	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-571-SA8-SB-12.5-13.5	7/10/13 15:05	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-571-SA8-SB-6.5-7.5	7/10/13 14:50	SO	None	2 - Encore	10 day																				X											
SL-571-SA8-SB-12.5-13.5	7/10/13 15:05	SO	None	2 - Encore	10 day																				X											

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Mapel	07/10/2013	1600							Brandy Barclay	7.11.13	920

G# 1403202

Natalie R. Luciano

From: Mysel, Stefanie [MyselSJ@cdmsmith.com]
Sent: Friday, July 12, 2013 10:36 AM
To: Natalie R. Luciano
Cc: Hartman, Pamela; Burgesser, Todd; Zakowski, Cherie
Subject: RE: SSFL 07/10/2013 COC

Attachments: COC2&4_07102013.pdf



COC2&4_07102013 .pdf (160 KB)

Natalie,

Thanks for finding these. That day was really crazy for some reason. The pH on COC 2 should be for EB1 and EB2. On COC 4 the trip blank should be TB-071013 and SL-573-SA8-9.5-10.5 should have 5 encores. I have attached the revised COCs.

Regards,

Stefanie

Stefanie J. Mysel
Geologist

CDM Smith
111 Academy Way
Suite 150
Irvine, CA 92617
Main: 949-752-5452
Cell: 610-248-2430
Email: myselsj@cdmsmith.com<mailto:myselsj@cdmsmith.com>

From: Natalie R. Luciano [NLuciano@lancasterlabs.com]
Sent: Friday, July 12, 2013 6:30 AM
To: Mysel, Stefanie
Cc: Hartman, Pamela; Burgesser, Todd; Zakowski, Cherie
Subject: RE: SSFL 07/10/2013 COC

Hi Stefanie,

I was going over the submittal had some questions.

6# 1403202

- The analysis of pH is only marked for EB2 on COC #2. Should one of the IDs have been EB1 instead?

- I noticed that on COC #4 the Trip Blank has a collection date of July 10, 2012 and an ID of TB-071012, but the container has TB-071013. Should this be listed as TB-071013 collected 7/10/13 on the COC instead?

- For SL-573-SA8-9.5-10.5, we received 5 Encores instead of the 2 listed on COC #4.

I attached the COCs associated with my questions for your reference.

Thank you,

Natalie

Senior Specialist, Environmental Client Services

Phone: 717-556-7258

-----Original Message-----
From: Mysel, Stefanie [mailto:MyselSJ@cdmsmith.com]
Sent: Wednesday, July 10, 2013 7:15 PM
To: !US19_SSFLShip; Burgesser, Todd
Cc: Hartman, Pamela; Mysel, Stefanie
Subject: SSFL 07/10/2013 COC

4 coolers were shipped to your lab for delivery tomorrow. These samples are from today's sampling. Samples were collected from subarea 8. The airbill number for today's shipment is 796201570730. Let me know if you have any questions or issues. Attached is an excel table with sample names, dates and times from today's sampling. We shipped 2 equipment blanks today for delivery tomorrow.

Regards,

Stefanie

Stefanie J. Mysel

Geologist

G# 1403202

CDM Smith

111 Academy Way

Suite 150

Irvine, CA 92617

Main: 949-752-5452

Cell: 610-248-2430

Email: myselsj@cdmsmith.com<mailto:myselsj@cdmsmith.com>

13013/1403202/7123467-80

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/10/2013
CarrierName: FedEx
AirbillNo: 796201570730

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130710-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9040 (Water)	pH 9045 (Soil)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB2-071013	7/10/13 15:30	WQ	None	4 - 1 L Amber	10 day									X							X															
EB2-071013	7/10/13 15:30	WQ	None	3 - 250 mL Amber	10 day							X			X							X														
EB2-071013	7/10/13 15:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB2-071013	7/10/13 15:30	WQ	None	1 - 250 mL Poly	10 day														X																	
EB1-071013	7/10/13 15:00	WQ	None	3 - 250 mL Amber	10 day							X			X							X														
EB1-071013	7/10/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB1-071013	7/10/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																	

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shelby Myers	07/10/2013	1600									

Amended COC received 7/12/13 from S. Mysel.
MK2 7/12/13

COC Rev 2

COC: 20130710-02 Page 1 of 1

13013/1403202/7123467 -80

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/10/2013
CarrierName: FedEx
AirbillNo: 796201570730

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130710-04
Cooler #: 4
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-071013	7/10/13 08:00	WQ	HCl	6 - 40 mL Vial	10 day																		X		X												
SL-572-SA8-SB-4.0-5.0	7/10/13 11:10	SO	None	2 - Encore	10 day																				X												
SL-572-SA8-SB-9.0-10.0	7/10/13 11:30	SO	None	2 - Encore	10 day																				X												
SL-572-SA8-SB-14.0-15.0	7/10/13 11:45	SO	None	2 - Encore	10 day																				X												
SL-572-SA8-SB-18.5-19.5	7/10/13 12:00	SO	None	5 - Encore	10 day																		X		X												
SL-573-SA8-SB-4.0-5.0	7/10/13 09:30	SO	None	2 - Encore	10 day																				X												
SL-573-SA8-SB-9.5-10.5	7/10/13 09:45	SO	None	5 - Encore	10 day																		X		X												
SL-571-SA8-SB-0.0-0.5	7/10/13 14:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-571-SA8-SB-0.0-0.5	7/10/13 14:15	SO	None	1 - 4 oz glass	10 day														X																		
SL-571-SA8-SB-6.5-7.5	7/10/13 14:50	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X											
SL-571-SA8-SB-12.5-13.5	7/10/13 15:05	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X											
SL-571-SA8-SB-6.5-7.5	7/10/13 14:50	SO	None	2 - Encore	10 day																				X												
SL-571-SA8-SB-12.5-13.5	7/10/13 15:05	SO	None	2 - Encore	10 day																				X												

Special Instructions:

Sampler: V. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Mysel	07/10/2013	1600									

Amended COC received 7/12/13 from S. Mysel. MKS 7/12/13

1 of 1

eurofins | Lancaster Laboratories

1403202

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 2.11.13

Time of Receipt: 920

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	D7131	1.5	TB	WI	Y	B	
2	↓	1.9	↓	↓	↓	↓	
3	↓	0.0	↓	↓	↓	↓	
4	↓	3.1	↓	↓	↓	↓	
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

TB ID = TB071013

Rec 5 Encores for SL-573-SA8-SB-9.5-10.5

Unpacker Signature/Emp#: Brianely Barclay 2299 **Date/Time:** 2.11.13 1052

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH065

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

July 24, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/12/2013
Group Number: 1403589
SDG: PH065
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-574-SA8-SB-0.0-0.5 Soil	7125058
SL-574-SA8-SB-4.0-5.0 Soil	7125059
SL-574-SA8-SB-9.0-10.0 Soil	7125060
SL-574-SA8-SB-14.0-15.0 Soil	7125061
SL-574-SA8-SB-14.0-15.0MS Soil	7125062
SL-574-SA8-SB-14.0-15.0MSD Soil	7125063
SL-574-SA8-SB-14.0-15.0DUP Soil	7125064
SL-874-SA8-SB-14.0-15.0 Soil	7125065
TB-071113 Water	7125066
SL-570-SA8-SB-0.0-0.5 Soil	7125067
SL-570-SA8-SB-4.0-5.0 Soil	7125068

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-574-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125058
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 08:45 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57400 SDG#: PH065-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.8	10
12969	Acenaphthylene	208-96-8	19	U	19	3.9	10
12969	Anthracene	120-12-7	19	U	19	3.9	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.8	10
12969	Benzo(a)pyrene	50-32-8	19	U	19	7.8	10
12969	Benzo(b)fluoranthene	205-99-2	19	U	19	7.8	10
12969	Benzo(e)pyrene	192-97-2	200	U	200	39	10
12969	Benzo(g,h,i)perylene	191-24-2	19	U	19	7.8	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.8	10
12969	Butylbenzylphthalate	85-68-7	210	U	210	70	10
12969	Di-n-butylphthalate	84-74-2	210	U	210	70	10
12969	Chrysene	218-01-9	19	U	19	3.9	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.8	10
12969	Diethylphthalate	84-66-2	210	U	210	70	10
12969	Dimethylphthalate	131-11-3	210	U	210	70	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	210	U	210	70	10
12969	Fluoranthene	206-44-0	19	U	19	7.8	10
12969	Fluorene	86-73-7	19	U	19	7.8	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.8	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.8	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.8	10
12969	Naphthalene	91-20-3	19	U	19	7.8	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.8	10
12969	Di-n-octylphthalate	117-84-0	210	U	210	70	10
12969	Phenanthrene	85-01-8	19	U	19	7.8	10
12969	Pyrene	129-00-0	19	U	19	7.8	10
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	58	U	58	23	10
12952	EFH (C15-C20)	n.a.	58	U	58	23	10
12952	EFH (C21-C30)	n.a.	110		58	23	10
12952	EFH (C30-C40)	n.a.	250		120	47	10
12952	EFH (C8-C11)	n.a.	58	U	58	23	10

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125058
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 08:45 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57400 SDG#: PH065-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,400		45.1	8.14	1
06944	Antimony	7440-36-0	4.51	U	4.51	0.835	1
06935	Arsenic	7440-38-2	4.61		4.51	0.790	1
06946	Barium	7440-39-3	110		1.13	0.0372	1
06947	Beryllium	7440-41-7	0.368	J	1.13	0.0756	1
07914	Boron	7440-42-8	9.30	J	11.3	0.948	1
06949	Cadmium	7440-43-9	0.764	J	1.13	0.0858	1
01650	Calcium	7440-70-2	27,900		22.6	3.77	1
06951	Chromium	7440-47-3	19.5		3.39	0.181	1
06952	Cobalt	7440-48-4	4.57		1.13	0.112	1
06953	Copper	7440-50-8	15.2		2.26	0.327	1
01654	Iron	7439-89-6	26,500		45.6	4.13	1
06955	Lead	7439-92-1	6.17		3.39	0.564	1
01656	Lithium	7439-93-2	12.2		4.5	0.38	1
01657	Magnesium	7439-95-4	4,430		11.3	1.88	1
06958	Manganese	7439-96-5	251		1.13	0.0937	1
06960	Molybdenum	7439-98-7	14.6		2.26	0.192	1
06961	Nickel	7440-02-0	12.0		2.26	0.147	1
10145	Phosphorus	7723-14-0	512		11.3	3.26	1
01662	Potassium	7440-09-7	2,210		113	9.41	1
01667	Sodium	7440-23-5	304		113	18.8	1
06969	Tin	7440-31-5	2.25	J	11.3	0.248	1
06970	Titanium	7440-32-6	850		1.13	0.192	1
06971	Vanadium	7440-62-2	42.7		1.13	0.147	1
06972	Zinc	7440-66-6	77.7		4.51	0.226	1
10146	Zirconium	7440-67-7	4.46	J	5.64	0.948	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.657		0.451	0.113	2
06142	Silver	7440-22-4	0.0390	J	0.226	0.0293	2
06144	Strontium	7440-24-6	68.5		0.451	0.0767	2
06145	Thallium	7440-28-0	0.155	J	0.226	0.0339	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0264		0.0192	0.0115	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.32		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125058
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 08:45 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57400 SDG#: PH065-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.105	JBQ	1.15	0.0269	1
11031	12378-PeCDD	40321-76-4	0.174	JB	5.76	0.0407	1
11031	123478-HxCDD	39227-28-6	0.136	JBQ	5.76	0.0396	1
11031	123678-HxCDD	57653-85-7	0.893	JB	5.76	0.0431	1
11031	123789-HxCDD	19408-74-3	0.533	JBQ	5.76	0.0410	1
11031	1234678-HpCDD	35822-46-9	11.7	B	5.76	0.0424	1
11031	OCDD	3268-87-9	97.0	B	11.5	0.0447	1
11031	2378-TCDF	51207-31-9	0.192	J	1.15	0.0501	1
11031	12378-PeCDF	57117-41-6	0.298	JB	5.76	0.0339	1
11031	23478-PeCDF	57117-31-4	0.476	JB	5.76	0.0296	1
11031	123478-HxCDF	70648-26-9	0.171	JB	5.76	0.0300	1
11031	123678-HxCDF	57117-44-9	0.178	JBQ	5.76	0.0299	1
11031	123789-HxCDF	72918-21-9	0.265	JB	5.76	0.0362	1
11031	234678-HxCDF	60851-34-5	0.262	JBQ	5.76	0.0288	1
11031	1234678-HpCDF	67562-39-4	1.47	JB	5.76	0.0189	1
11031	1234789-HpCDF	55673-89-7	0.122	JB	5.76	0.0293	1
11031	OCDF	39001-02-0	2.47	JB	11.5	0.0370	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.640				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	58	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125058
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 08:45 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57400 SDG#: PH065-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125058
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 08:45 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57400 SDG#: PH065-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13197SLC026	07/20/2013 11:50	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13197SLC026	07/17/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131970030A	07/18/2013 10:46	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131970030A	07/17/2013 08:35	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980026A	07/19/2013 06:18	Heather E Williams	10
12959	EFH soil ext.(microwave)	SW-846 3546	2	131980026A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/17/2013 10:42	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131970637001	07/20/2013 10:21	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 20:45	John P Hook	1
06955	Lead	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131970637001	07/18/2013 05:43	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131970637001B	07/18/2013 21:17	David K Beck	2
06142	Silver	SW-846 6020A	1	131970637001A	07/18/2013 21:17	David K Beck	2
06144	Strontium	SW-846 6020A	1	131970637001A	07/18/2013 21:17	David K Beck	2
06145	Thallium	SW-846 6020A	1	131970637001A	07/18/2013 21:17	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125058
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 08:45 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57400 SDG#: PH065-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131970638001	07/18/2013 08:52	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131970637001	07/17/2013 09:12	Denise K Conners	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131970638001	07/17/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13193039401A	07/12/2013 20:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401A	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125059
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 09:30 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57440 SDG#: PH065-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	6.9	10
12969	Acenaphthylene	208-96-8	17	U	17	3.4	10
12969	Anthracene	120-12-7	17	U	17	3.4	10
12969	Benzo(a)anthracene	56-55-3	17	U	17	6.9	10
12969	Benzo(a)pyrene	50-32-8	17	U	17	6.9	10
12969	Benzo(b)fluoranthene	205-99-2	17	U	17	6.9	10
12969	Benzo(e)pyrene	192-97-2	170	U	170	34	10
12969	Benzo(g,h,i)perylene	191-24-2	17	U	17	6.9	10
12969	Benzo(k)fluoranthene	207-08-9	17	U	17	6.9	10
12969	Butylbenzylphthalate	85-68-7	190	U	190	62	10
12969	Di-n-butylphthalate	84-74-2	190	U	190	62	10
12969	Chrysene	218-01-9	4.7	J	17	3.4	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.9	10
12969	Diethylphthalate	84-66-2	190	U	190	62	10
12969	Dimethylphthalate	131-11-3	190	U	190	62	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	62	10
12969	Fluoranthene	206-44-0	17	U	17	6.9	10
12969	Fluorene	86-73-7	17	U	17	6.9	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	6.9	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	6.9	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	6.9	10
12969	Naphthalene	91-20-3	17	U	17	6.9	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.9	10
12969	Di-n-octylphthalate	117-84-0	190	U	190	62	10
12969	Phenanthrene	85-01-8	17	U	17	6.9	10
12969	Pyrene	129-00-0	17	U	17	6.9	10
	Reporting limits were raised due to interference from the sample matrix.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.8	U	0.8	0.2	20
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125059
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 09:30 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57440 SDG#: PH065-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.8		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	14		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,700		41.1	7.41	1
06944	Antimony	7440-36-0	4.11	U	4.11	0.761	1
06935	Arsenic	7440-38-2	4.95		4.11	0.720	1
06946	Barium	7440-39-3	159		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.854	J	1.03	0.0689	1
07914	Boron	7440-42-8	11.1		10.3	0.864	1
06949	Cadmium	7440-43-9	0.439	J	1.03	0.0781	1
01650	Calcium	7440-70-2	7,560		20.6	3.43	1
06951	Chromium	7440-47-3	33.7		3.08	0.165	1
06952	Cobalt	7440-48-4	9.51		1.03	0.102	1
06953	Copper	7440-50-8	15.7		2.06	0.298	1
01654	Iron	7439-89-6	27,200		40.3	3.65	1
06955	Lead	7439-92-1	7.91		3.08	0.514	1
01656	Lithium	7439-93-2	27.7		4.1	0.35	1
01657	Magnesium	7439-95-4	7,720		10.3	1.72	1
06958	Manganese	7439-96-5	341		1.03	0.0853	1
06960	Molybdenum	7439-98-7	2.06	U	2.06	0.175	1
06961	Nickel	7440-02-0	19.7		2.06	0.134	1
10145	Phosphorus	7723-14-0	303		10.3	2.97	1
01662	Potassium	7440-09-7	4,040		103	8.57	1
01667	Sodium	7440-23-5	573		103	17.2	1
06969	Tin	7440-31-5	2.58	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,230		1.03	0.175	1
06971	Vanadium	7440-62-2	66.2		1.03	0.134	1
06972	Zinc	7440-66-6	62.4		4.11	0.206	1
10146	Zirconium	7440-67-7	4.00	J	5.14	0.864	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.411	U	0.411	0.103	2
06142	Silver	7440-22-4	0.0400	J	0.206	0.0267	2
06144	Strontium	7440-24-6	45.8		0.411	0.0699	2
06145	Thallium	7440-28-0	0.296		0.206	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.23		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125059
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 09:30 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57440 SDG#: PH065-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	3.7	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125059
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57440 SDG#: PH065-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0333 JBQ	1.04	0.0194	1
11031	12378-PeCDD	40321-76-4	0.102 JBQ	5.19	0.0213	1
11031	123478-HxCDD	39227-28-6	0.0465 JBQ	5.19	0.0226	1
11031	123678-HxCDD	57653-85-7	0.157 JB	5.19	0.0248	1
11031	123789-HxCDD	19408-74-3	0.186 JB	5.19	0.0229	1
11031	1234678-HpCDD	35822-46-9	1.17 JB	5.19	0.0272	1
11031	OCDD	3268-87-9	5.70 JB	10.4	0.0325	1
11031	2378-TCDF	51207-31-9	1.04 U	1.04	0.0187	1
11031	12378-PeCDF	57117-41-6	0.196 JBQ	5.19	0.0170	1
11031	23478-PeCDF	57117-31-4	0.109 JBQ	5.19	0.0151	1
11031	123478-HxCDF	70648-26-9	0.0884 JB	5.19	0.0130	1
11031	123678-HxCDF	57117-44-9	0.108 JBQ	5.19	0.0132	1
11031	123789-HxCDF	72918-21-9	0.195 JB	5.19	0.0143	1
11031	234678-HxCDF	60851-34-5	0.0606 JB	5.19	0.0124	1
11031	1234678-HpCDF	67562-39-4	0.143 JBQ	5.19	0.0105	1
11031	1234789-HpCDF	55673-89-7	0.0518 JBQ	5.19	0.0134	1
11031	OCDF	39001-02-0	0.217 JB	10.4	0.0280	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0821			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	86	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	85	26 - 138
13C12-OCDF	88	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125059
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 09:30 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57440 SDG#: PH065-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125059
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 09:30 by VC

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Suite 400
Fairfax VA 22030

57440 SDG#: PH065-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13197SLC026	07/20/2013	12:22	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13197SLC026	07/17/2013	08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013	15:05	Laura M Krieger	20
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319331685	07/12/2013	14:44	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319331685	07/12/2013	14:45	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131970030A	07/18/2013	11:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131970030A	07/17/2013	08:35	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980026A	07/19/2013	04:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	131980026A	07/18/2013	07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/17/2013	11:38	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013	11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131970637001	07/20/2013	10:25	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013	20:49	John P Hook	1
06955	Lead	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131970637001	07/18/2013	05:47	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125059
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 09:30 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57440 SDG#: PH065-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131970637001B	07/18/2013 21:19	David K Beck	2
06142	Silver	SW-846 6020A	1	131970637001A	07/18/2013 21:19	David K Beck	2
06144	Strontium	SW-846 6020A	1	131970637001A	07/18/2013 21:19	David K Beck	2
06145	Thallium	SW-846 6020A	1	131970637001A	07/18/2013 21:19	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131970638001	07/18/2013 08:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131970637001	07/17/2013 09:12	Denise K Conners	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131970638001	07/17/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13193039401A	07/12/2013 20:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401A	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125060
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 09:45 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57490 SDG#: PH065-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.5	10
12969	Acenaphthylene	208-96-8	19	U	19	3.7	10
12969	Anthracene	120-12-7	19	U	19	3.7	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.5	10
12969	Benzo(a)pyrene	50-32-8	19	U	19	7.5	10
12969	Benzo(b)fluoranthene	205-99-2	19	U	19	7.5	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	37	10
12969	Benzo(g,h,i)perylene	191-24-2	19	U	19	7.5	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.5	10
12969	Butylbenzylphthalate	85-68-7	200	U	200	67	10
12969	Di-n-butylphthalate	84-74-2	200	U	200	67	10
12969	Chrysene	218-01-9	6.4	J	19	3.7	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.5	10
12969	Diethylphthalate	84-66-2	200	U	200	67	10
12969	Dimethylphthalate	131-11-3	200	U	200	67	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	200	U	200	67	10
12969	Fluoranthene	206-44-0	19	U	19	7.5	10
12969	Fluorene	86-73-7	19	U	19	7.5	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.5	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.5	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.5	10
12969	Naphthalene	91-20-3	19	U	19	7.5	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.5	10
12969	Di-n-octylphthalate	117-84-0	200	U	200	67	10
12969	Phenanthrene	85-01-8	19	U	19	7.5	10
12969	Pyrene	129-00-0	19	U	19	7.5	10
	Reporting limits were raised due to interference from the sample matrix.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20.1
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125060
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 09:45 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57490 SDG#: PH065-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	23		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,200		44.5	8.02	1
06944	Antimony	7440-36-0	4.45	U	4.45	0.823	1
06935	Arsenic	7440-38-2	4.95		4.45	0.779	1
06946	Barium	7440-39-3	66.9		1.11	0.0367	1
06947	Beryllium	7440-41-7	0.652	J	1.11	0.0745	1
07914	Boron	7440-42-8	5.92	J	11.1	0.934	1
06949	Cadmium	7440-43-9	0.345	J	1.11	0.0845	1
01650	Calcium	7440-70-2	11,900		22.2	3.72	1
06951	Chromium	7440-47-3	21.2		3.34	0.178	1
06952	Cobalt	7440-48-4	3.89		1.11	0.110	1
06953	Copper	7440-50-8	11.2		2.22	0.323	1
01654	Iron	7439-89-6	20,100		43.6	3.95	1
06955	Lead	7439-92-1	4.39		3.34	0.556	1
01656	Lithium	7439-93-2	19.9		4.4	0.38	1
01657	Magnesium	7439-95-4	4,610		11.1	1.86	1
06958	Manganese	7439-96-5	145		1.11	0.0923	1
06960	Molybdenum	7439-98-7	2.22	U	2.22	0.189	1
06961	Nickel	7440-02-0	11.1		2.22	0.145	1
10145	Phosphorus	7723-14-0	196		11.1	3.22	1
01662	Potassium	7440-09-7	2,710		111	9.28	1
01667	Sodium	7440-23-5	479		111	18.6	1
06969	Tin	7440-31-5	2.68	J	11.1	0.245	1
06970	Titanium	7440-32-6	1,180		1.11	0.189	1
06971	Vanadium	7440-62-2	39.4		1.11	0.145	1
06972	Zinc	7440-66-6	45.7		4.45	0.222	1
10146	Zirconium	7440-67-7	1.89	J	5.56	0.934	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.445	U	0.445	0.111	2
06142	Silver	7440-22-4	0.222	U	0.222	0.0289	2
06144	Strontium	7440-24-6	31.1		0.445	0.0756	2
06145	Thallium	7440-28-0	0.259		0.222	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0163	J	0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.90		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125060
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 09:45 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57490 SDG#: PH065-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	11.0	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13197SLC026	07/20/2013 12:53	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13197SLC026	07/17/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013 15:43	Laura M Krieger	20.1
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319331685	07/12/2013 14:47	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319331685	07/12/2013 14:48	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131970030A	07/18/2013 11:23	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131970030A	07/17/2013 08:35	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980026A	07/19/2013 04:54	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	131980026A	07/18/2013 07:45	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131970637001	07/20/2013 10:32	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:01	John P Hook	1
06955	Lead	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125060
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 09:45 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57490 SDG#: PH065-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131970637001	07/18/2013 05:58	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131970637001B	07/18/2013 21:26	David K Beck	2
06142	Silver	SW-846 6020A	1	131970637001A	07/18/2013 21:26	David K Beck	2
06144	Strontium	SW-846 6020A	1	131970637001A	07/18/2013 21:26	David K Beck	2
06145	Thallium	SW-846 6020A	1	131970637001A	07/18/2013 21:26	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131970638001	07/18/2013 08:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131970637001	07/17/2013 09:12	Denise K Conners	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131970638001	07/17/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13193039401A	07/12/2013 20:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401A	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125061
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	20	U	20	7	0.92
10237	Acrolein	107-02-8	100	U	100	20	0.92
10237	Acrylonitrile	107-13-1	20	U	20	4	0.92
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	0.92
10237	Benzene	71-43-2	5	U	5	0.5	0.92
10237	Bromobenzene	108-86-1	5	U	5	1	0.92
10237	Bromochloromethane	74-97-5	5	U	5	1	0.92
10237	Bromodichloromethane	75-27-4	5	U	5	1	0.92
10237	Bromoform	75-25-2	5	U	5	1	0.92
10237	Bromomethane	74-83-9	5	U	5	2	0.92
10237	2-Butanone	78-93-3	10	U	10	4	0.92
10237	t-Butyl alcohol	75-65-0	51	U	51	20	0.92
10237	n-Butylbenzene	104-51-8	5	U	5	1	0.92
10237	sec-Butylbenzene	135-98-8	5	U	5	1	0.92
10237	tert-Butylbenzene	98-06-6	5	U	5	1	0.92
10237	Carbon Disulfide	75-15-0	5	U	5	1	0.92
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	0.92
10237	Chlorobenzene	108-90-7	5	U	5	1	0.92
10237	Chloroethane	75-00-3	5	U	5	2	0.92
10237	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	0.92
10237	Chloroform	67-66-3	5	U	5	1	0.92
10237	1-Chlorohexane	544-10-5	5	U	5	1	0.92
10237	Chloromethane	74-87-3	5	U	5	2	0.92
10237	2-Chlorotoluene	95-49-8	5	U	5	1	0.92
10237	4-Chlorotoluene	106-43-4	5	U	5	1	0.92
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	0.92
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	0.92
10237	Dibromochloromethane	124-48-1	5	U	5	1	0.92
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	0.92
10237	Dibromomethane	74-95-3	5	U	5	1	0.92
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	0.92
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	0.92
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	0.92
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	0.92
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	0.92
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	0.92
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	0.92
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	0.92
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	0.92
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	0.92
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	0.92
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	0.92
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	0.92
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	0.92
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	0.92
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	0.92
10237	Ethylbenzene	100-41-4	5	U	5	1	0.92
10237	Freon 113	76-13-1	5	U	5	2	0.92
10237	Freon 133a	75-88-7	5	U	5	2	0.92
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	0.92
10237	2-Hexanone	591-78-6	10	U	10	3	0.92

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125061
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	0.92
10237	Isopropylbenzene	98-82-8	5	U	5	1	0.92
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	0.92
10237	Methyl Iodide	74-88-4	5	U	5	3	0.92
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	0.92
10237	4-Methyl-2-pentanone	108-10-1	10	U	10	3	0.92
10237	Methylene Chloride	75-09-2	5	U	5	2	0.92
10237	n-Propylbenzene	103-65-1	5	U	5	1	0.92
10237	Styrene	100-42-5	5	U	5	1	0.92
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	0.92
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	0.92
10237	Tetrachloroethene	127-18-4	5	U	5	1	0.92
10237	Toluene	108-88-3	5	U	5	1	0.92
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	0.92
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	0.92
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	0.92
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	0.92
10237	Trichloroethene	79-01-6	5	U	5	1	0.92
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	0.92
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	0.92
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	0.92
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	0.92
10237	Vinyl Acetate	108-05-4	10	U	10	2	0.92
10237	Vinyl Chloride	75-01-4	5	U	5	1	0.92
10237	m+p-Xylene	179601-23-1	5	U	5	1	0.92
10237	o-Xylene	95-47-6	5	U	5	1	0.92
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125061
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.77
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,200		43.8	7.90	1
06944	Antimony	7440-36-0	4.38	U	4.38	0.810	1
06935	Arsenic	7440-38-2	6.86		4.38	0.767	1
06946	Barium	7440-39-3	89.1		1.10	0.0361	1
06947	Beryllium	7440-41-7	0.681	J	1.10	0.0734	1
07914	Boron	7440-42-8	5.22	J	11.0	0.920	1
06949	Cadmium	7440-43-9	0.508	J	1.10	0.0832	1
01650	Calcium	7440-70-2	9,730		21.9	3.66	1
06951	Chromium	7440-47-3	31.9		3.29	0.175	1
06952	Cobalt	7440-48-4	9.05		1.10	0.108	1
06953	Copper	7440-50-8	16.8		2.19	0.318	1
01654	Iron	7439-89-6	27,600		42.1	3.81	1
06955	Lead	7439-92-1	6.13		3.29	0.548	1
01656	Lithium	7439-93-2	26.1		4.4	0.37	1
01657	Magnesium	7439-95-4	6,550		11.0	1.83	1
06958	Manganese	7439-96-5	328		1.10	0.0909	1
06960	Molybdenum	7439-98-7	2.19	U	2.19	0.186	1
06961	Nickel	7440-02-0	16.5		2.19	0.142	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125061
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
10145	Phosphorus	7723-14-0	683		11.0	3.17	1
01662	Potassium	7440-09-7	2,720		110	9.13	1
01667	Sodium	7440-23-5	448		110	18.3	1
06969	Tin	7440-31-5	3.20	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,670		1.10	0.186	1
06971	Vanadium	7440-62-2	54.4		1.10	0.142	1
06972	Zinc	7440-66-6	75.1		4.38	0.219	1
10146	Zirconium	7440-67-7	5.48	U	5.48	0.920	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.438	U	0.438	0.110	2
06142	Silver	7440-22-4	0.219	U	0.219	0.0285	2
06144	Strontium	7440-24-6	38.7		0.438	0.0745	2
06145	Thallium	7440-28-0	0.408		0.219	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0174	U	0.0174	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.2 C.	n.a.	8.10		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	9.6		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B131972AA	07/17/2013 00:55	Andrea E Lando	0.92
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319331685	07/12/2013 15:03	Larry E Bevins	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319331685	07/12/2013 15:04	Larry E Bevins	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319331685	07/12/2013 15:00	Larry E Bevins	n.a.
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13197SLC026	07/20/2013 10:15	Mark A Clark	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125061
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10811	BNA Soil Microwave SIM	SW-846 3546	1	13197SLC026	07/17/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013 16:21	Laura M Krieger	22.77
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319331685	07/12/2013 14:58	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319331685	07/12/2013 14:59	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131970030A	07/18/2013 11:41	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131970030A	07/17/2013 08:35	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980026A	07/19/2013 03:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	131980026A	07/18/2013 07:45	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131970637001	07/20/2013 09:28	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 20:22	John P Hook	1
06955	Lead	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131970637001	07/18/2013 05:20	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131970637001B	07/18/2013 21:02	David K Beck	2
06142	Silver	SW-846 6020A	1	131970637001A	07/18/2013 21:02	David K Beck	2
06144	Strontium	SW-846 6020A	1	131970637001A	07/18/2013 21:02	David K Beck	2
06145	Thallium	SW-846 6020A	1	131970637001A	07/18/2013 21:02	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131970638001	07/18/2013 08:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131970637001	07/17/2013 09:12	Denise K Conners	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131970638001	07/17/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13193039401A	07/12/2013 20:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125061
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401A	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125062
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	170	20	7	0.9
10237	Acrolein	107-02-8	150	100	20	0.9
10237	Acrylonitrile	107-13-1	100	20	4	0.9
10237	t-Amyl methyl ether	994-05-8	20	5	1	0.9
10237	Benzene	71-43-2	20	5	0.5	0.9
10237	Bromobenzene	108-86-1	20	5	1	0.9
10237	Bromochloromethane	74-97-5	21	5	1	0.9
10237	Bromodichloromethane	75-27-4	20	5	1	0.9
10237	Bromoform	75-25-2	20	5	1	0.9
10237	Bromomethane	74-83-9	19	5	2	0.9
10237	2-Butanone	78-93-3	170	10	4	0.9
10237	t-Butyl alcohol	75-65-0	220	50	20	0.9
10237	n-Butylbenzene	104-51-8	19	5	1	0.9
10237	sec-Butylbenzene	135-98-8	20	5	1	0.9
10237	tert-Butylbenzene	98-06-6	20	5	1	0.9
10237	Carbon Disulfide	75-15-0	20	5	1	0.9
10237	Carbon Tetrachloride	56-23-5	21	5	1	0.9
10237	Chlorobenzene	108-90-7	20	5	1	0.9
10237	Chloroethane	75-00-3	17	5	2	0.9
10237	2-Chloroethyl Vinyl Ether	110-75-8	20	10	2	0.9
10237	Chloroform	67-66-3	21	5	1	0.9
10237	1-Chlorohexane	544-10-5	21	5	1	0.9
10237	Chloromethane	74-87-3	18	5	2	0.9
10237	2-Chlorotoluene	95-49-8	19	5	1	0.9
10237	4-Chlorotoluene	106-43-4	20	5	1	0.9
10237	1,2-Dibromo-3-chloropropane	96-12-8	19	5	2	0.9
10237	Dibromochloromethane	124-48-1	20	5	1	0.9
10237	1,2-Dibromoethane	106-93-4	21	5	1	0.9
10237	Dibromomethane	74-95-3	20	5	1	0.9
10237	1,2-Dichlorobenzene	95-50-1	20	5	1	0.9
10237	1,3-Dichlorobenzene	541-73-1	20	5	1	0.9
10237	1,4-Dichlorobenzene	106-46-7	20	5	1	0.9
10237	Dichlorodifluoromethane	75-71-8	19	5	2	0.9
10237	1,1-Dichloroethane	75-34-3	20	5	1	0.9
10237	1,2-Dichloroethane	107-06-2	21	5	1	0.9
10237	1,1-Dichloroethene	75-35-4	21	5	1	0.9
10237	cis-1,2-Dichloroethene	156-59-2	21	5	1	0.9
10237	trans-1,2-Dichloroethene	156-60-5	21	5	1	0.9
10237	1,2-Dichloropropane	78-87-5	21	5	1	0.9
10237	1,3-Dichloropropane	142-28-9	21	5	1	0.9
10237	2,2-Dichloropropane	594-20-7	20	5	1	0.9
10237	1,1-Dichloropropene	563-58-6	21	5	1	0.9
10237	cis-1,3-Dichloropropene	10061-01-5	21	5	1	0.9
10237	trans-1,3-Dichloropropene	10061-02-6	20	5	1	0.9
10237	Ethyl t-butyl ether	637-92-3	20	5	1	0.9
10237	Ethylbenzene	100-41-4	20	5	1	0.9
10237	Freon 113	76-13-1	19	5	2	0.9
10237	Hexachlorobutadiene	87-68-3	15	5	2	0.9
10237	2-Hexanone	591-78-6	100	10	3	0.9
10237	di-Isopropyl ether	108-20-3	21	5	1	0.9
10237	Isopropylbenzene	98-82-8	20	5	1	0.9

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125062
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/kg	ug/kg	ug/kg	
10237	p-Isopropyltoluene	99-87-6	19	5	1	0.9
10237	Methyl Iodide	74-88-4	22	5	3	0.9
10237	Methyl Tertiary Butyl Ether	1634-04-4	21	5	0.5	0.9
10237	4-Methyl-2-pentanone	108-10-1	110	10	3	0.9
10237	Methylene Chloride	75-09-2	20	5	2	0.9
10237	n-Propylbenzene	103-65-1	20	5	1	0.9
10237	Styrene	100-42-5	20	5	1	0.9
10237	1,1,1,2-Tetrachloroethane	630-20-6	20	5	1	0.9
10237	1,1,2,2-Tetrachloroethane	79-34-5	21	5	1	0.9
10237	Tetrachloroethene	127-18-4	21	5	1	0.9
10237	Toluene	108-88-3	20	5	1	0.9
10237	1,2,3-Trichlorobenzene	87-61-6	18	5	1	0.9
10237	1,2,4-Trichlorobenzene	120-82-1	18	5	1	0.9
10237	1,1,1-Trichloroethane	71-55-6	20	5	1	0.9
10237	1,1,2-Trichloroethane	79-00-5	22	5	1	0.9
10237	Trichloroethene	79-01-6	21	5	1	0.9
10237	Trichlorofluoromethane	75-69-4	21	5	2	0.9
10237	1,2,3-Trichloropropane	96-18-4	22	5	1	0.9
10237	1,2,4-Trimethylbenzene	95-63-6	20	5	1	0.9
10237	1,3,5-Trimethylbenzene	108-67-8	20	5	1	0.9
10237	Vinyl Chloride	75-01-4	20	5	1	0.9
10237	m+p-Xylene	179601-23-1	40	5	1	0.9
10237	o-Xylene	95-47-6	20	5	1	0.9
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	31	1.8	0.73	1
12969	Acenaphthylene	208-96-8	28	1.8	0.37	1
12969	Anthracene	120-12-7	30	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	30	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	30	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	33	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	29	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	30	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	30	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	38	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	38	20	6.6	1
12969	Chrysene	218-01-9	30	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	30	1.8	0.73	1
12969	Diethylphthalate	84-66-2	38	20	6.6	1
12969	Dimethylphthalate	131-11-3	32	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	37	20	6.6	1
12969	Fluoranthene	206-44-0	31	1.8	0.73	1
12969	Fluorene	86-73-7	29	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	30	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	31	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	29	1.8	0.73	1
12969	Naphthalene	91-20-3	28	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	25	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	38	20	6.6	1
12969	Phenanthrene	85-01-8	29	1.8	0.73	1
12969	Pyrene	129-00-0	31	1.8	0.73	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125062
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.1		1.0	0.2	22.89
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	160		19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	170		19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	3.1	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.2	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	6.0	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,500		44.2	7.98	1
06944	Antimony	7440-36-0	31.5		4.42	0.819	1
06935	Arsenic	7440-38-2	22.3		4.42	0.774	1
06946	Barium	7440-39-3	305		1.11	0.0365	1
06947	Beryllium	7440-41-7	6.03		1.11	0.0741	1
07914	Boron	7440-42-8	215		11.1	0.929	1
06949	Cadmium	7440-43-9	5.73		1.11	0.0841	1
01650	Calcium	7440-70-2	6,590		22.1	3.69	1
06951	Chromium	7440-47-3	52.2		3.32	0.177	1
06952	Cobalt	7440-48-4	61.2		1.11	0.110	1
06953	Copper	7440-50-8	43.3		2.21	0.321	1
01654	Iron	7439-89-6	25,800		43.0	3.89	1
06955	Lead	7439-92-1	20.1		3.32	0.553	1
01656	Lithium	7439-93-2	135		4.4	0.38	1
01657	Magnesium	7439-95-4	6,380		11.1	1.85	1
06958	Manganese	7439-96-5	519		1.11	0.0918	1
06960	Molybdenum	7439-98-7	210		2.21	0.188	1
06961	Nickel	7440-02-0	71.3		2.21	0.144	1
10145	Phosphorus	7723-14-0	668		11.1	3.20	1
01662	Potassium	7440-09-7	4,220		111	9.23	1
01667	Sodium	7440-23-5	1,460		111	18.5	1
06969	Tin	7440-31-5	388		11.1	0.243	1
06970	Titanium	7440-32-6	1,990		5.53	0.940	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125062
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	107	1.11	0.144	1
06972	Zinc	7440-66-6	120	4.42	0.221	1
10146	Zirconium	7440-67-7	112	5.53	0.929	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.32	0.442	0.111	2
06142	Silver	7440-22-4	11.7	0.221	0.0288	2
06144	Strontium	7440-24-6	38.7	0.442	0.0752	2
06145	Thallium	7440-28-0	0.884	0.221	0.0332	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.212	0.0184	0.0110	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B131972AA	07/17/2013 01:17	Andrea E Lando	0.9
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319331685	07/12/2013 15:04	Larry E Bevins	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319331685	07/12/2013 15:04	Larry E Bevins	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319331685	07/12/2013 14:56	Larry E Bevins	n.a.
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13197SLC026	07/20/2013 10:46	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13197SLC026	07/17/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013 22:42	Marie D Beamenderfer	22.89
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319331685	07/12/2013 14:55	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319331685	07/12/2013 14:56	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131970030A	07/18/2013 12:00	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131970030A	07/17/2013 08:35	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980026A	07/19/2013 03:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	131980026A	07/18/2013 07:45	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125062
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06944	Antimony	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131970637001	07/20/2013 09:40	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 20:34	John P Hook	1
06955	Lead	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131970637001	07/23/2013 22:33	John P Hook	5
06971	Vanadium	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131970637001	07/18/2013 05:31	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131970637001B	07/18/2013 21:09	David K Beck	2
06142	Silver	SW-846 6020A	1	131970637001A	07/18/2013 21:09	David K Beck	2
06144	Strontium	SW-846 6020A	1	131970637001A	07/18/2013 21:09	David K Beck	2
06145	Thallium	SW-846 6020A	1	131970637001A	07/18/2013 21:09	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131970638001	07/18/2013 09:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131970637001	07/17/2013 09:12	Denise K Conners	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131970638001	07/17/2013 11:40	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401A	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125063
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	150	22	8	0.97
10237	Acrolein	107-02-8	170	110	22	0.97
10237	Acrylonitrile	107-13-1	90	22	4	0.97
10237	t-Amyl methyl ether	994-05-8	20	5	1	0.97
10237	Benzene	71-43-2	20	5	0.5	0.97
10237	Bromobenzene	108-86-1	20	5	1	0.97
10237	Bromochloromethane	74-97-5	21	5	1	0.97
10237	Bromodichloromethane	75-27-4	19	5	1	0.97
10237	Bromoform	75-25-2	19	5	1	0.97
10237	Bromomethane	74-83-9	19	5	2	0.97
10237	2-Butanone	78-93-3	160	11	4	0.97
10237	t-Butyl alcohol	75-65-0	240	54	22	0.97
10237	n-Butylbenzene	104-51-8	19	5	1	0.97
10237	sec-Butylbenzene	135-98-8	20	5	1	0.97
10237	tert-Butylbenzene	98-06-6	20	5	1	0.97
10237	Carbon Disulfide	75-15-0	21	5	1	0.97
10237	Carbon Tetrachloride	56-23-5	21	5	1	0.97
10237	Chlorobenzene	108-90-7	20	5	1	0.97
10237	Chloroethane	75-00-3	18	5	2	0.97
10237	2-Chloroethyl Vinyl Ether	110-75-8	20	11	2	0.97
10237	Chloroform	67-66-3	21	5	1	0.97
10237	1-Chlorohexane	544-10-5	22	5	1	0.97
10237	Chloromethane	74-87-3	20	5	2	0.97
10237	2-Chlorotoluene	95-49-8	19	5	1	0.97
10237	4-Chlorotoluene	106-43-4	19	5	1	0.97
10237	1,2-Dibromo-3-chloropropane	96-12-8	18	5	2	0.97
10237	Dibromochloromethane	124-48-1	19	5	1	0.97
10237	1,2-Dibromoethane	106-93-4	20	5	1	0.97
10237	Dibromomethane	74-95-3	20	5	1	0.97
10237	1,2-Dichlorobenzene	95-50-1	20	5	1	0.97
10237	1,3-Dichlorobenzene	541-73-1	19	5	1	0.97
10237	1,4-Dichlorobenzene	106-46-7	19	5	1	0.97
10237	Dichlorodifluoromethane	75-71-8	20	5	2	0.97
10237	1,1-Dichloroethane	75-34-3	20	5	1	0.97
10237	1,2-Dichloroethane	107-06-2	20	5	1	0.97
10237	1,1-Dichloroethene	75-35-4	21	5	1	0.97
10237	cis-1,2-Dichloroethene	156-59-2	21	5	1	0.97
10237	trans-1,2-Dichloroethene	156-60-5	21	5	1	0.97
10237	1,2-Dichloropropane	78-87-5	21	5	1	0.97
10237	1,3-Dichloropropane	142-28-9	20	5	1	0.97
10237	2,2-Dichloropropane	594-20-7	20	5	1	0.97
10237	1,1-Dichloropropene	563-58-6	21	5	1	0.97
10237	cis-1,3-Dichloropropene	10061-01-5	20	5	1	0.97
10237	trans-1,3-Dichloropropene	10061-02-6	19	5	1	0.97
10237	Ethyl t-butyl ether	637-92-3	20	5	1	0.97
10237	Ethylbenzene	100-41-4	20	5	1	0.97
10237	Freon 113	76-13-1	21	5	2	0.97
10237	Hexachlorobutadiene	87-68-3	18	5	2	0.97
10237	2-Hexanone	591-78-6	93	11	3	0.97
10237	di-Isopropyl ether	108-20-3	21	5	1	0.97
10237	Isopropylbenzene	98-82-8	20	5	1	0.97

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125063
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/kg	ug/kg	ug/kg	
10237	p-Isopropyltoluene	99-87-6	19	5	1	0.97
10237	Methyl Iodide	74-88-4	22	5	3	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	20	5	0.5	0.97
10237	4-Methyl-2-pentanone	108-10-1	100	11	3	0.97
10237	Methylene Chloride	75-09-2	20	5	2	0.97
10237	n-Propylbenzene	103-65-1	21	5	1	0.97
10237	Styrene	100-42-5	19	5	1	0.97
10237	1,1,1,2-Tetrachloroethane	630-20-6	20	5	1	0.97
10237	1,1,2,2-Tetrachloroethane	79-34-5	19	5	1	0.97
10237	Tetrachloroethene	127-18-4	21	5	1	0.97
10237	Toluene	108-88-3	20	5	1	0.97
10237	1,2,3-Trichlorobenzene	87-61-6	18	5	1	0.97
10237	1,2,4-Trichlorobenzene	120-82-1	18	5	1	0.97
10237	1,1,1-Trichloroethane	71-55-6	21	5	1	0.97
10237	1,1,2-Trichloroethane	79-00-5	20	5	1	0.97
10237	Trichloroethene	79-01-6	21	5	1	0.97
10237	Trichlorofluoromethane	75-69-4	22	5	2	0.97
10237	1,2,3-Trichloropropane	96-18-4	20	5	1	0.97
10237	1,2,4-Trimethylbenzene	95-63-6	20	5	1	0.97
10237	1,3,5-Trimethylbenzene	108-67-8	20	5	1	0.97
10237	Vinyl Chloride	75-01-4	21	5	1	0.97
10237	m+p-Xylene	179601-23-1	39	5	1	0.97
10237	o-Xylene	95-47-6	19	5	1	0.97
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	33	1.8	0.73	1
12969	Acenaphthylene	208-96-8	29	1.8	0.37	1
12969	Anthracene	120-12-7	30	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	30	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	30	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	33	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	29	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	32	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	30	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	38	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	38	20	6.6	1
12969	Chrysene	218-01-9	30	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	32	1.8	0.73	1
12969	Diethylphthalate	84-66-2	38	20	6.6	1
12969	Dimethylphthalate	131-11-3	32	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	37	20	6.6	1
12969	Fluoranthene	206-44-0	31	1.8	0.73	1
12969	Fluorene	86-73-7	30	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	32	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	31	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	30	1.8	0.73	1
12969	Naphthalene	91-20-3	29	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	26	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	38	20	6.6	1
12969	Phenanthrene	85-01-8	30	1.8	0.73	1
12969	Pyrene	129-00-0	31	1.8	0.73	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125063
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.1		1.0	0.2	23.02
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	150		19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	160		19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	3.2	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	6.4	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,600		44.2	7.98	1
06944	Antimony	7440-36-0	30.6		4.42	0.819	1
06935	Arsenic	7440-38-2	22.7		4.42	0.774	1
06946	Barium	7440-39-3	278		1.11	0.0365	1
06947	Beryllium	7440-41-7	5.89		1.11	0.0741	1
07914	Boron	7440-42-8	209		11.1	0.929	1
06949	Cadmium	7440-43-9	5.60		1.11	0.0841	1
01650	Calcium	7440-70-2	5,470		22.1	3.69	1
06951	Chromium	7440-47-3	44.0		3.32	0.177	1
06952	Cobalt	7440-48-4	58.4		1.11	0.110	1
06953	Copper	7440-50-8	39.2		2.21	0.321	1
01654	Iron	7439-89-6	24,800		43.0	3.89	1
06955	Lead	7439-92-1	21.2		3.32	0.553	1
01656	Lithium	7439-93-2	129		4.4	0.38	1
01657	Magnesium	7439-95-4	5,310		11.1	1.85	1
06958	Manganese	7439-96-5	348		1.11	0.0918	1
06960	Molybdenum	7439-98-7	206		2.21	0.188	1
06961	Nickel	7440-02-0	62.8		2.21	0.144	1
10145	Phosphorus	7723-14-0	583		11.1	3.20	1
01662	Potassium	7440-09-7	3,840		111	9.23	1
01667	Sodium	7440-23-5	1,390		111	18.5	1
06969	Tin	7440-31-5	383		11.1	0.243	1
06970	Titanium	7440-32-6	1,750		1.11	0.188	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125063
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	102	1.11	0.144	1
06972	Zinc	7440-66-6	106	4.42	0.221	1
10146	Zirconium	7440-67-7	110	5.53	0.929	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.05	0.442	0.111	2
06142	Silver	7440-22-4	11.7	0.221	0.0288	2
06144	Strontium	7440-24-6	40.6	0.442	0.0752	2
06145	Thallium	7440-28-0	0.763	0.221	0.0332	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.208	0.0183	0.0110	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B131972AA	07/17/2013 01:40	Andrea E Lando	0.97
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319331685	07/12/2013 15:03	Larry E Bevins	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319331685	07/12/2013 15:04	Larry E Bevins	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319331685	07/12/2013 15:03	Larry E Bevins	n.a.
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13197SLC026	07/20/2013 11:18	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13197SLC026	07/17/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013 23:20	Marie D Beamenderfer	23.02
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319331685	07/12/2013 15:02	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319331685	07/12/2013 15:02	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131970030A	07/18/2013 12:18	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131970030A	07/17/2013 08:35	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980026A	07/19/2013 03:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	131980026A	07/18/2013 07:45	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125063
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06944	Antimony	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131970637001	07/20/2013 09:43	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 20:38	John P Hook	1
06955	Lead	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131970637001	07/18/2013 05:35	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131970637001B	07/18/2013 21:12	David K Beck	2
06142	Silver	SW-846 6020A	1	131970637001A	07/18/2013 21:12	David K Beck	2
06144	Strontium	SW-846 6020A	1	131970637001A	07/18/2013 21:12	David K Beck	2
06145	Thallium	SW-846 6020A	1	131970637001A	07/18/2013 21:12	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131970638001	07/18/2013 09:07	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131970637001	07/17/2013 09:12	Denise K Conners	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131970638001	07/17/2013 11:40	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401A	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125064
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,300		44.2	7.98	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.819	1
06935	Arsenic	7440-38-2	9.45		4.42	0.774	1
06946	Barium	7440-39-3	85.8		1.11	0.0365	1
06947	Beryllium	7440-41-7	0.817	J	1.11	0.0741	1
07914	Boron	7440-42-8	4.79	J	11.1	0.929	1
06949	Cadmium	7440-43-9	0.535	J	1.11	0.0841	1
01650	Calcium	7440-70-2	7,260		22.1	3.69	1
06951	Chromium	7440-47-3	28.9		3.32	0.177	1
06952	Cobalt	7440-48-4	9.22		1.11	0.110	1
06953	Copper	7440-50-8	18.0		2.21	0.321	1
01654	Iron	7439-89-6	27,800		44.2	4.00	1
06955	Lead	7439-92-1	7.94		3.32	0.553	1
01656	Lithium	7439-93-2	27.7		4.4	0.38	1
01657	Magnesium	7439-95-4	6,110		11.1	1.85	1
06958	Manganese	7439-96-5	370		1.11	0.0918	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	15.6		2.21	0.144	1
10145	Phosphorus	7723-14-0	634		11.1	3.20	1
01662	Potassium	7440-09-7	2,580		111	9.23	1
01667	Sodium	7440-23-5	450		111	18.5	1
06969	Tin	7440-31-5	3.45	J	11.1	0.243	1
06970	Titanium	7440-32-6	1,530		1.11	0.188	1
06971	Vanadium	7440-62-2	58.9		1.11	0.144	1
06972	Zinc	7440-66-6	68.9		4.42	0.221	1
10146	Zirconium	7440-67-7	1.48	J	5.53	0.929	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.442	U	0.442	0.111	2
06142	Silver	7440-22-4	0.221	U	0.221	0.0288	2
06144	Strontium	7440-24-6	34.9		0.442	0.0752	2
06145	Thallium	7440-28-0	0.429		0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184	U	0.0184	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.13		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.6		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	9.8		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-574-SA8-SB-14.0-15.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125064
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:00 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57414 SDG#: PH065-04DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131970637001	07/20/2013 09:36	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 20:30	John P Hook	1
06955	Lead	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131970637001	07/18/2013 05:28	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131970637001B	07/18/2013 21:07	David K Beck	2
06142	Silver	SW-846 6020A	1	131970637001A	07/18/2013 21:07	David K Beck	2
06144	Strontium	SW-846 6020A	1	131970637001A	07/18/2013 21:07	David K Beck	2
06145	Thallium	SW-846 6020A	1	131970637001A	07/18/2013 21:07	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131970638001	07/18/2013 09:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131970637001	07/17/2013 09:12	Denise K Conners	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131970638001	07/17/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13193039401A	07/12/2013 20:20	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401A	07/18/2013 23:52	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401A	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-874-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125065
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

87414 SDG#: PH065-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	23	U	23	8	1.07
10237	Acrolein	107-02-8	110	U	110	23	1.07
10237	Acrylonitrile	107-13-1	23	U	23	5	1.07
10237	t-Amyl methyl ether	994-05-8	6	U	6	1	1.07
10237	Benzene	71-43-2	6	U	6	0.6	1.07
10237	Bromobenzene	108-86-1	6	U	6	1	1.07
10237	Bromochloromethane	74-97-5	6	U	6	1	1.07
10237	Bromodichloromethane	75-27-4	6	U	6	1	1.07
10237	Bromoform	75-25-2	6	U	6	1	1.07
10237	Bromomethane	74-83-9	6	U	6	2	1.07
10237	2-Butanone	78-93-3	11	U	11	5	1.07
10237	t-Butyl alcohol	75-65-0	57	U	57	23	1.07
10237	n-Butylbenzene	104-51-8	6	U	6	1	1.07
10237	sec-Butylbenzene	135-98-8	6	U	6	1	1.07
10237	tert-Butylbenzene	98-06-6	6	U	6	1	1.07
10237	Carbon Disulfide	75-15-0	6	U	6	1	1.07
10237	Carbon Tetrachloride	56-23-5	6	U	6	1	1.07
10237	Chlorobenzene	108-90-7	6	U	6	1	1.07
10237	Chloroethane	75-00-3	6	U	6	2	1.07
10237	2-Chloroethyl Vinyl Ether	110-75-8	11	U	11	2	1.07
10237	Chloroform	67-66-3	6	U	6	1	1.07
10237	1-Chlorohexane	544-10-5	6	U	6	1	1.07
10237	Chloromethane	74-87-3	6	U	6	2	1.07
10237	2-Chlorotoluene	95-49-8	6	U	6	1	1.07
10237	4-Chlorotoluene	106-43-4	6	U	6	1	1.07
10237	Chlorotrifluoroethene	79-38-9	6	U	6	2	1.07
10237	1,2-Dibromo-3-chloropropane	96-12-8	6	U	6	2	1.07
10237	Dibromochloromethane	124-48-1	6	U	6	1	1.07
10237	1,2-Dibromoethane	106-93-4	6	U	6	1	1.07
10237	Dibromomethane	74-95-3	6	U	6	1	1.07
10237	1,2-Dichlorobenzene	95-50-1	6	U	6	1	1.07
10237	1,3-Dichlorobenzene	541-73-1	6	U	6	1	1.07
10237	1,4-Dichlorobenzene	106-46-7	6	U	6	1	1.07
10237	Dichlorodifluoromethane	75-71-8	6	U	6	2	1.07
10237	1,1-Dichloroethane	75-34-3	6	U	6	1	1.07
10237	1,2-Dichloroethane	107-06-2	6	U	6	1	1.07
10237	1,1-Dichloroethene	75-35-4	6	U	6	1	1.07
10237	cis-1,2-Dichloroethene	156-59-2	6	U	6	1	1.07
10237	trans-1,2-Dichloroethene	156-60-5	6	U	6	1	1.07
10237	1,2-Dichloropropane	78-87-5	6	U	6	1	1.07
10237	1,3-Dichloropropane	142-28-9	6	U	6	1	1.07
10237	2,2-Dichloropropane	594-20-7	6	U	6	1	1.07
10237	1,1-Dichloropropene	563-58-6	6	U	6	1	1.07
10237	cis-1,3-Dichloropropene	10061-01-5	6	U	6	1	1.07
10237	trans-1,3-Dichloropropene	10061-02-6	6	U	6	1	1.07
10237	Ethyl t-butyl ether	637-92-3	6	U	6	1	1.07
10237	Ethylbenzene	100-41-4	6	U	6	1	1.07
10237	Freon 113	76-13-1	6	U	6	2	1.07
10237	Freon 133a	75-88-7	6	U	6	2	1.07
10237	Hexachlorobutadiene	87-68-3	6	U	6	2	1.07
10237	2-Hexanone	591-78-6	11	U	11	3	1.07

*=This limit was used in the evaluation of the final result

Sample Description: SL-874-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125065
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

87414 SDG#: PH065-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	di-Isopropyl ether	108-20-3	6	U	6	1	1.07
10237	Isopropylbenzene	98-82-8	6	U	6	1	1.07
10237	p-Isopropyltoluene	99-87-6	6	U	6	1	1.07
10237	Methyl Iodide	74-88-4	6	U	6	3	1.07
10237	Methyl Tertiary Butyl Ether	1634-04-4	6	U	6	0.6	1.07
10237	4-Methyl-2-pentanone	108-10-1	11	U	11	3	1.07
10237	Methylene Chloride	75-09-2	6	U	6	2	1.07
10237	n-Propylbenzene	103-65-1	6	U	6	1	1.07
10237	Styrene	100-42-5	6	U	6	1	1.07
10237	1,1,1,2-Tetrachloroethane	630-20-6	6	U	6	1	1.07
10237	1,1,2,2-Tetrachloroethane	79-34-5	6	U	6	1	1.07
10237	Tetrachloroethene	127-18-4	6	U	6	1	1.07
10237	Toluene	108-88-3	6	U	6	1	1.07
10237	1,2,3-Trichlorobenzene	87-61-6	6	U	6	1	1.07
10237	1,2,4-Trichlorobenzene	120-82-1	6	U	6	1	1.07
10237	1,1,1-Trichloroethane	71-55-6	6	U	6	1	1.07
10237	1,1,2-Trichloroethane	79-00-5	6	U	6	1	1.07
10237	Trichloroethene	79-01-6	6	U	6	1	1.07
10237	Trichlorofluoromethane	75-69-4	6	U	6	2	1.07
10237	1,2,3-Trichloropropane	96-18-4	6	U	6	1	1.07
10237	1,2,4-Trimethylbenzene	95-63-6	6	U	6	1	1.07
10237	1,3,5-Trimethylbenzene	108-67-8	6	U	6	1	1.07
10237	Vinyl Acetate	108-05-4	11	U	11	2	1.07
10237	Vinyl Chloride	75-01-4	6	U	6	1	1.07
10237	m+p-Xylene	179601-23-1	6	U	6	1	1.07
10237	o-Xylene	95-47-6	6	U	6	1	1.07
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-874-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125065
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

87414 SDG#: PH065-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.37
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,600		41.7	7.51	1
06944	Antimony	7440-36-0	4.17	U	4.17	0.771	1
06935	Arsenic	7440-38-2	5.89		4.17	0.729	1
06946	Barium	7440-39-3	65.5		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.493	J	1.04	0.0698	1
07914	Boron	7440-42-8	4.00	J	10.4	0.875	1
06949	Cadmium	7440-43-9	0.447	J	1.04	0.0792	1
01650	Calcium	7440-70-2	5,690		20.8	3.48	1
06951	Chromium	7440-47-3	19.4		3.13	0.167	1
06952	Cobalt	7440-48-4	6.20		1.04	0.103	1
06953	Copper	7440-50-8	11.0		2.08	0.302	1
01654	Iron	7439-89-6	21,200		42.5	3.85	1
06955	Lead	7439-92-1	4.56		3.13	0.521	1
01656	Lithium	7439-93-2	19.6		4.2	0.35	1
01657	Magnesium	7439-95-4	4,510		10.4	1.74	1
06958	Manganese	7439-96-5	267		1.04	0.0865	1
06960	Molybdenum	7439-98-7	2.08	U	2.08	0.177	1
06961	Nickel	7440-02-0	10.2		2.08	0.135	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-874-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125065
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

87414 SDG#: PH065-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
10145	Phosphorus	7723-14-0	417		10.4	3.01	1
01662	Potassium	7440-09-7	2,590		104	8.69	1
01667	Sodium	7440-23-5	300		104	17.4	1
06969	Tin	7440-31-5	2.73	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,390		1.04	0.177	1
06971	Vanadium	7440-62-2	41.4		1.04	0.135	1
06972	Zinc	7440-66-6	52.6		4.17	0.208	1
10146	Zirconium	7440-67-7	1.50	J	5.21	0.875	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.417	U	0.417	0.104	2
06142	Silver	7440-22-4	0.208	U	0.208	0.0271	2
06144	Strontium	7440-24-6	24.5		0.417	0.0708	2
06145	Thallium	7440-28-0	0.303		0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0170	U	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.3 C.	n.a.	7.96		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	6.8		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B131972AA	07/17/2013 02:02	Andrea E Lando	1.07
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319331685	07/12/2013 15:04	Larry E Bevins	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319331685	07/12/2013 15:04	Larry E Bevins	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319331685	07/12/2013 14:53	Larry E Bevins	n.a.
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13197SLC026	07/20/2013 13:25	Mark A Clark	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-874-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125065
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

87414 SDG#: PH065-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10811	BNA Soil Microwave SIM	SW-846 3546	1	13197SLC026	07/17/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013 18:15	Laura M Krieger	24.37
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319331685	07/12/2013 14:52	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319331685	07/12/2013 14:52	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131970030A	07/18/2013 12:37	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131970030A	07/17/2013 08:35	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980026A	07/19/2013 04:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	131980026A	07/18/2013 07:45	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131970637001	07/20/2013 10:36	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:05	John P Hook	1
06955	Lead	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131970637001	07/18/2013 06:02	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131970637001B	07/18/2013 21:29	David K Beck	2
06142	Silver	SW-846 6020A	1	131970637001A	07/18/2013 21:29	David K Beck	2
06144	Strontium	SW-846 6020A	1	131970637001A	07/18/2013 21:29	David K Beck	2
06145	Thallium	SW-846 6020A	1	131970637001A	07/18/2013 21:29	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131970638001	07/18/2013 09:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131970637001	07/17/2013 09:12	Denise K Conners	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131970638001	07/17/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13193039401A	07/12/2013 20:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-874-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125065
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 10:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

87414 SDG#: PH065-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401A	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7125066
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 08:00

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

711TB SDG#: PH065-06TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	20	U	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7125066
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 08:00

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

711TB SDG#: PH065-06TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y131973AA	07/17/2013 00:27	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y131973AA	07/17/2013 00:27	Brett W Kenyon	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13196B94A	07/16/2013 12:08	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7125066
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 08:00

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

711TB SDG#: PH065-06TB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01146	GC VOA Water Prep	SW-846 5030B	1	13196B94A	07/16/2013 12:08	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125067
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 13:50 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH065-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	0.99	J	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	0.94	J	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.59	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	0.76	J	1.8	0.73	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	12	J	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	140	U	140	54	25
12952	EFH (C15-C20)	n.a.	140	U	140	54	25
12952	EFH (C21-C30)	n.a.	330		140	54	25
12952	EFH (C30-C40)	n.a.	860		270	110	25
12952	EFH (C8-C11)	n.a.	140	U	140	54	25
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125067
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 13:50 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH065-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,300		42.5	7.67	1
06944	Antimony	7440-36-0	1.18	J	4.25	0.787	1
06935	Arsenic	7440-38-2	4.82		4.25	0.744	1
06946	Barium	7440-39-3	117		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.140	J	1.06	0.0712	1
07914	Boron	7440-42-8	9.64	J	10.6	0.893	1
06949	Cadmium	7440-43-9	0.548	J	1.06	0.0808	1
01650	Calcium	7440-70-2	69,200		42.5	7.10	2
06951	Chromium	7440-47-3	18.4		3.19	0.170	1
06952	Cobalt	7440-48-4	4.15		1.06	0.105	1
06953	Copper	7440-50-8	16.9		2.13	0.308	1
01654	Iron	7439-89-6	14,000		42.1	3.81	1
06955	Lead	7439-92-1	7.60		3.19	0.532	1
01656	Lithium	7439-93-2	8.9		4.3	0.36	1
01657	Magnesium	7439-95-4	5,360		10.6	1.78	1
06958	Manganese	7439-96-5	225		1.06	0.0883	1
06960	Molybdenum	7439-98-7	4.69		2.13	0.181	1
06961	Nickel	7440-02-0	9.98		2.13	0.138	1
10145	Phosphorus	7723-14-0	516		10.6	3.07	1
01662	Potassium	7440-09-7	1,910		106	8.87	1
01667	Sodium	7440-23-5	528		106	17.8	1
06969	Tin	7440-31-5	2.06	J	10.6	0.234	1
06970	Titanium	7440-32-6	804		1.06	0.181	1
06971	Vanadium	7440-62-2	34.2		1.06	0.138	1
06972	Zinc	7440-66-6	44.0		4.25	0.213	1
10146	Zirconium	7440-67-7	9.81		5.32	0.893	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.280	J	0.425	0.106	2
06142	Silver	7440-22-4	0.0560	J	0.213	0.0276	2
06144	Strontium	7440-24-6	114		1.06	0.181	5
06145	Thallium	7440-28-0	0.110	J	0.213	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0412		0.0171	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	9.56		0.0100	0.0100	1
	The pH was measured in water at 22.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125067
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 13:50 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH065-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0427 JBQ	1.09	0.0335	1
11031	12378-PeCDD	40321-76-4	0.241 JB	5.45	0.0456	1
11031	123478-HxCDD	39227-28-6	0.431 JBQ	5.45	0.0588	1
11031	123678-HxCDD	57653-85-7	2.08 JB	5.45	0.0597	1
11031	123789-HxCDD	19408-74-3	0.861 JBQ	5.45	0.0587	1
11031	1234678-HpCDD	35822-46-9	42.7 B	5.45	0.0657	1
11031	OCDD	3268-87-9	353 B	10.9	0.113	1
11031	2378-TCDF	51207-31-9	0.201 JQ	1.09	0.0620	1
11031	12378-PeCDF	57117-41-6	0.292 JB	5.45	0.0564	1
11031	23478-PeCDF	57117-31-4	1.08 JB	5.45	0.0536	1
11031	123478-HxCDF	70648-26-9	0.763 JB	5.45	0.0472	1
11031	123678-HxCDF	57117-44-9	0.464 JBQ	5.45	0.0468	1
11031	123789-HxCDF	72918-21-9	0.271 JB	5.45	0.0769	1
11031	234678-HxCDF	60851-34-5	0.660 JB	5.45	0.0469	1
11031	1234678-HpCDF	67562-39-4	6.54 B	5.45	0.0369	1
11031	1234789-HpCDF	55673-89-7	0.542 JB	5.45	0.0780	1
11031	OCDF	39001-02-0	9.42 JB	10.9	0.111	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.56			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	54	23 - 140
13C12-OCDD	38	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	51	29 - 147
13C12-1234678-HpCDF	58	28 - 143
13C12-1234789-HpCDF	31	26 - 138
13C12-OCDF	29	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125067
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 13:50 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH065-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125067
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 13:50 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH065-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13197SLC026	07/20/2013 13:57	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13197SLC026	07/17/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131970030A	07/18/2013 12:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131970030A	07/17/2013 08:35	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980026A	07/19/2013 15:32	Heather E Williams	25
12959	EFH soil ext.(microwave)	SW-846 3546	2	131980026A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/17/2013 12:35	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131970637001	07/23/2013 22:36	John P Hook	2
06951	Chromium	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131970637001	07/20/2013 10:47	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:09	John P Hook	1
06955	Lead	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131970637001	07/18/2013 06:06	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131970637001B	07/18/2013 21:31	David K Beck	2
06142	Silver	SW-846 6020A	1	131970637001A	07/18/2013 21:31	David K Beck	2
06144	Strontium	SW-846 6020A	1	131970637001A	07/24/2013 08:42	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	131970637001A	07/18/2013 21:31	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125067
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 13:50 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57000 SDG#: PH065-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131970638001	07/18/2013 09:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131970637001	07/17/2013 09:12	Denise K Conners	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131970638001	07/17/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13193039401A	07/12/2013 20:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401A	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125068
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 14:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH065-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.6	10
12969	Acenaphthylene	208-96-8	19	U	19	3.8	10
12969	Anthracene	120-12-7	19	U	19	3.8	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.6	10
12969	Benzo(a)pyrene	50-32-8	19	U	19	7.6	10
12969	Benzo(b)fluoranthene	205-99-2	19	U	19	7.6	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	38	10
12969	Benzo(g,h,i)perylene	191-24-2	19	U	19	7.6	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.6	10
12969	Butylbenzylphthalate	85-68-7	200	U	200	68	10
12969	Di-n-butylphthalate	84-74-2	200	U	200	68	10
12969	Chrysene	218-01-9	6.0	J	19	3.8	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.6	10
12969	Diethylphthalate	84-66-2	200	U	200	68	10
12969	Dimethylphthalate	131-11-3	200	U	200	68	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	200	U	200	68	10
12969	Fluoranthene	206-44-0	19	U	19	7.6	10
12969	Fluorene	86-73-7	19	U	19	7.6	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.6	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.6	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.6	10
12969	Naphthalene	91-20-3	19	U	19	7.6	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.6	10
12969	Di-n-octylphthalate	117-84-0	200	U	200	68	10
12969	Phenanthrene	85-01-8	19	U	19	7.6	10
12969	Pyrene	129-00-0	19	U	19	7.6	10
	Reporting limits were raised due to interference from the sample matrix.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20.19
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125068
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 14:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH065-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	28	U	28	11	5
12952	EFH (C15-C20)	n.a.	28	U	28	11	5
12952	EFH (C21-C30)	n.a.	31		28	11	5
12952	EFH (C30-C40)	n.a.	130		57	23	5
12952	EFH (C8-C11)	n.a.	28	U	28	11	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,700		45.3	8.17	1
06944	Antimony	7440-36-0	4.53	U	4.53	0.838	1
06935	Arsenic	7440-38-2	4.85		4.53	0.793	1
06946	Barium	7440-39-3	86.8		1.13	0.0374	1
06947	Beryllium	7440-41-7	0.714	J	1.13	0.0759	1
07914	Boron	7440-42-8	8.50	J	11.3	0.952	1
06949	Cadmium	7440-43-9	0.497	J	1.13	0.0861	1
01650	Calcium	7440-70-2	7,720		22.7	3.78	1
06951	Chromium	7440-47-3	26.7		3.40	0.181	1
06952	Cobalt	7440-48-4	5.75		1.13	0.112	1
06953	Copper	7440-50-8	13.9		2.27	0.329	1
01654	Iron	7439-89-6	25,900		45.3	4.10	1
06955	Lead	7439-92-1	6.29		3.40	0.566	1
01656	Lithium	7439-93-2	21.3		4.5	0.39	1
01657	Magnesium	7439-95-4	5,750		11.3	1.89	1
06958	Manganese	7439-96-5	188		1.13	0.0940	1
06960	Molybdenum	7439-98-7	2.27	U	2.27	0.193	1
06961	Nickel	7440-02-0	14.5		2.27	0.147	1
10145	Phosphorus	7723-14-0	368		11.3	3.27	1
01662	Potassium	7440-09-7	2,490		113	9.45	1
01667	Sodium	7440-23-5	211		113	18.9	1
06969	Tin	7440-31-5	3.01	J	11.3	0.249	1
06970	Titanium	7440-32-6	1,290		1.13	0.193	1
06971	Vanadium	7440-62-2	49.2		1.13	0.147	1
06972	Zinc	7440-66-6	58.4		4.53	0.227	1
10146	Zirconium	7440-67-7	2.90	J	5.66	0.952	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.453	U	0.453	0.113	2
06142	Silver	7440-22-4	0.0354	J	0.227	0.0295	2
06144	Strontium	7440-24-6	39.7		0.453	0.0770	2
06145	Thallium	7440-28-0	0.335		0.227	0.0340	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0178	U	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.27		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125068
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 14:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH065-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	12.6	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125068
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 14:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH065-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0237 JB	1.12	0.0184	1
11031	12378-PeCDD	40321-76-4	0.0308 JBQ	5.60	0.0262	1
11031	123478-HxCDD	39227-28-6	0.0374 JB	5.60	0.0232	1
11031	123678-HxCDD	57653-85-7	0.0606 JB	5.60	0.0243	1
11031	123789-HxCDD	19408-74-3	0.0480 JB	5.60	0.0235	1
11031	1234678-HpCDD	35822-46-9	1.20 JB	5.60	0.0469	1
11031	OCDD	3268-87-9	9.62 JB	11.2	0.0695	1
11031	2378-TCDF	51207-31-9	1.12 U	1.12	0.0166	1
11031	12378-PeCDF	57117-41-6	0.0599 JBQ	5.60	0.0167	1
11031	23478-PeCDF	57117-31-4	0.0318 JBQ	5.60	0.0158	1
11031	123478-HxCDF	70648-26-9	0.0553 JB	5.60	0.0137	1
11031	123678-HxCDF	57117-44-9	0.0420 JBQ	5.60	0.0130	1
11031	123789-HxCDF	72918-21-9	0.0497 JBQ	5.60	0.0151	1
11031	234678-HxCDF	60851-34-5	0.0476 JBQ	5.60	0.0133	1
11031	1234678-HpCDF	67562-39-4	0.265 JBQ	5.60	0.0190	1
11031	1234789-HpCDF	55673-89-7	0.0594 JB	5.60	0.0241	1
11031	OCDF	39001-02-0	0.419 JBQ	11.2	0.0636	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0593			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125068
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 14:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH065-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125068
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 14:15 by VC

Submitted: 07/12/2013 09:20
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH065-08*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13197SLC026	07/20/2013 14:29	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13197SLC026	07/17/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013 18:54	Laura M Krieger	20.19
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319331685	07/12/2013 14:46	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319331685	07/12/2013 14:47	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131970030A	07/18/2013 13:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131970030A	07/17/2013 08:35	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980026A	07/19/2013 15:53	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	2	131980026A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13196002	07/17/2013 13:31	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13196002	07/15/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131970637001	07/20/2013 10:51	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:13	John P Hook	1
06955	Lead	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131970637001	07/18/2013 06:10	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-570-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7125068
LL Group # 1403589
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/11/2013 14:15 by VC

Submitted: 07/12/2013 09:20
Reported: 07/24/2013 18:29

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57040 SDG#: PH065-08*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131970637001B	07/18/2013 21:34	David K Beck	2
06142	Silver	SW-846 6020A	1	131970637001A	07/18/2013 21:34	David K Beck	2
06144	Strontium	SW-846 6020A	1	131970637001A	07/18/2013 21:34	David K Beck	2
06145	Thallium	SW-846 6020A	1	131970637001A	07/18/2013 21:34	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131970638001	07/18/2013 09:17	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131970637001	07/17/2013 09:12	Denise K Conners	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131970638001	07/17/2013 11:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13193039401A	07/12/2013 20:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401A	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403589
Reported: 07/24/13 at 06:29 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B131972AA	Sample number(s): 7125061-7125063,7125065								
Acetone	20 U	20.	7	ug/kg	116		18-197		
Acrolein	100 U	100.	20	ug/kg	86		50-137		
Acrylonitrile	20 U	20.	4	ug/kg	111		60-133		
t-Amyl methyl ether	5 U	5.	1	ug/kg	103		63-130		
Benzene	5 U	5.	0.5	ug/kg	94		80-120		
Bromobenzene	5 U	5.	1	ug/kg	93		79-120		
Bromochloromethane	5 U	5.	1	ug/kg	101		82-133		
Bromodichloromethane	5 U	5.	1	ug/kg	93		75-114		
Bromoform	5 U	5.	1	ug/kg	102		70-120		
Bromomethane	5 U	5.	2	ug/kg	89		32-162		
2-Butanone	10 U	10.	4	ug/kg	124		38-146		
t-Butyl alcohol	50 U	50.	20	ug/kg	95		60-149		
n-Butylbenzene	5 U	5.	1	ug/kg	87		72-120		
sec-Butylbenzene	5 U	5.	1	ug/kg	89		75-120		
tert-Butylbenzene	5 U	5.	1	ug/kg	87		75-120		
Carbon Disulfide	5 U	5.	1	ug/kg	89		59-129		
Carbon Tetrachloride	5 U	5.	1	ug/kg	89		69-122		
Chlorobenzene	5 U	5.	1	ug/kg	94		80-120		
Chloroethane	5 U	5.	2	ug/kg	80		37-154		
2-Chloroethyl Vinyl Ether	10 U	10.	2	ug/kg	114		44-137		
Chloroform	5 U	5.	1	ug/kg	96		80-120		
1-Chlorohexane	5 U	5.	1	ug/kg	93		70-130		
Chloromethane	5 U	5.	2	ug/kg	86		56-120		
2-Chlorotoluene	5 U	5.	1	ug/kg	90		78-120		
4-Chlorotoluene	5 U	5.	1	ug/kg	89		79-120		
Chlorotrifluoroethene	5 U	5.	2	ug/kg	70	74	22-131	5	30
1,2-Dibromo-3-chloropropane	5 U	5.	2	ug/kg	112		55-128		
Dibromochloromethane	5 U	5.	1	ug/kg	97		77-120		
1,2-Dibromoethane	5 U	5.	1	ug/kg	104		80-120		
Dibromomethane	5 U	5.	1	ug/kg	101		80-120		
1,2-Dichlorobenzene	5 U	5.	1	ug/kg	97		80-120		
1,3-Dichlorobenzene	5 U	5.	1	ug/kg	92		80-120		
1,4-Dichlorobenzene	5 U	5.	1	ug/kg	92		80-120		
Dichlorodifluoromethane	5 U	5.	2	ug/kg	81		32-120		
1,1-Dichloroethane	5 U	5.	1	ug/kg	94		80-120		
1,2-Dichloroethane	5 U	5.	1	ug/kg	103		72-126		
1,1-Dichloroethene	5 U	5.	1	ug/kg	92		73-129		
cis-1,2-Dichloroethene	5 U	5.	1	ug/kg	96		80-120		
trans-1,2-Dichloroethene	5 U	5.	1	ug/kg	96		79-120		
1,2-Dichloropropane	5 U	5.	1	ug/kg	99		77-120		
1,3-Dichloropropane	5 U	5.	1	ug/kg	101		80-120		
2,2-Dichloropropane	5 U	5.	1	ug/kg	89		72-123		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403589
Reported: 07/24/13 at 06:29 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloropropene	5	U	5.	1	ug/kg	93		77-120		
cis-1,3-Dichloropropene	5	U	5.	1	ug/kg	98		74-120		
trans-1,3-Dichloropropene	5	U	5.	1	ug/kg	98		77-120		
Ethyl t-butyl ether	5	U	5.	1	ug/kg	101		64-124		
Ethylbenzene	5	U	5.	1	ug/kg	90		80-120		
Freon 113	5	U	5.	2	ug/kg	86		64-137		
Freon 133a	5	U	5.	2	ug/kg	90	90	78-120	1	30
Hexachlorobutadiene	5	U	5.	2	ug/kg	83		46-130		
2-Hexanone	10	U	10.	3	ug/kg	112		40-129		
di-Isopropyl ether	5	U	5.	1	ug/kg	100		68-128		
Isopropylbenzene	5	U	5.	1	ug/kg	91		76-120		
p-Isopropyltoluene	5	U	5.	1	ug/kg	86		75-120		
Methyl Iodide	5	U	5.	3	ug/kg	98		72-130		
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/kg	107		74-121		
4-Methyl-2-pentanone	10	U	10.	3	ug/kg	129*		52-125		
Methylene Chloride	5	U	5.	2	ug/kg	93		76-124		
n-Propylbenzene	5	U	5.	1	ug/kg	89		77-120		
Styrene	5	U	5.	1	ug/kg	93		76-120		
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/kg	93		80-120		
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/kg	108		71-123		
Tetrachloroethene	5	U	5.	1	ug/kg	90		78-126		
Toluene	5	U	5.	1	ug/kg	91		80-120		
1,2,3-Trichlorobenzene	5	U	5.	1	ug/kg	92		64-120		
1,2,4-Trichlorobenzene	5	U	5.	1	ug/kg	92		68-113		
1,1,1-Trichloroethane	5	U	5.	1	ug/kg	89		71-125		
1,1,2-Trichloroethane	5	U	5.	1	ug/kg	106		80-120		
Trichloroethene	5	U	5.	1	ug/kg	94		80-120		
Trichlorofluoromethane	5	U	5.	2	ug/kg	84		58-133		
1,2,3-Trichloropropane	5	U	5.	1	ug/kg	112		71-123		
1,2,4-Trimethylbenzene	5	U	5.	1	ug/kg	90		79-120		
1,3,5-Trimethylbenzene	5	U	5.	1	ug/kg	91		78-120		
Vinyl Acetate	10	U	10.	2	ug/kg	135*	127*	29-111	6	30
Vinyl Chloride	5	U	5.	1	ug/kg	91		53-120		
m+p-Xylene	5	U	5.	1	ug/kg	91		80-120		
o-Xylene	5	U	5.	1	ug/kg	91		80-120		
Batch number: Y131973AA	Sample number(s): 7125066									
Acetone	20	U	20.	6	ug/l	92	92	35-181	0	30
Acrolein	100	U	100.	40	ug/l	111	106	46-146	5	30
Acrylonitrile	20	U	20.	4	ug/l	85	86	61-130	1	30
t-Amyl methyl ether	5	U	5.	0.8	ug/l	105	105	66-120	0	30
Benzene	5	U	5.	0.5	ug/l	106	104	77-121	2	30
Bromobenzene	5	U	5.	1	ug/l	101	100	80-120	1	30
Bromochloromethane	5	U	5.	1	ug/l	114	111	80-121	2	30
Bromodichloromethane	5	U	5.	1	ug/l	107	106	73-120	1	30
Bromoform	5	U	5.	1	ug/l	100	96	61-120	4	30
Bromomethane	5	U	5.	1	ug/l	96	95	51-120	1	30
2-Butanone	10	U	10.	3	ug/l	93	93	57-141	1	30
t-Butyl alcohol	50	U	50.	10	ug/l	112	106	75-120	5	30
n-Butylbenzene	5	U	5.	1	ug/l	108	107	73-130	1	30
sec-Butylbenzene	5	U	5.	1	ug/l	109	108	74-124	1	30
tert-Butylbenzene	5	U	5.	1	ug/l	103	102	80-120	1	30
Carbon Disulfide	5	U	5.	1	ug/l	73	74	68-121	1	30
Carbon Tetrachloride	5	U	5.	1	ug/l	114	110	65-137	3	30
Chlorobenzene	5	U	5.	0.8	ug/l	112	109	80-120	3	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403589
Reported: 07/24/13 at 06:29 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chloroethane	5	U	5.	1	ug/l	83	85	60-120	2	30
2-Chloroethyl Vinyl Ether	10	U	10.	2	ug/l	99	97	52-127	2	30
Chloroform	5	U	5.	0.8	ug/l	115	113	77-122	2	30
1-Chlorohexane	5	U	5.	1	ug/l	110	107	70-130	2	30
Chloromethane	5	U	5.	1	ug/l	97	99	54-123	2	30
2-Chlorotoluene	5	U	5.	1	ug/l	104	102	80-120	1	30
4-Chlorotoluene	5	U	5.	1	ug/l	103	102	80-120	2	30
Chlorotrifluoroethene	5	U	5.	2	ug/l	74	74	47-120	0	30
1,2-Dibromo-3-chloropropane	5	U	5.	2	ug/l	99	100	56-120	1	30
Dibromochloromethane	5	U	5.	1	ug/l	100	97	72-120	3	30
1,2-Dibromoethane	5	U	5.	1	ug/l	110	106	76-120	3	30
Dibromomethane	5	U	5.	1	ug/l	109	107	80-120	2	30
1,2-Dichlorobenzene	5	U	5.	1	ug/l	111	109	80-120	1	30
1,3-Dichlorobenzene	5	U	5.	1	ug/l	107	105	80-120	2	30
1,4-Dichlorobenzene	5	U	5.	1	ug/l	108	107	80-120	1	30
Dichlorodifluoromethane	5	U	5.	2	ug/l	106	105	35-122	1	30
1,1-Dichloroethane	5	U	5.	1	ug/l	104	103	79-120	0	30
1,2-Dichloroethane	5	U	5.	1	ug/l	119	116	64-130	2	30
1,1-Dichloroethene	5	U	5.	0.8	ug/l	96	95	76-124	1	30
cis-1,2-Dichloroethene	5	U	5.	0.8	ug/l	108	107	80-120	2	30
trans-1,2-Dichloroethene	5	U	5.	0.8	ug/l	105	105	80-120	0	30
1,2-Dichloropropane	5	U	5.	1	ug/l	109	108	80-120	1	30
1,3-Dichloropropane	5	U	5.	1	ug/l	104	102	80-120	1	30
2,2-Dichloropropane	5	U	5.	1	ug/l	108	107	67-124	2	30
1,1-Dichloropropene	5	U	5.	1	ug/l	110	109	80-120	1	30
cis-1,3-Dichloropropene	5	U	5.	1	ug/l	109	109	78-120	0	30
trans-1,3-Dichloropropene	5	U	5.	1	ug/l	99	97	66-124	2	30
Ethyl t-butyl ether	5	U	5.	0.8	ug/l	102	102	66-120	0	30
Ethylbenzene	5	U	5.	0.8	ug/l	107	105	79-120	2	30
Freon 113	5	U	5.	2	ug/l	105	103	69-128	2	30
Freon 133a	5	U	5.	2	ug/l	95	97	64-120	2	30
Hexachlorobutadiene	5	U	5.	2	ug/l	112	112	58-120	1	30
2-Hexanone	10	U	10.	3	ug/l	92	91	59-125	1	30
di-Isopropyl ether	5	U	5.	0.8	ug/l	99	100	65-120	1	30
Isopropylbenzene	5	U	5.	1	ug/l	111	108	77-120	2	30
p-Isopropyltoluene	5	U	5.	1	ug/l	107	106	77-121	1	30
Methyl Iodide	5	U	5.	1	ug/l	99	98	71-122	2	30
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/l	104	105	68-121	0	30
4-Methyl-2-pentanone	10	U	10.	3	ug/l	96	95	65-122	1	30
Methylene Chloride	5	U	5.	2	ug/l	105	105	84-118	0	30
n-Propylbenzene	5	U	5.	1	ug/l	108	106	77-130	2	30
Styrene	5	U	5.	1	ug/l	108	106	77-120	2	30
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/l	111	108	79-120	3	30
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/l	101	101	70-129	1	30
Tetrachloroethene	5	U	5.	0.8	ug/l	110	108	79-120	2	30
Toluene	5	U	5.	0.7	ug/l	108	105	79-120	3	30
1,2,3-Trichlorobenzene	5	U	5.	1	ug/l	116	113	67-120	2	30
1,2,4-Trichlorobenzene	5	U	5.	1	ug/l	114	113	65-120	1	30
1,1,1-Trichloroethane	5	U	5.	0.8	ug/l	111	109	66-126	2	30
1,1,2-Trichloroethane	5	U	5.	0.8	ug/l	108	107	80-120	1	30
Trichloroethene	5	U	5.	1	ug/l	114	113	80-120	1	30
Trichlorofluoromethane	5	U	5.	2	ug/l	112	110	65-130	2	30
1,2,3-Trichloropropane	5	U	5.	1	ug/l	103	101	76-120	2	30
1,2,4-Trimethylbenzene	5	U	5.	1	ug/l	110	107	69-122	3	30
1,3,5-Trimethylbenzene	5	U	5.	1	ug/l	108	106	68-124	1	30
Vinyl Acetate	10	U	10.	2	ug/l	119	122	57-147	2	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403589
Reported: 07/24/13 at 06:29 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Vinyl Chloride	5	U	5.	1	ug/l	98	99	63-120	2	30
m+p-Xylene	5	U	5.	0.8	ug/l	108	106	77-120	2	30
o-Xylene	5	U	5.	0.8	ug/l	109	105	77-120	3	30
Batch number: 13197SLC026	Sample number(s): 7125058-7125063,7125065,7125067-7125068									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	96		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	99		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	115		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	101		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	124		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	124		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	103		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	128*		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	108		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	121		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	105		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	103		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	105		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	83		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	126		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	98		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	103		71-120		
Batch number: 13196B94A	Sample number(s): 7125066									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	108	108	75-135	0	30
Batch number: 13198A16A	Sample number(s): 7125059-7125063,7125065,7125068									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	74		67-119		
Batch number: 131970030A	Sample number(s): 7125058-7125063,7125065,7125067-7125068									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	73	74	36-106	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	94		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	100		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 131980026A	Sample number(s): 7125058-7125063,7125065,7125067-7125068									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	100		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	107		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	108		64-134		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403589
Reported: 07/24/13 at 06:29 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C30-C40)	10 U	10.	4.0	mg/kg	110		65-128		
EFH (C8-C11)	5.0 U	5.0	2.0	mg/kg	80		49-107		
Batch number: 131970637001	Sample number(s): 7125058-7125065,7125067-7125068								
Aluminum	40.0 U	40.0	7.21	mg/kg	94		80-120		
Antimony	4.00 U	4.00	0.740	mg/kg	113		80-120		
Arsenic	4.00 U	4.00	0.700	mg/kg	100		80-120		
Barium	1.00 U	1.00	0.0330	mg/kg	101		80-120		
Beryllium	1.00 U	1.00	0.0670	mg/kg	99		80-120		
Boron	10.0 U	10.0	0.840	mg/kg	97		80-120		
Cadmium	1.00 U	1.00	0.0760	mg/kg	101		80-120		
Calcium	5.84 J	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	102		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	103		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	101		80-120		
Lithium	4.0 U	4.0	0.34	mg/kg	101		80-120		
Magnesium	10.0 U	10.0	1.67	mg/kg	100		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00 U	2.00	0.130	mg/kg	104		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	103		80-120		
Potassium	100 U	100.	8.34	mg/kg	99		80-120		
Sodium	100 U	100.	16.7	mg/kg	99		80-120		
Tin	1.28 J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00 U	1.00	0.130	mg/kg	101		80-120		
Zinc	4.00 U	4.00	0.200	mg/kg	101		80-120		
Zirconium	5.00 U	5.00	0.840	mg/kg	103		80-120		
Batch number: 131970637001A	Sample number(s): 7125058-7125065,7125067-7125068								
Silver	0.200 U	0.200	0.0260	mg/kg	101		80-120		
Strontium	0.400 U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	111		80-120		
Batch number: 131970637001B	Sample number(s): 7125058-7125065,7125067-7125068								
Selenium	0.400 U	0.400	0.100	mg/kg	85		80-120		
Batch number: 131970638001	Sample number(s): 7125058-7125065,7125067-7125068								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	110		85-120		
Batch number: 132030637003	Sample number(s): 7125058-7125065,7125067-7125068								
Iron	40.0 U	40.0	3.62	mg/kg	101		80-120		
Batch number: 13193039401A	Sample number(s): 7125058-7125061,7125064-7125065,7125067-7125068								
15a pH by 9045D					100		95-105		
Batch number: 13199162401A	Sample number(s): 7125058-7125065,7125067-7125068								
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403589
Reported: 07/24/13 at 06:29 PM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13196002	Sample number(s): 7125058-7125059,7125067-7125068								
2378-TCDD	0.0400 J	1.00	0.0216	ng/kg	89		67-158		
12378-PeCDD	0.0613 J	5.00	0.0242	ng/kg	94		70-142		
123478-HxCDD	0.0220 J	5.00	0.0167	ng/kg	98		70-164		
123678-HxCDD	0.0258 J	5.00	0.0179	ng/kg	96		76-134		
123789-HxCDD	0.0474 J	5.00	0.0172	ng/kg	96		64-162		
1234678-HpCDD	0.0478 J	5.00	0.0155	ng/kg	95		70-140		
OCDD	0.263 J	10.0	0.0205	ng/kg	96		78-144		
2378-TCDF	1.00 U	1.00	0.0196	ng/kg	93		75-158		
12378-PeCDF	0.0646 J	5.00	0.0138	ng/kg	94		80-134		
23478-PeCDF	0.0232 J	5.00	0.0137	ng/kg	95		68-160		
123478-HxCDF	0.0412 J	5.00	0.00990	ng/kg	98		72-134		
123678-HxCDF	0.0216 J	5.00	0.00910	ng/kg	95		84-130		
123789-HxCDF	0.0394 J	5.00	0.0120	ng/kg	98		78-130		
234678-HxCDF	0.0356 J	5.00	0.00910	ng/kg	97		70-156		
1234678-HpCDF	0.0258 J	5.00	0.00620	ng/kg	96		82-122		
1234789-HpCDF	0.0609 J	5.00	0.0120	ng/kg	96		78-138		
OCDF	0.106 J	10.0	0.0316	ng/kg	94		63-170		
TEQ WHO 2005 - EDLx0.0	0.00230			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B131972AA	Sample number(s): 7125061-7125063,7125065 UNSPK: 7125061								
Acetone	111	94	31-195	9	30				
Acrolein	102	107	10-165	13	30				
Acrylonitrile	101	83	48-139	12	30				
t-Amyl methyl ether	102	91	39-147	4	30				
Benzene	102	94	55-143	0	30				
Bromobenzene	101	92	43-139	2	30				
Bromochloromethane	104	96	60-137	0	30				
Bromodichloromethane	98	89	53-136	2	30				
Bromoform	100	88	38-124	6	30				
Bromomethane	94	90	42-168	3	30				
2-Butanone	116	96	37-163	11	30				
t-Butyl alcohol	110	112	47-153	9	30				
n-Butylbenzene	94	87	30-146	1	30				
sec-Butylbenzene	98	93	33-157	3	30				
tert-Butylbenzene	98	93	41-152	2	30				
Carbon Disulfide	101	96	48-146	2	30				
Carbon Tetrachloride	104	98	45-153	2	30				
Chlorobenzene	102	93	49-135	2	30				
Chloroethane	84	83	39-152	6	30				
2-Chloroethyl Vinyl Ether	100	91	32-139	2	30				

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Quality Control Summary

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chloroform	106	96	61-142	3	30				
1-Chlorohexane	105	103	70-130	5	30				
Chloromethane	92	91	36-143	7	30				
2-Chlorotoluene	97	90	42-146	0	30				
4-Chlorotoluene	99	90	39-145	1	30				
1,2-Dibromo-3-chloropropane	97	83	30-139	8	30				
Dibromochloromethane	102	88	51-128	7	30				
1,2-Dibromoethane	105	91	54-129	7	30				
Dibromomethane	103	91	57-130	4	30				
1,2-Dichlorobenzene	99	91	36-133	2	30				
1,3-Dichlorobenzene	100	91	34-134	3	30				
1,4-Dichlorobenzene	99	91	35-136	2	30				
Dichlorodifluoromethane	97	95	26-151	6	30				
1,1-Dichloroethane	102	95	63-142	0	30				
1,2-Dichloroethane	108	95	49-150	5	30				
1,1-Dichloroethene	106	100	61-149	1	30				
cis-1,2-Dichloroethene	104	96	49-153	1	30				
trans-1,2-Dichloroethene	106	98	51-153	1	30				
1,2-Dichloropropane	106	96	48-145	2	30				
1,3-Dichloropropane	105	91	45-150	7	30				
2,2-Dichloropropane	99	94	53-147	2	30				
1,1-Dichloropropene	107	98	54-145	1	30				
cis-1,3-Dichloropropene	103	93	35-151	3	30				
trans-1,3-Dichloropropene	100	89	30-149	5	30				
Ethyl t-butyl ether	100	92	58-124	1	30				
Ethylbenzene	99	91	44-141	2	30				
Freon 113	97	99	56-156	10	30				
Hexachlorobutadiene	75	83	10-155	17	30				
2-Hexanone	104	86	32-160	11	30				
di-Isopropyl ether	104	96	59-133	0	30				
Isopropylbenzene	98	91	38-144	1	30				
p-Isopropyltoluene	94	89	29-152	2	30				
Methyl Iodide	108	101	52-139	0	30				
Methyl Tertiary Butyl Ether	105	91	55-129	7	30				
4-Methyl-2-pentanone	113	95	46-139	10	30				
Methylene Chloride	101	92	49-160	1	30				
n-Propylbenzene	100	97	39-157	4	30				
Styrene	100	90	35-134	3	30				
1,1,1,2-Tetrachloroethane	101	91	39-150	3	30				
1,1,2,2-Tetrachloroethane	103	90	40-152	6	30				
Tetrachloroethene	105	97	42-149	1	30				
Toluene	102	94	50-146	1	30				
1,2,3-Trichlorobenzene	91	81	10-140	4	30				
1,2,4-Trichlorobenzene	90	82	10-136	2	30				
1,1,1-Trichloroethane	101	95	43-150	2	30				
1,1,2-Trichloroethane	108	94	47-161	7	30				
Trichloroethene	105	96	53-144	1	30				
Trichlorofluoromethane	103	101	47-163	5	30				
1,2,3-Trichloropropane	110	91	45-154	11	30				
1,2,4-Trimethylbenzene	99	92	37-149	0	30				
1,3,5-Trimethylbenzene	100	92	38-150	0	30				
Vinyl Chloride	98	97	50-154	6	30				

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Quality Control Summary

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Reported: 07/24/13 at 06:29 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
m+p-Xylene	100	91	44-137	1	30						
o-Xylene	99	90	42-137	1	30						
Batch number: 13197SLC026	Sample number(s): 7125058-7125063,7125065,7125067-7125068 UNSPK: 7125061										
Acenaphthene	86	90	48-127	4	30						
Acenaphthylene	78	80	49-121	2	30						
Anthracene	81	82	52-126	1	30						
Benzo(a)anthracene	83	83	32-135	1	30						
Benzo(a)pyrene	82	83	36-138	2	30						
Benzo(b)fluoranthene	91	91	26-142	0	30						
Benzo(e)pyrene	79	80	70-130	1	30						
Benzo(g,h,i)perylene	82	87	33-141	5	30						
Benzo(k)fluoranthene	81	82	47-129	2	30						
Butylbenzylphthalate	104	105	59-153	1	30						
Di-n-butylphthalate	104	103	62-154	1	30						
Chrysene	83	83	29-148	0	30						
Dibenz(a,h)anthracene	82	87	34-125	6	30						
Diethylphthalate	105	105	76-127	1	30						
Dimethylphthalate	89	88	62-136	1	30						
Bis(2-Ethylhexyl)phthalate	101	103	39-167	1	30						
Fluoranthene	84	85	47-135	0	30						
Fluorene	80	81	50-129	1	30						
Indeno(1,2,3-cd)pyrene	83	88	17-136	6	30						
1-Methylnaphthalene	84	86	50-131	3	30						
2-Methylnaphthalene	80	82	28-144	3	30						
Naphthalene	78	81	31-148	4	30						
N-Nitrosodimethylamine	67	71	48-113	6	30						
Di-n-octylphthalate	103	103	52-162	0	30						
Phenanthrene	80	81	29-142	2	30						
Pyrene	85	84	26-143	1	30						
Batch number: 13198A16A	Sample number(s): 7125059-7125063,7125065,7125068 UNSPK: 7125061										
11a TPH by EPA 8015B GRO	72	72	39-118	0	30						
Batch number: 131970030A	Sample number(s): 7125058-7125063,7125065,7125067-7125068 UNSPK: 7125061										
PCB-1016	89	83	16-146	7	50						
PCB-1260	93	86	40-134	7	50						
Batch number: 131980026A	Sample number(s): 7125058-7125063,7125065,7125067-7125068 UNSPK: 7125061										
EFH (C12-C14)	103	107	49-123	3	20						
EFH (C15-C20)	110	116	49-123	6	20						
EFH (C21-C30)	112	118	49-123	5	20						
EFH (C30-C40)	109	115	49-123	5	20						
EFH (C8-C11)	88	93	49-123	5	20						
Batch number: 131970637001	Sample number(s): 7125058-7125065,7125067-7125068 UNSPK: 7125061 BKG: 7125061										
Aluminum	604 (2)	190 (2)	75-125	5	20	16,500		17,400		6	20
Antimony	57*	55*	75-125	3	20	3.96	U	4.00	U	0 (1)	20
Arsenic	93	95	75-125	2	20	6.20		8.55		32* (1)	20
Barium	98	86	75-125	9	20	80.6		77.6		4	20
Beryllium	97	94	75-125	2	20	0.616	J	0.739	J	18 (1)	20
Boron	95	92	75-125	3	20	4.72	J	4.33	J	8 (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403589
Reported: 07/24/13 at 06:29 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Cadmium	94	92	75-125	2	20	0.459	J	0.484	J	5 (1)	20
Calcium	-709 (2)	-964 (2)	75-125	19	20	8,800		6,560		29*	20
Chromium	91	54*	75-125	17	20	28.9		26.2		10	20
Cobalt	94	89	75-125	5	20	8.18		8.33		2	20
Copper	96	81	75-125	10	20	15.2		16.3		7	20
Lead	84	91	75-125	5	20	5.54		7.18		26* (1)	20
Lithium	98	93	75-125	4	20	23.6		25.0		6	20
Magnesium	-74 (2)	-558 (2)	75-125	18	20	5,920		5,520		7	20
Manganese	346 (2)	36 (2)	75-125	39*	20	296		335		12	20
Molybdenum	95	93	75-125	2	20	1.98	U	2.00	U	0 (1)	20
Nickel	99	84	75-125	13	20	14.9		14.1		5	20
Phosphorus	-14 (2)	-90 (2)	75-125	14	20	617		573		7	20
Potassium	136*	102	75-125	9	20	2,460		2,330		5	20
Sodium	91	85	75-125	5	20	405		407		1 (1)	20
Tin	87	86	75-125	1	20	2.90	J	3.12	J	7 (1)	20
Titanium	293 (2)	75 (2)	75-125	13	20	1,510		1,390		8	20
Vanadium	95	87	75-125	5	20	49.2		53.3		8	20
Zinc	81	56*	75-125	12	20	67.9		62.3		9	20
Zirconium	101	99	75-125	2	20	4.95	U	1.34	J	200* (1)	20
Batch number: 131970637001A	Sample number(s): 7125058-7125065,7125067-7125068 UNSPK: 7125061 BKG: 7125061										
Silver	106	105	75-125	1	20	0.198	U	0.200	U	0 (1)	20
Strontium	0 (2)	21 (2)	75-125	5	20	35.0		31.6		10	20
Thallium	107	80	75-125	15	20	0.369		0.387		5 (1)	20
Batch number: 131970637001B	Sample number(s): 7125058-7125065,7125067-7125068 UNSPK: 7125061 BKG: 7125061										
Selenium	105	92	75-125	13	20	0.396	U	0.400	U	0 (1)	20
Batch number: 131970638001	Sample number(s): 7125058-7125065,7125067-7125068 UNSPK: 7125061 BKG: 7125061										
3a Mercury 7471A	115	114	65-135	2	20	0.0157	U	0.0166	U	0 (1)	20
Batch number: 132030637003	Sample number(s): 7125058-7125065,7125067-7125068 UNSPK: 7125061 BKG: 7125061										
Iron	-1653 (2)	-2598 (2)	75-125	4	20	24,900		25,100		1	20
Batch number: 13193039401A	Sample number(s): 7125058-7125061,7125064-7125065,7125067-7125068 BKG: 7125061										
15a pH by 9045D						8.10		8.13		0	3
Batch number: 13199162401A	Sample number(s): 7125058-7125065,7125067-7125068 BKG: 7125061										
14a Moisture Content by 160.3						9.6		9.8		2	20
14a Moisture Content by 160.3						9.6		9.8		2	20
14a Moisture Content by 160.3						9.6		9.8		2	20
Batch number: 13196002	Sample number(s): 7125058-7125059,7125067-7125068 UNSPK: P125334										
2378-TCDD	91	90	40-135	2	20						
12378-PeCDD	95	93	40-135	3	20						
123478-HxCDD	99	99	40-135	2	20						
123678-HxCDD	97	98	40-135	1	20						
123789-HxCDD	97	96	40-135	3	20						
1234678-HpCDD	106	77	40-135	23*	20						

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403589
Reported: 07/24/13 at 06:29 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
OCDD	166*	11*	40-135	43*	20				
2378-TCDF	95	91	40-135	5	20				
12378-PeCDF	95	95	40-135	2	20				
23478-PeCDF	97	97	40-135	2	20				
123478-HxCDF	98	99	40-135	0	20				
123678-HxCDF	95	95	40-135	2	20				
123789-HxCDF	97	97	40-135	2	20				
234678-HxCDF	98	97	40-135	2	20				
1234678-HpCDF	98	95	40-135	4	20				
1234789-HpCDF	96	95	40-135	2	20				
OCDF	98	92	40-135	7	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 12a Volatile Organics EPA8260B
Batch number: B131972AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7125061	100	101	98	95
7125062	102	104	100	102
7125063	102	100	100	99
7125065	101	105	96	96
Blank	99	103	98	97
LCS	101	109	99	101
LCSD	97	98	97	95
MS	102	104	100	102
MSD	102	100	100	99
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 12b Volatile Organics EPA8260B
Batch number: Y131973AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7125066	106	101	96	93
Blank	103	101	97	95
LCS	103	104	99	102
LCSD	102	103	98	102
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13197SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403589
Reported: 07/24/13 at 06:29 PM

Surrogate Quality Control

7125058	82	86	99
7125059	88	90	103
7125060	86	90	101
7125061	72	77	84
7125062	71	76	80
7125063	70	77	83
7125065	81	86	92
7125067	85	92	99
7125068	83	85	95
Blank	85	92	97
LCS	86	94	99
MS	71	76	80
MSD	70	77	83
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13196B94A

	Trifluorotoluene-F
7125066	71
Blank	71
LCS	77
LCSD	76
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13198A16A

	Trifluorotoluene-F
7125059	70
7125060	73
7125061	71
7125062	68
7125063	68
7125065	73
7125068	65
Blank	74
LCS	71
MS	68
MSD	68
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 131970030A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7125058	104	76
7125059	105	89
7125060	103	87
7125061	103	86
7125062	102	90
7125063	92	85

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403589
Reported: 07/24/13 at 06:29 PM

Surrogate Quality Control

7125065	102	96
7125067	100	86
7125068	96	79
Blank	108	102
LCS	106	99
LCSD	104	106
MS	102	90
MSD	92	85
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131980026A

	Chlorobenzene	Orthoterphenyl
7125058	93	89
7125059	91	88
7125060	95	98
7125061	98	101
7125062	100	107
7125063	100	107
7125065	96	102
7125067	145*	89
7125068	83	81
Blank	97	100
LCS	96	104
MS	100	107
MSD	100	107
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13196002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7125058	77	82	82	81	82	73
7125059	79	83	85	85	85	86
7125067	73	68	77	76	76	51
7125068	77	81	81	83	82	80
Blank	68	71	75	84	80	72
MS	77	84	83	84	82	82
MSD	81	85	86	87	85	75
OPR	54	57	64	69	65	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7125058	74	58	58	82	80	80
7125059	92	85	88	86	83	84
7125067	58	31	29	68	70	74
7125068	85	77	71	81	77	81
Blank	98	59	57	74	80	82
MS	85	67	63	83	79	80
MSD	79	57	50	85	81	83
OPR	84	53	51	59	66	67

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403589
Reported: 07/24/13 at 06:29 PM

Surrogate Quality Control

Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7125058	79	74	72	72	79	
7125059	83	86	90	73	82	
7125067	72	54	38	71	68	
7125068	79	77	71	72	80	
Blank	80	81	88	59	74	
MS	79	77	77	74	84	
MSD	82	75	71	76	83	
OPR	65	69	75	50	59	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1403589 7025058-68

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/11/2013
CarrierName: FedEx
AirbillNo: 796212144625

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130711-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-574-SA8-SB-0.0-0.5	7/11/13 08:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-574-SA8-SB-0.0-0.5	7/11/13 08:45	SO	None	1 - 4 oz glass	10 day														X																	
SL-574-SA8-SB-4.0-5.0	7/11/13 09:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X						X											
SL-574-SA8-SB-9.0-10.0	7/11/13 09:45	SO	None	2 - 16 oz glass	10 day	X	X					X			X				X						X											
SL-574-SA8-SB-14.0-15.0MS	7/11/13 10:00	SO	None	6 - 16 oz glass	10 day	X	X					X			X				X						X											MS/MSD
SL-874-SA8-SB-14.0-15.0	7/11/13 10:15	SO	None	2 - 16 oz glass	10 day	X	X					X			X				X						X											

Special Instructions:

Sampler: Y. Carlos

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	07/11/2013	1600							Brandey Barclay	7.12.13	920

COC Rev 2

COC: 20130711-01, Page 1 of 1

1 of 1

13013 1403589 7125058-68

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/11/2013
CarrierName: FedEx
AirbillNo: 796212144625

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130711-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-071113	7/11/13 08:00	WQ	HCl	6 - 40 mL Vial	10 day																	X		X												
SL-574-SA8-SB-4.0-5.0	7/11/13 09:30	SO	None	2 - Encore	10 day																			X												
SL-574-SA8-SB-9.0-10.0	7/11/13 09:45	SO	None	2 - Encore	10 day																			X												
SL-574-SA8-SB-14.0-15.0MS	7/11/13 10:00	SO	None	15 - Encore	10 day																	X		X												MS/MSD
SL-874-SA8-SB-14.0-15.0	7/11/13 10:15	SO	None	5 - Encore	10 day																	X		X												
SL-570-SA8-SB-0.0-0.5	7/11/13 13:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-570-SA8-SB-0.0-0.5	7/11/13 13:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-570-SA8-SB-4.0-5.0	7/11/13 14:15	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X							X											
SL-570-SA8-SB-4.0-5.0	7/11/13 14:15	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Carbo

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stu Mysel	07/11/2013	1600							Brandy	7-12-13	920
									Brandy		

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Environmental Sample Administration Receipt Documentation Log

1403589

Client/Project: CDM

Date of Receipt: 7.12.13

Time of Receipt: 920

Source Code: SO-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.1	TB	WI	Y	B	
2	↓	1.1	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: (0)

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Barclay 2299 **Date/Time:** 7.12.13 1012

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH066

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 01, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/13/2013
Group Number: 1403853
SDG: PH066
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-578-SA8-SB-0.0-0.5 Soil	7126350
SL-578-SA8-SB-4.0-5.0 Soil	7126351
SL-578-SA8-SB-4.0-5.0MS Soil	7126352
SL-578-SA8-SB-4.0-5.0MSD Soil	7126353
SL-578-SA8-SB-4.0-5.0DUP Soil	7126354
SL-878-SA8-SB-4.0-5.0 Soil	7126355
SL-578-SA8-SB-9.0-10.0 Soil	7126356
SL-580-SA8-SB-0.0-0.5 Soil	7126357
TB-071213 Water	7126358
SL-580-SA8-SB-4.0-5.0 Soil	7126359
SL-580-SA8-SB-10.5-11.5 Soil	7126360
SL-581-SA8-SB-0.0-0.5 Soil	7126361
SL-581-SA8-SB-4.5-5.5 Soil	7126362
SL-587-SA8-SB-0.0-0.5 Soil	7126363
SL-587-SA8-SB-6.5-7.5 Soil	7126364

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-578-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126350
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 08:35 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-0 SDG#: PH066-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	360	U	360	180	1
10726	Benzidine	92-87-5	1,800	U	1,800	760	1
10726	Benzoic acid	65-85-0	540	U	540	180	1
10726	Benzyl alcohol	100-51-6	360	U	360	180	1
10726	1,1'-Biphenyl	92-52-4	36	U	36	18	1
10726	4-Bromophenyl-phenylether	101-55-3	36	U	36	18	1
10726	2-butoxy-Ethanol	111-76-2	180	U	180	180	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Carbazole	86-74-8	36	U	36	18	1
10726	4-Chloro-3-methylphenol	59-50-7	36	U	36	18	1
10726	4-Chloroaniline	106-47-8	36	U	36	18	1
10726	bis(2-Chloroethoxy)methane	111-91-1	36	U	36	18	1
10726	bis(2-Chloroethyl)ether	111-44-4	36	U	36	18	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	36	U	36	18	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	36	U	36	8	1
10726	2-Chlorophenol	95-57-8	36	U	36	18	1
10726	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	18	1
10726	Dibenzofuran	132-64-9	36	U	36	18	1
10726	1,2-Dichlorobenzene	95-50-1	36	U	36	18	1
10726	1,3-Dichlorobenzene	541-73-1	36	U	36	18	1
10726	1,4-Dichlorobenzene	106-46-7	36	U	36	18	1
10726	3,3'-Dichlorobenzidine	91-94-1	360	U	360	110	1
10726	2,4-Dichlorophenol	120-83-2	36	U	36	18	1
10726	2,6-Dichlorophenol	87-65-0	36	U	36	18	1
10726	2,4-Dimethylphenol	105-67-9	36	U	36	18	1
10726	3,5-Dimethylphenol	108-68-9	180	U	180	36	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	540	U	540	180	1
10726	2,4-Dinitrophenol	51-28-5	720	U	720	330	1
10726	1,2-Diphenylhydrazine	122-66-7	36	U	36	18	1
10726	Hexachlorobenzene	118-74-1	18	U	18	4	1
10726	Hexachlorobutadiene	87-68-3	36	U	36	18	1
10726	Hexachlorocyclopentadiene	77-47-4	540	U	540	180	1
10726	Hexachloroethane	67-72-1	180	U	180	36	1
10726	Isophorone	78-59-1	36	U	36	18	1
10726	2-Methylphenol	95-48-7	36	U	36	18	1
10726	4-Methylphenol	106-44-5	36	U	36	18	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	180	U	180	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	36	U	36	18	1
10726	3-Nitroaniline	99-09-2	180	U	180	72	1
10726	4-Nitroaniline	100-01-6	180	U	180	72	1

*=This limit was used in the evaluation of the final result

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SSFL Phase 3 Subarea 8

LL Sample # SW 7126350
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 08:35 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-0 SDG#: PH066-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Nitrobenzene	98-95-3	36	U	36	18	1
10726	2-Nitrophenol	88-75-5	36	U	36	18	1
10726	4-Nitrophenol	100-02-7	540	U	540	180	1
10726	N-Nitroso-di-n-propylamine	621-64-7	36	U	36	18	1
10726	N-Nitrosodiphenylamine	86-30-6	36	U	36	18	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	36	1
10726	Phenol	108-95-2	36	U	36	18	1
10726	2-phenoxy-Ethanol	122-99-6	180	U	180	180	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyridine	110-86-1	180	U	180	72	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	180	U	180	36	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	36	U	36	18	1
10726	2,4,5-Trichlorophenol	95-95-4	36	U	36	18	1
10726	2,4,6-Trichlorophenol	88-06-2	36	U	36	18	1
	Due to a laboratory error, 2,6-dichlorophenol was not spiked into the associated QC. The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of: phenol 660 ug/kg was detected in the re-extraction.						
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	0.79	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	0.71	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.3	J	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1

*=This limit was used in the evaluation of the final result

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578-0 SDG#: PH066-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	21		20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	11	U	11	4.3	2
12952	EFH (C15-C20)	n.a.	11	U	11	4.3	2
12952	EFH (C21-C30)	n.a.	13		11	4.3	2
12952	EFH (C30-C40)	n.a.	53		22	8.7	2
12952	EFH (C8-C11)	n.a.	11	U	11	4.3	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,900		42.5	7.67	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.787	1
06935	Arsenic	7440-38-2	5.80		4.25	0.744	1
06946	Barium	7440-39-3	118		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.735	J	1.06	0.0712	1
07914	Boron	7440-42-8	1.97	J	10.6	0.893	1
06949	Cadmium	7440-43-9	0.371	J	1.06	0.0808	1
01650	Calcium	7440-70-2	10,300		21.3	3.55	1
06951	Chromium	7440-47-3	29.9		3.19	0.170	1
06952	Cobalt	7440-48-4	11.4		1.06	0.105	1
06953	Copper	7440-50-8	23.4		2.13	0.308	1
01654	Iron	7439-89-6	28,000		42.5	3.85	1
06955	Lead	7439-92-1	7.44		3.19	0.532	1
01656	Lithium	7439-93-2	26.4		4.3	0.36	1
01657	Magnesium	7439-95-4	6,070		10.6	1.78	1
06958	Manganese	7439-96-5	534		1.06	0.0883	1
06960	Molybdenum	7439-98-7	0.308	J	2.13	0.181	1
06961	Nickel	7440-02-0	18.1		2.13	0.138	1
10145	Phosphorus	7723-14-0	365		10.6	3.07	1
01662	Potassium	7440-09-7	3,060		106	8.87	1
01667	Sodium	7440-23-5	187		106	17.8	1

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578-0 SDG#: PH066-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06969	Tin	7440-31-5	3.15 J	10.6	0.234	1
06970	Titanium	7440-32-6	1,350	1.06	0.181	1
06971	Vanadium	7440-62-2	52.2	1.06	0.138	1
06972	Zinc	7440-66-6	70.4	4.25	0.213	1
10146	Zirconium	7440-67-7	5.66	5.32	0.893	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.425 U	0.425	0.106	2
06142	Silver	7440-22-4	0.0890 J	0.213	0.0276	2
06144	Strontium	7440-24-6	31.5	0.425	0.0723	2
06145	Thallium	7440-28-0	0.368	0.213	0.0319	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171 U	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	9.39	0.0100	0.0100	1
	The pH was measured in water at 21.3 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.8	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0308	1
11031	12378-PeCDD	40321-76-4	5.30	U	5.30	0.0440	1
11031	123478-HxCDD	39227-28-6	5.30	U	5.30	0.0307	1
11031	123678-HxCDD	57653-85-7	0.0938	JQ	5.30	0.0307	1
11031	123789-HxCDD	19408-74-3	0.131	J	5.30	0.0329	1
11031	1234678-HpCDD	35822-46-9	1.41	JB	5.30	0.0497	1
11031	OCDD	3268-87-9	12.7	B	10.6	0.0343	1
11031	2378-TCDF	51207-31-9	0.0326	JQ	1.06	0.0325	1
11031	12378-PeCDF	57117-41-6	0.0515	JBQ	5.30	0.0204	1
11031	23478-PeCDF	57117-31-4	0.0735	JQ	5.30	0.0197	1
11031	123478-HxCDF	70648-26-9	0.0256	JB	5.30	0.0153	1
11031	123678-HxCDF	57117-44-9	0.0418	JBQ	5.30	0.0136	1
11031	123789-HxCDF	72918-21-9	0.168	J	5.30	0.0161	1
11031	234678-HxCDF	60851-34-5	0.0272	JBQ	5.30	0.0139	1
11031	1234678-HpCDF	67562-39-4	0.194	JB	5.30	0.0163	1
11031	1234789-HpCDF	55673-89-7	0.0406	JBQ	5.30	0.0247	1
11031	OCDF	39001-02-0	0.478	J	10.6	0.0359	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0525				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	86	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	99	17 - 157
13C12-2378-TCDF	86	24 - 169
13C12-12378-PeCDF	105	24 - 185
13C12-23478-PeCDF	100	21 - 178
13C12-123478-HxCDF	88	26 - 152
13C12-123678-HxCDF	97	26 - 123
13C12-234678-HxCDF	92	28 - 136
13C12-123789-HxCDF	100	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	86	26 - 138
13C12-OCDF	90	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13198SLD026	07/25/2013 02:55	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/20/2013 17:08	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13198SLD026	07/17/2013 18:00	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 16:00	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/19/2013 16:13	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/19/2013 18:29	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 10:47	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126350
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 08:35 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-0 SDG#: PH066-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 12:41	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 12:41	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 09:59	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 12:41	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 08:32	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401A	07/13/2013 14:28	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126351
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	380	U	380	190	1
10726	Benzidine	92-87-5	1,900	U	1,900	790	1
10726	Benzo(a)anthracene	56-55-3	8	J	19	4	1
10726	Benzoic acid	65-85-0	570	U	570	190	1
10726	Benzyl alcohol	100-51-6	380	U	380	190	1
10726	1,1'-Biphenyl	92-52-4	38	U	38	19	1
10726	4-Bromophenyl-phenylether	101-55-3	38	U	38	19	1
10726	2-butoxy-Ethanol	111-76-2	190	U	190	190	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Carbazole	86-74-8	38	U	38	19	1
10726	4-Chloro-3-methylphenol	59-50-7	38	U	38	19	1
10726	4-Chloroaniline	106-47-8	38	U	38	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	38	U	38	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	38	U	38	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	38	U	38	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	37	U	37	8	1
10726	2-Chlorophenol	95-57-8	38	U	38	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	19	1
10726	Chrysene	218-01-9	9	J	19	4	1
10726	Dibenzofuran	132-64-9	38	U	38	19	1
10726	1,2-Dichlorobenzene	95-50-1	38	U	38	19	1
10726	1,3-Dichlorobenzene	541-73-1	38	U	38	19	1
10726	1,4-Dichlorobenzene	106-46-7	38	U	38	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	380	U	380	110	1
10726	2,4-Dichlorophenol	120-83-2	38	U	38	19	1
10726	2,6-Dichlorophenol	87-65-0	38	U	38	19	1
10726	2,4-Dimethylphenol	105-67-9	38	U	38	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	38	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	570	U	570	190	1
10726	2,4-Dinitrophenol	51-28-5	750	U	750	340	1
10726	1,2-Diphenylhydrazine	122-66-7	38	U	38	19	1
10726	Fluoranthene	206-44-0	8	J	19	4	1
10726	Hexachlorobenzene	118-74-1	19	U	19	4	1
10726	Hexachlorobutadiene	87-68-3	38	U	38	19	1
10726	Hexachlorocyclopentadiene	77-47-4	570	U	570	190	1
10726	Hexachloroethane	67-72-1	190	U	190	38	1
10726	Isophorone	78-59-1	38	U	38	19	1
10726	2-Methylphenol	95-48-7	38	U	38	19	1
10726	4-Methylphenol	106-44-5	38	U	38	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	190	U	190	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126351
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	2-Nitroaniline	88-74-4	38	U	38	19	1
10726	3-Nitroaniline	99-09-2	190	U	190	75	1
10726	4-Nitroaniline	100-01-6	190	U	190	75	1
10726	Nitrobenzene	98-95-3	38	U	38	19	1
10726	2-Nitrophenol	88-75-5	38	U	38	19	1
10726	4-Nitrophenol	100-02-7	570	U	570	190	1
10726	N-Nitroso-di-n-propylamine	621-64-7	38	U	38	19	1
10726	N-Nitrosodiphenylamine	86-30-6	38	U	38	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	190	U	190	38	1
10726	Phenanthrene	85-01-8	5	J	19	4	1
10726	Phenol	108-95-2	38	U	38	19	1
10726	2-phenoxy-Ethanol	122-99-6	190	U	190	190	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyrene	129-00-0	11	J	19	4	1
10726	Pyridine	110-86-1	190	U	190	75	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	190	U	190	38	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	38	U	38	19	1
10726	2,4,5-Trichlorophenol	95-95-4	38	U	38	19	1
10726	2,4,6-Trichlorophenol	88-06-2	38	U	38	19	1
	Due to a laboratory error, 2,6-dichlorophenol was not spiked into the associated QC. The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of: benzo(b)fluoranthene 4.9 ug/kg was detected in the re-extraction.						
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	0.77	J	1.9	0.38	1
12969	Benzo(a)pyrene	50-32-8	6.3		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	9.9		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	5.0	J	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	3.1		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	4.6		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Dibenz(a,h)anthracene	53-70-3	1.2	J	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.8	J	20	6.8	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.2		1.9	0.75	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126351
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	1-Methylnaphthalene	90-12-0	0.89	J	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	0.92	J	1.9	0.75	1
12969	Naphthalene	91-20-3	0.78	J	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.81
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.7		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	28		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,300		44.4	8.00	1
06944	Antimony	7440-36-0	4.44	U	4.44	0.821	1
06935	Arsenic	7440-38-2	5.71		4.44	0.776	1
06946	Barium	7440-39-3	116		1.11	0.0366	1
06947	Beryllium	7440-41-7	0.830	J	1.11	0.0743	1
07914	Boron	7440-42-8	2.75	J	11.1	0.932	1
06949	Cadmium	7440-43-9	0.533	J	1.11	0.0843	1
01650	Calcium	7440-70-2	5,110		22.2	3.70	1
06951	Chromium	7440-47-3	29.7		3.33	0.177	1
06952	Cobalt	7440-48-4	8.52		1.11	0.110	1
06953	Copper	7440-50-8	16.9		2.22	0.322	1
01654	Iron	7439-89-6	27,500		44.4	4.01	1
06955	Lead	7439-92-1	8.58		3.33	0.555	1
01656	Lithium	7439-93-2	20.5		4.4	0.38	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126351
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	5,560	11.1	1.85	1
06958	Manganese	7439-96-5	373	1.11	0.0921	1
06960	Molybdenum	7439-98-7	0.416 J	2.22	0.189	1
06961	Nickel	7440-02-0	17.9	2.22	0.144	1
10145	Phosphorus	7723-14-0	286	11.1	3.21	1
01662	Potassium	7440-09-7	5,200	111	9.25	1
01667	Sodium	7440-23-5	214	111	18.5	1
06969	Tin	7440-31-5	3.04 J	11.1	0.244	1
06970	Titanium	7440-32-6	1,210	1.11	0.189	1
06971	Vanadium	7440-62-2	55.0	1.11	0.144	1
06972	Zinc	7440-66-6	65.4	4.44	0.222	1
10146	Zirconium	7440-67-7	7.25	5.55	0.932	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.277 J	0.444	0.111	2
06142	Silver	7440-22-4	0.0557 J	0.222	0.0288	2
06144	Strontium	7440-24-6	33.4	0.444	0.0754	2
06145	Thallium	7440-28-0	0.402	0.222	0.0333	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179 U	0.0179	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.12	0.0100	0.0100	1
	The pH was measured in water at 21.2 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.6	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126351
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.10	U	1.10	0.0520	1
11031	12378-PeCDD	40321-76-4	5.49	U	5.49	0.167	1
11031	123478-HxCDD	39227-28-6	0.0838	J	5.49	0.0657	1
11031	123678-HxCDD	57653-85-7	0.520	JQ	5.49	0.0699	1
11031	123789-HxCDD	19408-74-3	0.800	J	5.49	0.0635	1
11031	1234678-HpCDD	35822-46-9	1.41	JB	5.49	0.0528	1
11031	OCDD	3268-87-9	13.2	B	11.0	0.0480	1
11031	2378-TCDF	51207-31-9	1.10	U	1.10	0.0574	1
11031	12378-PeCDF	57117-41-6	0.127	JBQ	5.49	0.0372	1
11031	23478-PeCDF	57117-31-4	0.131	JQ	5.49	0.0331	1
11031	123478-HxCDF	70648-26-9	0.0311	JBQ	5.49	0.0296	1
11031	123678-HxCDF	57117-44-9	0.0590	JBQ	5.49	0.0279	1
11031	123789-HxCDF	72918-21-9	0.901	J	5.49	0.0334	1
11031	234678-HxCDF	60851-34-5	0.0870	JB	5.49	0.0273	1
11031	1234678-HpCDF	67562-39-4	0.204	JBQ	5.49	0.0880	1
11031	1234789-HpCDF	55673-89-7	5.49	U	5.49	0.107	1
11031	OCDF	39001-02-0	0.414	J	11.0	0.0456	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.206				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	97	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	92	28 - 130
13C12-1234678-HpCDD	106	23 - 140
13C12-OCDD	116	17 - 157
13C12-2378-TCDF	87	24 - 169
13C12-12378-PeCDF	109	24 - 185
13C12-23478-PeCDF	108	21 - 178
13C12-123478-HxCDF	90	26 - 152
13C12-123678-HxCDF	96	26 - 123
13C12-234678-HxCDF	96	28 - 136
13C12-123789-HxCDF	100	29 - 147
13C12-1234678-HpCDF	103	28 - 143
13C12-1234789-HpCDF	108	26 - 138
13C12-OCDF	104	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126351
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126351
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13198SLD026	07/25/2013 03:19	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/24/2013 13:11	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13198SLD026	07/17/2013 18:00	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198B16A	07/18/2013 21:51	Laura M Krieger	23.81
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319431704	07/13/2013 13:47	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319431704	07/13/2013 13:47	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 16:18	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/19/2013 01:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/19/2013 19:26	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126351
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 10:23	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 12:26	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 12:26	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 09:48	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 12:26	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 08:35	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401A	07/13/2013 14:28	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126352
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	1,800		19	4	1
10726	Acenaphthylene	208-96-8	1,900		19	4	1
10726	Aniline	62-53-3	1,100		380	190	1
10726	Anthracene	120-12-7	1,900		19	4	1
10726	Benzidine	92-87-5	1,900	U	1,900	790	1
10726	Benzo(a)anthracene	56-55-3	1,700		19	4	1
10726	Benzo(a)pyrene	50-32-8	1,900		19	4	1
10726	Benzo(b)fluoranthene	205-99-2	1,900		19	4	1
10726	Benzo(g,h,i)perylene	191-24-2	2,000		19	4	1
10726	Benzo(k)fluoranthene	207-08-9	1,800		19	4	1
10726	Benzoic acid	65-85-0	3,000		570	190	1
10726	Benzyl alcohol	100-51-6	1,700		380	190	1
10726	1,1'-Biphenyl	92-52-4	1,900		38	19	1
10726	4-Bromophenyl-phenylether	101-55-3	2,100		38	19	1
10726	2-butoxy-Ethanol	111-76-2	190	U	190	190	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Butylbenzylphthalate	85-68-7	1,800		190	75	1
10726	Di-n-butylphthalate	84-74-2	1,800		190	75	1
10726	Carbazole	86-74-8	1,700		38	19	1
10726	4-Chloro-3-methylphenol	59-50-7	1,700		38	19	1
10726	4-Chloroaniline	106-47-8	990		38	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,800		38	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,800		38	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,800		38	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	2,200		37	8	1
10726	2-Chlorophenol	95-57-8	1,800		38	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,600		38	19	1
10726	Chrysene	218-01-9	1,700		19	4	1
10726	Dibenz(a,h)anthracene	53-70-3	1,900		19	4	1
10726	Dibenzofuran	132-64-9	1,800		38	19	1
10726	1,2-Dichlorobenzene	95-50-1	1,800		38	19	1
10726	1,3-Dichlorobenzene	541-73-1	1,800		38	19	1
10726	1,4-Dichlorobenzene	106-46-7	1,700		38	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	1,100		380	110	1
10726	2,4-Dichlorophenol	120-83-2	1,900		38	19	1
10726	2,6-Dichlorophenol	87-65-0	38	U	38	19	1
10726	Diethylphthalate	84-66-2	1,600		190	75	1
10726	2,4-Dimethylphenol	105-67-9	1,600		38	19	1
10726	3,5-Dimethylphenol	108-68-9	1,900		190	38	1
10726	Dimethylphthalate	131-11-3	1,700		190	75	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,900		570	190	1
10726	2,4-Dinitrophenol	51-28-5	2,900		750	340	1
10726	1,2-Diphenylhydrazine	122-66-7	2,200		38	19	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,800		190	75	1
10726	Fluoranthene	206-44-0	1,500		19	4	1
10726	Fluorene	86-73-7	1,700		19	4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126352
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Hexachlorobenzene	118-74-1	2,000		19	4	1
10726	Hexachlorobutadiene	87-68-3	1,900		38	19	1
10726	Hexachlorocyclopentadiene	77-47-4	3,200		570	190	1
10726	Hexachloroethane	67-72-1	1,800		190	38	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,900		19	4	1
10726	Isophorone	78-59-1	1,800		38	19	1
10726	1-Methylnaphthalene	90-12-0	1,800		19	4	1
10726	2-Methylnaphthalene	91-57-6	1,700		19	4	1
10726	2-Methylphenol	95-48-7	1,600		38	19	1
10726	4-Methylphenol	106-44-5	1,600		38	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	1,800		19	4	1
10726	NDPA as diphenylamine	n.a.	1,900		190	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	1,700		38	19	1
10726	3-Nitroaniline	99-09-2	1,600		190	75	1
10726	4-Nitroaniline	100-01-6	1,300		190	75	1
10726	Nitrobenzene	98-95-3	1,800		38	19	1
10726	2-Nitrophenol	88-75-5	1,900		38	19	1
10726	4-Nitrophenol	100-02-7	1,400		570	190	1
10726	N-Nitrosodimethylamine	62-75-9	1,500		190	75	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,600		38	19	1
10726	N-Nitrosodiphenylamine	86-30-6	1,900		38	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	1,900		190	75	1
10726	Pentachlorophenol	87-86-5	1,600		190	38	1
10726	Phenanthrene	85-01-8	1,800		19	4	1
10726	Phenol	108-95-2	1,700		38	19	1
10726	2-phenoxy-Ethanol	122-99-6	190	U	190	190	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyrene	129-00-0	1,800		19	4	1
10726	Pyridine	110-86-1	1,100		190	75	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	190	U	190	38	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	1,900		38	19	1
10726	2,4,5-Trichlorophenol	95-95-4	1,800		38	19	1
10726	2,4,6-Trichlorophenol	88-06-2	1,700		38	19	1

Due to a laboratory error, 2,6-dichlorophenol was not spiked into the associated QC. The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126352
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	35		1.9	0.75	1
12969	Acenaphthylene	208-96-8	34		1.9	0.38	1
12969	Anthracene	120-12-7	37		1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	45		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	44		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	56		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	40		19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	21		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	47		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	47		20	6.8	1
12969	Di-n-butylphthalate	84-74-2	45		20	6.8	1
12969	Chrysene	218-01-9	47		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	25		1.9	0.75	1
12969	Diethylphthalate	84-66-2	47		20	6.8	1
12969	Dimethylphthalate	131-11-3	39		20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	49		20	6.8	1
12969	Fluoranthene	206-44-0	52		1.9	0.75	1
12969	Fluorene	86-73-7	36		1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	25		1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	39		1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	38		1.9	0.75	1
12969	Naphthalene	91-20-3	37		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	30		1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	65		20	6.8	1
12969	Phenanthrene	85-01-8	42		1.9	0.75	1
12969	Pyrene	129-00-0	51		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	9.0		1.1	0.2	23.5
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	170		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	170		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	4.4	J	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126352
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	19		5.7	2.3	1
12952	EFH (C30-C40)	n.a.	49		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	36,500		45.2	8.16	1
06944	Antimony	7440-36-0	19.9		4.52	0.837	1
06935	Arsenic	7440-38-2	23.1		4.52	0.792	1
06946	Barium	7440-39-3	368		1.13	0.0373	1
06947	Beryllium	7440-41-7	6.72		1.13	0.0758	1
07914	Boron	7440-42-8	220		11.3	0.950	1
06949	Cadmium	7440-43-9	5.70		1.13	0.0860	1
01650	Calcium	7440-70-2	5,840		22.6	3.78	1
06951	Chromium	7440-47-3	60.2		3.39	0.181	1
06952	Cobalt	7440-48-4	61.5		1.13	0.112	1
06953	Copper	7440-50-8	46.0		2.26	0.328	1
01654	Iron	7439-89-6	31,600		90.5	8.19	2
06955	Lead	7439-92-1	25.1		3.39	0.566	1
01656	Lithium	7439-93-2	138		4.5	0.38	1
01657	Magnesium	7439-95-4	6,820		11.3	1.89	1
06958	Manganese	7439-96-5	445		1.13	0.0939	1
06960	Molybdenum	7439-98-7	208		2.26	0.192	1
06961	Nickel	7440-02-0	72.9		2.26	0.147	1
10145	Phosphorus	7723-14-0	362		11.3	3.27	1
01662	Potassium	7440-09-7	6,910		113	9.43	1
01667	Sodium	7440-23-5	1,280		113	18.9	1
06969	Tin	7440-31-5	399		11.3	0.249	1
06970	Titanium	7440-32-6	1,770		1.13	0.192	1
06971	Vanadium	7440-62-2	127		1.13	0.147	1
06972	Zinc	7440-66-6	127		4.52	0.226	1
10146	Zirconium	7440-67-7	117		5.66	0.950	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.72		0.452	0.113	2
06142	Silver	7440-22-4	14.7		0.226	0.0294	2
06144	Strontium	7440-24-6	44.5		0.452	0.0769	2
06145	Thallium	7440-28-0	1.06		0.226	0.0339	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.211		0.0182	0.0109	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	11.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126352
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	24.3		1.11	0.139	1
11031	12378-PeCDD	40321-76-4	118		5.57	0.166	1
11031	123478-HxCDD	39227-28-6	119		5.57	0.113	1
11031	123678-HxCDD	57653-85-7	113		5.57	0.115	1
11031	123789-HxCDD	19408-74-3	112		5.57	0.112	1
11031	1234678-HpCDD	35822-46-9	108	B	5.57	0.156	1
11031	OCDD	3268-87-9	219	B	11.1	0.136	1
11031	2378-TCDF	51207-31-9	22.9		1.11	0.119	1
11031	12378-PeCDF	57117-41-6	113	B	5.57	0.0965	1
11031	23478-PeCDF	57117-31-4	117		5.57	0.0957	1
11031	123478-HxCDF	70648-26-9	106	B	5.57	0.109	1
11031	123678-HxCDF	57117-44-9	110	B	5.57	0.109	1
11031	123789-HxCDF	72918-21-9	109		5.57	0.139	1
11031	234678-HxCDF	60851-34-5	107	B	5.57	0.110	1
11031	1234678-HpCDF	67562-39-4	105	B	5.57	0.0976	1
11031	1234789-HpCDF	55673-89-7	102	B	5.57	0.140	1
11031	OCDF	39001-02-0	200		11.1	0.131	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	96	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	98	17 - 157
13C12-2378-TCDF	88	24 - 169
13C12-12378-PeCDF	106	24 - 185
13C12-23478-PeCDF	102	21 - 178
13C12-123478-HxCDF	89	26 - 152
13C12-123678-HxCDF	95	26 - 123
13C12-234678-HxCDF	91	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	90	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126352
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13198SLD026	07/25/2013 03:43	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/24/2013 13:43	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13198SLD026	07/17/2013 18:00	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198B16A	07/18/2013 22:29	Laura M Krieger	23.5
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319431704	07/13/2013 13:47	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319431704	07/13/2013 13:48	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 16:37	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/19/2013 01:45	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/19/2013 20:22	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 16:31	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126352
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 10:35	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 12:34	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 12:34	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 09:53	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 12:34	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 08:41	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126353
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	1,900		19	4	1
10726	Acenaphthylene	208-96-8	1,900		19	4	1
10726	Aniline	62-53-3	1,100		380	190	1
10726	Anthracene	120-12-7	1,900		19	4	1
10726	Benzidine	92-87-5	1,900	U	1,900	790	1
10726	Benzo(a)anthracene	56-55-3	1,700		19	4	1
10726	Benzo(a)pyrene	50-32-8	1,900		19	4	1
10726	Benzo(b)fluoranthene	205-99-2	1,800		19	4	1
10726	Benzo(g,h,i)perylene	191-24-2	2,000		19	4	1
10726	Benzo(k)fluoranthene	207-08-9	1,900		19	4	1
10726	Benzoic acid	65-85-0	3,000		570	190	1
10726	Benzyl alcohol	100-51-6	1,700		380	190	1
10726	1,1'-Biphenyl	92-52-4	1,900		38	19	1
10726	4-Bromophenyl-phenylether	101-55-3	2,000		38	19	1
10726	2-butoxy-Ethanol	111-76-2	190	U	190	190	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Butylbenzylphthalate	85-68-7	1,800		190	75	1
10726	Di-n-butylphthalate	84-74-2	1,800		190	75	1
10726	Carbazole	86-74-8	1,700		38	19	1
10726	4-Chloro-3-methylphenol	59-50-7	1,600		38	19	1
10726	4-Chloroaniline	106-47-8	850		38	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,800		38	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,800		38	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,700		38	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	2,200		37	8	1
10726	2-Chlorophenol	95-57-8	2,000		38	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,800		38	19	1
10726	Chrysene	218-01-9	1,600		19	4	1
10726	Dibenz(a,h)anthracene	53-70-3	2,000		19	4	1
10726	Dibenzofuran	132-64-9	1,800		38	19	1
10726	1,2-Dichlorobenzene	95-50-1	1,800		38	19	1
10726	1,3-Dichlorobenzene	541-73-1	1,800		38	19	1
10726	1,4-Dichlorobenzene	106-46-7	1,700		38	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	1,200		380	110	1
10726	2,4-Dichlorophenol	120-83-2	1,800		38	19	1
10726	2,6-Dichlorophenol	87-65-0	38	U	38	19	1
10726	Diethylphthalate	84-66-2	1,800		190	75	1
10726	2,4-Dimethylphenol	105-67-9	1,600		38	19	1
10726	3,5-Dimethylphenol	108-68-9	1,900		190	38	1
10726	Dimethylphthalate	131-11-3	1,800		190	75	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,800		570	190	1
10726	2,4-Dinitrophenol	51-28-5	2,800		750	340	1
10726	1,2-Diphenylhydrazine	122-66-7	2,200		38	19	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,800		190	75	1
10726	Fluoranthene	206-44-0	1,500		19	4	1
10726	Fluorene	86-73-7	1,800		19	4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126353
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Hexachlorobenzene	118-74-1	2,000		19	4	1
10726	Hexachlorobutadiene	87-68-3	1,800		38	19	1
10726	Hexachlorocyclopentadiene	77-47-4	3,300		570	190	1
10726	Hexachloroethane	67-72-1	1,800		190	38	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	2,000		19	4	1
10726	Isophorone	78-59-1	1,700		38	19	1
10726	1-Methylnaphthalene	90-12-0	1,800		19	4	1
10726	2-Methylnaphthalene	91-57-6	1,600		19	4	1
10726	2-Methylphenol	95-48-7	1,700		38	19	1
10726	4-Methylphenol	106-44-5	1,600		38	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	1,800		19	4	1
10726	NDPA as diphenylamine	n.a.	1,900		190	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	1,800		38	19	1
10726	3-Nitroaniline	99-09-2	1,700		190	75	1
10726	4-Nitroaniline	100-01-6	1,400		190	75	1
10726	Nitrobenzene	98-95-3	1,700		38	19	1
10726	2-Nitrophenol	88-75-5	1,800		38	19	1
10726	4-Nitrophenol	100-02-7	1,500		570	190	1
10726	N-Nitrosodimethylamine	62-75-9	1,500		190	75	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,700		38	19	1
10726	N-Nitrosodiphenylamine	86-30-6	1,900		38	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	1,900		190	75	1
10726	Pentachlorophenol	87-86-5	1,600		190	38	1
10726	Phenanthrene	85-01-8	1,800		19	4	1
10726	Phenol	108-95-2	1,700		38	19	1
10726	2-phenoxy-Ethanol	122-99-6	190	U	190	190	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyrene	129-00-0	1,800		19	4	1
10726	Pyridine	110-86-1	1,100		190	75	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	190	U	190	38	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	1,800		38	19	1
10726	2,4,5-Trichlorophenol	95-95-4	1,900		38	19	1
10726	2,4,6-Trichlorophenol	88-06-2	1,900		38	19	1

Due to a laboratory error, 2,6-dichlorophenol was not spiked into the associated QC. The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126353
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	35		1.9	0.75	1
12969	Acenaphthylene	208-96-8	35		1.9	0.38	1
12969	Anthracene	120-12-7	35		1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	36		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	37		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	47		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	36		19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	20		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	40		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	47		20	6.8	1
12969	Di-n-butylphthalate	84-74-2	45		20	6.8	1
12969	Chrysene	218-01-9	37		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	26		1.9	0.75	1
12969	Diethylphthalate	84-66-2	51		20	6.8	1
12969	Dimethylphthalate	131-11-3	39		20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	51		20	6.8	1
12969	Fluoranthene	206-44-0	37		1.9	0.75	1
12969	Fluorene	86-73-7	36		1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	24		1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	39		1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	37		1.9	0.75	1
12969	Naphthalene	91-20-3	36		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	30		1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	67		20	6.8	1
12969	Phenanthrene	85-01-8	36		1.9	0.75	1
12969	Pyrene	129-00-0	36		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.8		1.1	0.2	23.95
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	180		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	180		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	3.5	J	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126353
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	11		5.7	2.3	1
12952	EFH (C30-C40)	n.a.	29		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	39,400		44.8	8.08	1
06944	Antimony	7440-36-0	16.1		4.48	0.829	1
06935	Arsenic	7440-38-2	23.2		4.48	0.784	1
06946	Barium	7440-39-3	349		1.12	0.0370	1
06947	Beryllium	7440-41-7	6.74		1.12	0.0750	1
07914	Boron	7440-42-8	218		11.2	0.941	1
06949	Cadmium	7440-43-9	5.59		1.12	0.0851	1
01650	Calcium	7440-70-2	6,000		22.4	3.74	1
06951	Chromium	7440-47-3	62.2		3.36	0.179	1
06952	Cobalt	7440-48-4	60.7		1.12	0.111	1
06953	Copper	7440-50-8	44.6		2.24	0.325	1
01654	Iron	7439-89-6	33,600		89.6	8.11	2
06955	Lead	7439-92-1	24.4		3.36	0.560	1
01656	Lithium	7439-93-2	138		4.5	0.38	1
01657	Magnesium	7439-95-4	7,150		11.2	1.87	1
06958	Manganese	7439-96-5	483		1.12	0.0930	1
06960	Molybdenum	7439-98-7	200		2.24	0.190	1
06961	Nickel	7440-02-0	72.9		2.24	0.146	1
10145	Phosphorus	7723-14-0	341		11.2	3.24	1
01662	Potassium	7440-09-7	6,360		112	9.34	1
01667	Sodium	7440-23-5	1,280		112	18.7	1
06969	Tin	7440-31-5	385		11.2	0.246	1
06970	Titanium	7440-32-6	1,740		1.12	0.190	1
06971	Vanadium	7440-62-2	131		1.12	0.146	1
06972	Zinc	7440-66-6	127		4.48	0.224	1
10146	Zirconium	7440-67-7	113		5.60	0.941	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	3.38		0.448	0.112	2
06142	Silver	7440-22-4	15.5		0.224	0.0291	2
06144	Strontium	7440-24-6	45.3		0.448	0.0762	2
06145	Thallium	7440-28-0	1.16		0.224	0.0336	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.209		0.0177	0.0106	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	11.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126353
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.7		1.08	0.0881	1
11031	12378-PeCDD	40321-76-4	116		5.42	0.0891	1
11031	123478-HxCDD	39227-28-6	112		5.42	0.0688	1
11031	123678-HxCDD	57653-85-7	107		5.42	0.0721	1
11031	123789-HxCDD	19408-74-3	111		5.42	0.0724	1
11031	1234678-HpCDD	35822-46-9	103	B	5.42	0.0732	1
11031	OCDD	3268-87-9	210	B	10.8	0.0492	1
11031	2378-TCDF	51207-31-9	22.0		1.08	0.0672	1
11031	12378-PeCDF	57117-41-6	111	B	5.42	0.0506	1
11031	23478-PeCDF	57117-31-4	114		5.42	0.0468	1
11031	123478-HxCDF	70648-26-9	104	B	5.42	0.0534	1
11031	123678-HxCDF	57117-44-9	104	B	5.42	0.0506	1
11031	123789-HxCDF	72918-21-9	102		5.42	0.0600	1
11031	234678-HxCDF	60851-34-5	104	B	5.42	0.0505	1
11031	1234678-HpCDF	67562-39-4	101	B	5.42	0.0459	1
11031	1234789-HpCDF	55673-89-7	102	B	5.42	0.0636	1
11031	OCDF	39001-02-0	192		10.8	0.0524	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	111	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	94	24 - 185
13C12-23478-PeCDF	89	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	106	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	95	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126353
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13198SLD026	07/25/2013 04:08	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/24/2013 14:14	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13198SLD026	07/17/2013 18:00	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198B16A	07/18/2013 23:07	Laura M Krieger	23.95
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319431704	07/13/2013 13:48	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319431704	07/13/2013 13:48	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 16:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/19/2013 02:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/19/2013 21:19	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 16:35	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126353
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 10:39	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 12:36	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 12:36	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 09:55	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 12:36	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 08:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126354
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,700		45.2	8.16	1
06944	Antimony	7440-36-0	4.52	U	4.52	0.837	1
06935	Arsenic	7440-38-2	6.35		4.52	0.792	1
06946	Barium	7440-39-3	141		1.13	0.0373	1
06947	Beryllium	7440-41-7	0.975	J	1.13	0.0758	1
07914	Boron	7440-42-8	2.99	J	11.3	0.950	1
06949	Cadmium	7440-43-9	0.500	J	1.13	0.0860	1
01650	Calcium	7440-70-2	5,440		22.6	3.78	1
06951	Chromium	7440-47-3	35.0		3.39	0.181	1
06952	Cobalt	7440-48-4	10.2		1.13	0.112	1
06953	Copper	7440-50-8	18.0		2.26	0.328	1
01654	Iron	7439-89-6	31,500		90.5	8.19	2
06955	Lead	7439-92-1	8.86		3.39	0.566	1
01656	Lithium	7439-93-2	23.9		4.5	0.38	1
01657	Magnesium	7439-95-4	6,250		11.3	1.89	1
06958	Manganese	7439-96-5	562		1.13	0.0939	1
06960	Molybdenum	7439-98-7	0.303	J	2.26	0.192	1
06961	Nickel	7440-02-0	21.1		2.26	0.147	1
10145	Phosphorus	7723-14-0	254		11.3	3.27	1
01662	Potassium	7440-09-7	5,080		113	9.43	1
01667	Sodium	7440-23-5	222		113	18.9	1
06969	Tin	7440-31-5	3.20	J	11.3	0.249	1
06970	Titanium	7440-32-6	1,300		1.13	0.192	1
06971	Vanadium	7440-62-2	65.4		1.13	0.147	1
06972	Zinc	7440-66-6	70.7		4.52	0.226	1
10146	Zirconium	7440-67-7	8.46		5.66	0.950	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.277	J	0.452	0.113	2
06142	Silver	7440-22-4	0.0818	J	0.226	0.0294	2
06144	Strontium	7440-24-6	38.8		0.452	0.0769	2
06145	Thallium	7440-28-0	0.410		0.226	0.0339	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0180	U	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.09		0.0100	0.0100	1
	The pH was measured in water at 21.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	11.6		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	10.5		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126354
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:15 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-4 SDG#: PH066-02DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 16:27	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 10:30	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 12:31	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 12:31	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 09:52	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 12:31	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 08:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401A	07/13/2013 14:28	Clayton C Litchmore	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-878-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126355
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

878-4 SDG#: PH066-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	380	U	380	190	1
10726	Benzidine	92-87-5	1,900	U	1,900	790	1
10726	Benzoic acid	65-85-0	560	U	560	190	1
10726	Benzyl alcohol	100-51-6	380	U	380	190	1
10726	1,1'-Biphenyl	92-52-4	38	U	38	19	1
10726	4-Bromophenyl-phenylether	101-55-3	38	U	38	19	1
10726	2-butoxy-Ethanol	111-76-2	190	U	190	190	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Carbazole	86-74-8	38	U	38	19	1
10726	4-Chloro-3-methylphenol	59-50-7	38	U	38	19	1
10726	4-Chloroaniline	106-47-8	38	U	38	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	38	U	38	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	38	U	38	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	38	U	38	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	37	U	37	8	1
10726	2-Chlorophenol	95-57-8	38	U	38	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	19	1
10726	Dibenzofuran	132-64-9	38	U	38	19	1
10726	1,2-Dichlorobenzene	95-50-1	38	U	38	19	1
10726	1,3-Dichlorobenzene	541-73-1	38	U	38	19	1
10726	1,4-Dichlorobenzene	106-46-7	38	U	38	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	380	U	380	110	1
10726	2,4-Dichlorophenol	120-83-2	38	U	38	19	1
10726	2,6-Dichlorophenol	87-65-0	38	U	38	19	1
10726	2,4-Dimethylphenol	105-67-9	38	U	38	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	38	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	560	U	560	190	1
10726	2,4-Dinitrophenol	51-28-5	740	U	740	340	1
10726	1,2-Diphenylhydrazine	122-66-7	38	U	38	19	1
10726	Hexachlorobenzene	118-74-1	19	U	19	4	1
10726	Hexachlorobutadiene	87-68-3	38	U	38	19	1
10726	Hexachlorocyclopentadiene	77-47-4	560	U	560	190	1
10726	Hexachloroethane	67-72-1	190	U	190	38	1
10726	Isophorone	78-59-1	38	U	38	19	1
10726	2-Methylphenol	95-48-7	38	U	38	19	1
10726	4-Methylphenol	106-44-5	38	U	38	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	190	U	190	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	38	U	38	19	1
10726	3-Nitroaniline	99-09-2	190	U	190	75	1
10726	4-Nitroaniline	100-01-6	190	U	190	75	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-878-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126355
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

878-4 SDG#: PH066-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Nitrobenzene	98-95-3	38	U	38	19	1
10726	2-Nitrophenol	88-75-5	38	U	38	19	1
10726	4-Nitrophenol	100-02-7	560	U	560	190	1
10726	N-Nitroso-di-n-propylamine	621-64-7	38	U	38	19	1
10726	N-Nitrosodiphenylamine	86-30-6	38	U	38	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	190	U	190	38	1
10726	Phenol	108-95-2	38	U	38	19	1
10726	2-phenoxy-Ethanol	122-99-6	190	U	190	190	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyridine	110-86-1	190	U	190	75	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	190	U	190	38	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	38	U	38	19	1
10726	2,4,5-Trichlorophenol	95-95-4	38	U	38	19	1
10726	2,4,6-Trichlorophenol	88-06-2	38	U	38	19	1
	Due to a laboratory error, 2,6-dichlorophenol was not spiked into the associated QC. The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.						
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	0.88	J	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.1	J	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	2.4		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.1	J	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	2.4		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.8	J	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	0.78	J	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-878-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126355
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

878-4 SDG#: PH066-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Phenanthrene	85-01-8	1.5	J	1.9	0.75	1
12969	Pyrene	129-00-0	1.6	J	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.58
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	18		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,500		43.0	7.75	1
06944	Antimony	7440-36-0	4.30	U	4.30	0.795	1
06935	Arsenic	7440-38-2	6.49		4.30	0.752	1
06946	Barium	7440-39-3	135		1.07	0.0355	1
06947	Beryllium	7440-41-7	1.02	J	1.07	0.0720	1
07914	Boron	7440-42-8	3.04	J	10.7	0.903	1
06949	Cadmium	7440-43-9	0.408	J	1.07	0.0817	1
01650	Calcium	7440-70-2	5,050		21.5	3.59	1
06951	Chromium	7440-47-3	36.2		3.22	0.172	1
06952	Cobalt	7440-48-4	10.1		1.07	0.106	1
06953	Copper	7440-50-8	17.7		2.15	0.312	1
01654	Iron	7439-89-6	32,600		86.0	7.78	2
06955	Lead	7439-92-1	8.91		3.22	0.537	1
01656	Lithium	7439-93-2	24.3		4.3	0.37	1
01657	Magnesium	7439-95-4	6,350		10.7	1.80	1
06958	Manganese	7439-96-5	524		1.07	0.0892	1
06960	Molybdenum	7439-98-7	0.229	J	2.15	0.183	1
06961	Nickel	7440-02-0	20.8		2.15	0.140	1
10145	Phosphorus	7723-14-0	242		10.7	3.11	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-878-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126355
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

878-4 SDG#: PH066-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01662	Potassium	7440-09-7	5,300	107	8.96	1
01667	Sodium	7440-23-5	207	107	18.0	1
06969	Tin	7440-31-5	3.10 J	10.7	0.236	1
06970	Titanium	7440-32-6	1,340	1.07	0.183	1
06971	Vanadium	7440-62-2	66.8	1.07	0.140	1
06972	Zinc	7440-66-6	70.2	4.30	0.215	1
10146	Zirconium	7440-67-7	7.25	5.37	0.903	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.326 J	0.430	0.107	2
06142	Silver	7440-22-4	0.0645 J	0.215	0.0279	2
06144	Strontium	7440-24-6	34.1	0.430	0.0731	2
06145	Thallium	7440-28-0	0.588	0.215	0.0322	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0177 U	0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	5.91	0.0100	0.0100	1
	The pH was measured in water at 21.4 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.4	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-878-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126355
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

878-4 SDG#: PH066-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0442	1
11031	12378-PeCDD	40321-76-4	0.144	JQ	5.40	0.0658	1
11031	123478-HxCDD	39227-28-6	0.0627	J	5.40	0.0405	1
11031	123678-HxCDD	57653-85-7	0.430	J	5.40	0.0413	1
11031	123789-HxCDD	19408-74-3	0.735	J	5.40	0.0418	1
11031	1234678-HpCDD	35822-46-9	0.273	JBQ	5.40	0.0362	1
11031	OCDD	3268-87-9	1.52	JB	10.8	0.0406	1
11031	2378-TCDF	51207-31-9	1.08	U	1.08	0.0397	1
11031	12378-PeCDF	57117-41-6	0.248	JBQ	5.40	0.0257	1
11031	23478-PeCDF	57117-31-4	0.0415	JQ	5.40	0.0249	1
11031	123478-HxCDF	70648-26-9	0.0716	JBQ	5.40	0.0193	1
11031	123678-HxCDF	57117-44-9	0.114	JBQ	5.40	0.0194	1
11031	123789-HxCDF	72918-21-9	1.06	J	5.40	0.0235	1
11031	234678-HxCDF	60851-34-5	0.0605	JBQ	5.40	0.0193	1
11031	1234678-HpCDF	67562-39-4	0.0814	JBQ	5.40	0.0142	1
11031	1234789-HpCDF	55673-89-7	0.0496	JBQ	5.40	0.0181	1
11031	OCDF	39001-02-0	0.147	J	10.8	0.0349	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.230				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	90	25 - 164
13C12-12378-PeCDD	100	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	94	28 - 130
13C12-123789-HxCDD	95	28 - 130
13C12-1234678-HpCDD	102	23 - 140
13C12-OCDD	124	17 - 157
13C12-2378-TCDF	100	24 - 169
13C12-12378-PeCDF	113	24 - 185
13C12-23478-PeCDF	112	21 - 178
13C12-123478-HxCDF	99	26 - 152
13C12-123678-HxCDF	103	26 - 123
13C12-234678-HxCDF	99	28 - 136
13C12-123789-HxCDF	103	29 - 147
13C12-1234678-HpCDF	110	28 - 143
13C12-1234789-HpCDF	107	26 - 138
13C12-OCDF	117	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-878-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126355
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

878-4 SDG#: PH066-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-878-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126355
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

878-4 SDG#: PH066-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13198SLD026	07/25/2013 04:32	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/20/2013 17:40	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13198SLD026	07/17/2013 18:00	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198B16A	07/18/2013 18:03	Laura M Krieger	23.58
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319431704	07/13/2013 13:49	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319431704	07/13/2013 13:50	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 17:14	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/19/2013 00:42	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/19/2013 22:16	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 16:39	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-878-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126355
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

878-4 SDG#: PH066-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 10:51	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 12:43	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 12:43	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 10:00	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 12:43	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 08:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401A	07/13/2013 14:28	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126356
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-8 SDG#: PH066-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	350	U	350	180	1
10726	Benzidine	92-87-5	1,800	U	1,800	740	1
10726	Benzoic acid	65-85-0	530	U	530	180	1
10726	Benzyl alcohol	100-51-6	350	U	350	180	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	18	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	18	1
10726	2-butoxy-Ethanol	111-76-2	180	U	180	180	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Carbazole	86-74-8	35	U	35	18	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	18	1
10726	4-Chloroaniline	106-47-8	35	U	35	18	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	18	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	18	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	18	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	35	U	35	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	18	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	18	1
10726	Dibenzofuran	132-64-9	35	U	35	18	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	18	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	18	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	18	1
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	110	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	18	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	18	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	18	1
10726	3,5-Dimethylphenol	108-68-9	180	U	180	35	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	530	U	530	180	1
10726	2,4-Dinitrophenol	51-28-5	700	U	700	320	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	18	1
10726	Hexachlorobenzene	118-74-1	18	U	18	4	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	18	1
10726	Hexachlorocyclopentadiene	77-47-4	530	U	530	180	1
10726	Hexachloroethane	67-72-1	180	U	180	35	1
10726	Isophorone	78-59-1	35	U	35	18	1
10726	2-Methylphenol	95-48-7	35	U	35	18	1
10726	4-Methylphenol	106-44-5	35	U	35	18	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	180	U	180	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	18	1
10726	3-Nitroaniline	99-09-2	180	U	180	70	1
10726	4-Nitroaniline	100-01-6	180	U	180	70	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126356
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-8 SDG#: PH066-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Nitrobenzene	98-95-3	35	U	35	18	1
10726	2-Nitrophenol	88-75-5	35	U	35	18	1
10726	4-Nitrophenol	100-02-7	530	U	530	180	1
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	18	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	18	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenol	108-95-2	35	U	35	18	1
10726	2-phenoxy-Ethanol	122-99-6	180	U	180	180	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyridine	110-86-1	180	U	180	70	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	180	U	180	35	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	18	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	18	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	18	1
	Due to a laboratory error, 2,6-dichlorophenol was not spiked into the associated QC. The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of: pyrene 3.8 ug/kg was detected in the re-extraction.						
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.3	J	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	J	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	2.3		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.82	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.0	J	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.9		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.7	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.8		1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126356
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-8 SDG#: PH066-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.4	J	1.8	0.70	1
12969	Pyrene	129-00-0	1.9		1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.08
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.0	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	17		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,300		41.8	7.54	1
06944	Antimony	7440-36-0	4.18	U	4.18	0.774	1
06935	Arsenic	7440-38-2	5.05		4.18	0.732	1
06946	Barium	7440-39-3	87.1		1.05	0.0345	1
06947	Beryllium	7440-41-7	0.440	J	1.05	0.0700	1
07914	Boron	7440-42-8	10.5	U	10.5	0.878	1
06949	Cadmium	7440-43-9	0.351	J	1.05	0.0795	1
01650	Calcium	7440-70-2	5,280		20.9	3.49	1
06951	Chromium	7440-47-3	21.2		3.14	0.167	1
06952	Cobalt	7440-48-4	5.81		1.05	0.104	1
06953	Copper	7440-50-8	7.74		2.09	0.303	1
01654	Iron	7439-89-6	23,700		41.8	3.78	1
06955	Lead	7439-92-1	3.31		3.14	0.523	1
01656	Lithium	7439-93-2	29.0		4.2	0.36	1
01657	Magnesium	7439-95-4	6,140		10.5	1.75	1
06958	Manganese	7439-96-5	419		1.05	0.0868	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126356
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-8 SDG#: PH066-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06960	Molybdenum	7439-98-7	2.09	U	2.09	0.178	1
06961	Nickel	7440-02-0	12.5		2.09	0.136	1
10145	Phosphorus	7723-14-0	499		10.5	3.02	1
01662	Potassium	7440-09-7	2,630		105	8.72	1
01667	Sodium	7440-23-5	116		105	17.5	1
06969	Tin	7440-31-5	3.04	J	10.5	0.230	1
06970	Titanium	7440-32-6	1,590		1.05	0.178	1
06971	Vanadium	7440-62-2	44.2		1.05	0.136	1
06972	Zinc	7440-66-6	58.6		4.18	0.209	1
10146	Zirconium	7440-67-7	3.63	J	5.23	0.878	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.146	J	0.418	0.105	2
06142	Silver	7440-22-4	0.209	U	0.209	0.0272	2
06144	Strontium	7440-24-6	20.8		0.418	0.0711	2
06145	Thallium	7440-28-0	0.415		0.209	0.0314	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.14		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126356
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-8 SDG#: PH066-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.0259	1
11031	12378-PeCDD	40321-76-4	5.05	U	5.05	0.0346	1
11031	123478-HxCDD	39227-28-6	5.05	U	5.05	0.0186	1
11031	123678-HxCDD	57653-85-7	5.05	U	5.05	0.0200	1
11031	123789-HxCDD	19408-74-3	0.0353	JQ	5.05	0.0206	1
11031	1234678-HpCDD	35822-46-9	0.163	JBQ	5.05	0.0270	1
11031	OCDD	3268-87-9	0.988	JBQ	10.1	0.0254	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.0208	1
11031	12378-PeCDF	57117-41-6	0.0281	JB	5.05	0.0168	1
11031	23478-PeCDF	57117-31-4	0.0155	JQ	5.05	0.0151	1
11031	123478-HxCDF	70648-26-9	5.05	U	5.05	0.00971	1
11031	123678-HxCDF	57117-44-9	0.0298	JB	5.05	0.00993	1
11031	123789-HxCDF	72918-21-9	0.0288	JQ	5.05	0.0109	1
11031	234678-HxCDF	60851-34-5	5.05	U	5.05	0.00940	1
11031	1234678-HpCDF	67562-39-4	0.0450	JBQ	5.05	0.0120	1
11031	1234789-HpCDF	55673-89-7	0.0234	JBQ	5.05	0.0182	1
11031	OCDF	39001-02-0	0.0542	JQ	10.1	0.0261	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00380				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	97	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	101	17 - 157
13C12-2378-TCDF	90	24 - 169
13C12-12378-PeCDF	103	24 - 185
13C12-23478-PeCDF	105	21 - 178
13C12-123478-HxCDF	89	26 - 152
13C12-123678-HxCDF	95	26 - 123
13C12-234678-HxCDF	93	28 - 136
13C12-123789-HxCDF	96	29 - 147
13C12-1234678-HpCDF	107	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	88	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126356
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-8 SDG#: PH066-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126356
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-8 SDG#: PH066-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13198SLD026	07/25/2013 04:56	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/20/2013 18:12	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13198SLD026	07/17/2013 18:00	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198B16A	07/18/2013 18:41	Laura M Krieger	24.08
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319431704	07/13/2013 13:51	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319431704	07/13/2013 13:51	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 17:32	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/19/2013 01:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/20/2013 02:10	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-578-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126356
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 09:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

578-8 SDG#: PH066-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 11:02	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 12:50	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 12:50	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 10:06	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 12:50	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 08:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401A	07/13/2013 14:28	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126357
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-0 SDG#: PH066-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	370	U	370	180	1
10726	Benzidine	92-87-5	1,800	U	1,800	770	1
10726	Benzoic acid	65-85-0	550	U	550	180	1
10726	Benzyl alcohol	100-51-6	370	U	370	180	1
10726	1,1'-Biphenyl	92-52-4	37	U	37	18	1
10726	4-Bromophenyl-phenylether	101-55-3	37	U	37	18	1
10726	2-butoxy-Ethanol	111-76-2	190	U	190	190	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Carbazole	86-74-8	37	U	37	18	1
10726	4-Chloro-3-methylphenol	59-50-7	37	U	37	18	1
10726	4-Chloroaniline	106-47-8	37	U	37	18	1
10726	bis(2-Chloroethoxy)methane	111-91-1	37	U	37	18	1
10726	bis(2-Chloroethyl)ether	111-44-4	37	U	37	18	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	37	U	37	18	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	36	U	36	8	1
10726	2-Chlorophenol	95-57-8	37	U	37	18	1
10726	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	18	1
10726	Dibenzofuran	132-64-9	37	U	37	18	1
10726	1,2-Dichlorobenzene	95-50-1	37	U	37	18	1
10726	1,3-Dichlorobenzene	541-73-1	37	U	37	18	1
10726	1,4-Dichlorobenzene	106-46-7	37	U	37	18	1
10726	3,3'-Dichlorobenzidine	91-94-1	370	U	370	110	1
10726	2,4-Dichlorophenol	120-83-2	37	U	37	18	1
10726	2,6-Dichlorophenol	87-65-0	37	U	37	18	1
10726	2,4-Dimethylphenol	105-67-9	37	U	37	18	1
10726	3,5-Dimethylphenol	108-68-9	180	U	180	37	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	550	U	550	180	1
10726	2,4-Dinitrophenol	51-28-5	730	U	730	330	1
10726	1,2-Diphenylhydrazine	122-66-7	37	U	37	18	1
10726	Hexachlorobenzene	118-74-1	19	U	19	4	1
10726	Hexachlorobutadiene	87-68-3	37	U	37	18	1
10726	Hexachlorocyclopentadiene	77-47-4	550	U	550	180	1
10726	Hexachloroethane	67-72-1	180	U	180	37	1
10726	Isophorone	78-59-1	37	U	37	18	1
10726	2-Methylphenol	95-48-7	37	U	37	18	1
10726	4-Methylphenol	106-44-5	37	U	37	18	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	180	U	180	37	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	37	U	37	18	1
10726	3-Nitroaniline	99-09-2	180	U	180	74	1
10726	4-Nitroaniline	100-01-6	180	U	180	74	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126357
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-0 SDG#: PH066-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Nitrobenzene	98-95-3	37	U	37	18	1
10726	2-Nitrophenol	88-75-5	37	U	37	18	1
10726	4-Nitrophenol	100-02-7	550	U	550	180	1
10726	N-Nitroso-di-n-propylamine	621-64-7	37	U	37	18	1
10726	N-Nitrosodiphenylamine	86-30-6	37	U	37	18	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	190	U	190	37	1
10726	Phenol	108-95-2	890		37	18	1
10726	2-phenoxy-Ethanol	122-99-6	190	U	190	190	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyridine	110-86-1	180	U	180	74	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	180	U	180	37	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	37	U	37	18	1
10726	2,4,5-Trichlorophenol	95-95-4	37	U	37	18	1
10726	2,4,6-Trichlorophenol	88-06-2	37	U	37	18	1
	Due to a laboratory error, 2,6-dichlorophenol was not spiked into the associated QC. The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.						
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	J	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	2.6		1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	3.8		1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.5	J	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9		1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	2.6		1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	2.2		1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.0	J	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	14	J	20	6.6	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126357
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-0 SDG#: PH066-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	2.3		1.8	0.74	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	280	U	280	110	50
12952	EFH (C15-C20)	n.a.	280	U	280	110	50
12952	EFH (C21-C30)	n.a.	340		280	110	50
12952	EFH (C30-C40)	n.a.	1,600		550	220	50
12952	EFH (C8-C11)	n.a.	280	U	280	110	50
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,600		43.7	7.88	1
06944	Antimony	7440-36-0	4.37	U	4.37	0.809	1
06935	Arsenic	7440-38-2	5.86		4.37	0.765	1
06946	Barium	7440-39-3	101		1.09	0.0361	1
06947	Beryllium	7440-41-7	0.754	J	1.09	0.0732	1
07914	Boron	7440-42-8	2.49	J	10.9	0.918	1
06949	Cadmium	7440-43-9	0.303	J	1.09	0.0831	1
01650	Calcium	7440-70-2	6,900		21.9	3.65	1
06951	Chromium	7440-47-3	26.6		3.28	0.175	1
06952	Cobalt	7440-48-4	6.70		1.09	0.108	1
06953	Copper	7440-50-8	11.1		2.19	0.317	1
01654	Iron	7439-89-6	26,200		43.7	3.96	1
06955	Lead	7439-92-1	6.65		3.28	0.546	1
01656	Lithium	7439-93-2	24.0		4.4	0.37	1
01657	Magnesium	7439-95-4	5,360		10.9	1.83	1
06958	Manganese	7439-96-5	306		1.09	0.0907	1
06960	Molybdenum	7439-98-7	0.238	J	2.19	0.186	1
06961	Nickel	7440-02-0	14.9		2.19	0.142	1
10145	Phosphorus	7723-14-0	300		10.9	3.16	1
01662	Potassium	7440-09-7	2,800		109	9.11	1
01667	Sodium	7440-23-5	99.2	J	109	18.3	1
06969	Tin	7440-31-5	3.08	J	10.9	0.240	1
06970	Titanium	7440-32-6	1,200		1.09	0.186	1
06971	Vanadium	7440-62-2	49.6		1.09	0.142	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126357
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-0 SDG#: PH066-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06972	Zinc	7440-66-6	57.1		4.37	0.219	1
10146	Zirconium	7440-67-7	5.13	J	5.46	0.918	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.123	J	0.437	0.109	2
06142	Silver	7440-22-4	0.219	U	0.219	0.0284	2
06144	Strontium	7440-24-6	29.5		0.437	0.0743	2
06145	Thallium	7440-28-0	0.364		0.219	0.0328	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182	U	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.91		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126357
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-0 SDG#: PH066-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0312	1
11031	12378-PeCDD	40321-76-4	5.43	U	5.43	0.0405	1
11031	123478-HxCDD	39227-28-6	5.43	U	5.43	0.0269	1
11031	123678-HxCDD	57653-85-7	0.100	JQ	5.43	0.0295	1
11031	123789-HxCDD	19408-74-3	0.144	JQ	5.43	0.0281	1
11031	1234678-HpCDD	35822-46-9	2.09	JB	5.43	0.0439	1
11031	OCDD	3268-87-9	24.0	B	10.9	0.0478	1
11031	2378-TCDF	51207-31-9	1.09	U	1.09	0.0296	1
11031	12378-PeCDF	57117-41-6	0.0781	JBQ	5.43	0.0192	1
11031	23478-PeCDF	57117-31-4	0.0531	JQ	5.43	0.0178	1
11031	123478-HxCDF	70648-26-9	5.43	U	5.43	0.0166	1
11031	123678-HxCDF	57117-44-9	0.0390	JBQ	5.43	0.0164	1
11031	123789-HxCDF	72918-21-9	0.216	J	5.43	0.0191	1
11031	234678-HxCDF	60851-34-5	0.0200	JBQ	5.43	0.0162	1
11031	1234678-HpCDF	67562-39-4	0.123	JBQ	5.43	0.0110	1
11031	1234789-HpCDF	55673-89-7	5.43	U	5.43	0.0170	1
11031	OCDF	39001-02-0	0.300	JQ	10.9	0.0360	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0497				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	94	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	94	23 - 140
13C12-OCDD	97	17 - 157
13C12-2378-TCDF	84	24 - 169
13C12-12378-PeCDF	109	24 - 185
13C12-23478-PeCDF	100	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	92	26 - 123
13C12-234678-HxCDF	89	28 - 136
13C12-123789-HxCDF	91	29 - 147
13C12-1234678-HpCDF	110	28 - 143
13C12-1234789-HpCDF	88	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126357
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-0 SDG#: PH066-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126357
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-0 SDG#: PH066-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13198SLD026	07/25/2013 05:20	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/20/2013 18:44	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13198SLD026	07/17/2013 18:00	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 17:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/19/2013 04:33	Heather E Williams	50
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/20/2013 03:07	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 11:06	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126357
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-0 SDG#: PH066-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 12:53	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 12:53	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 10:07	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 12:53	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 08:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401A	07/13/2013 14:28	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071213 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7126358
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 08:00

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB712 SDG#: PH066-06TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13196B94A	07/16/2013 12:58	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13196B94A	07/16/2013 12:58	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126359
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-4 SDG#: PH066-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	360	U	360	180	1
10726	Benzidine	92-87-5	1,800	U	1,800	760	1
10726	Benzoic acid	65-85-0	540	U	540	180	1
10726	Benzyl alcohol	100-51-6	360	U	360	180	1
10726	1,1'-Biphenyl	92-52-4	36	U	36	18	1
10726	4-Bromophenyl-phenylether	101-55-3	36	U	36	18	1
10726	2-butoxy-Ethanol	111-76-2	180	U	180	180	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Carbazole	86-74-8	36	U	36	18	1
10726	4-Chloro-3-methylphenol	59-50-7	36	U	36	18	1
10726	4-Chloroaniline	106-47-8	36	U	36	18	1
10726	bis(2-Chloroethoxy)methane	111-91-1	36	U	36	18	1
10726	bis(2-Chloroethyl)ether	111-44-4	36	U	36	18	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	36	U	36	18	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	36	U	36	8	1
10726	2-Chlorophenol	95-57-8	36	U	36	18	1
10726	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	18	1
10726	Dibenzofuran	132-64-9	36	U	36	18	1
10726	1,2-Dichlorobenzene	95-50-1	36	U	36	18	1
10726	1,3-Dichlorobenzene	541-73-1	36	U	36	18	1
10726	1,4-Dichlorobenzene	106-46-7	36	U	36	18	1
10726	3,3'-Dichlorobenzidine	91-94-1	360	U	360	110	1
10726	2,4-Dichlorophenol	120-83-2	36	U	36	18	1
10726	2,6-Dichlorophenol	87-65-0	36	U	36	18	1
10726	2,4-Dimethylphenol	105-67-9	36	U	36	18	1
10726	3,5-Dimethylphenol	108-68-9	180	U	180	36	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	540	U	540	180	1
10726	2,4-Dinitrophenol	51-28-5	720	U	720	330	1
10726	1,2-Diphenylhydrazine	122-66-7	36	U	36	18	1
10726	Fluoranthene	206-44-0	7	J	18	4	1
10726	Hexachlorobenzene	118-74-1	18	U	18	4	1
10726	Hexachlorobutadiene	87-68-3	36	U	36	18	1
10726	Hexachlorocyclopentadiene	77-47-4	540	U	540	180	1
10726	Hexachloroethane	67-72-1	180	U	180	36	1
10726	Isophorone	78-59-1	36	U	36	18	1
10726	2-Methylphenol	95-48-7	36	U	36	18	1
10726	4-Methylphenol	106-44-5	36	U	36	18	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	180	U	180	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	36	U	36	18	1
10726	3-Nitroaniline	99-09-2	180	U	180	72	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126359
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-4 SDG#: PH066-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	4-Nitroaniline	100-01-6	180	U	180	72	1
10726	Nitrobenzene	98-95-3	36	U	36	18	1
10726	2-Nitrophenol	88-75-5	36	U	36	18	1
10726	4-Nitrophenol	100-02-7	540	U	540	180	1
10726	N-Nitroso-di-n-propylamine	621-64-7	36	U	36	18	1
10726	N-Nitrosodiphenylamine	86-30-6	36	U	36	18	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	36	1
10726	Phenol	108-95-2	36	U	36	18	1
10726	2-phenoxy-Ethanol	122-99-6	180	U	180	180	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyridine	110-86-1	180	U	180	72	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	180	U	180	36	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	36	U	36	18	1
10726	2,4,5-Trichlorophenol	95-95-4	36	U	36	18	1
10726	2,4,6-Trichlorophenol	88-06-2	36	U	36	18	1
	Due to a laboratory error, 2,6-dichlorophenol was not spiked into the associated QC. The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of: pyrene 6.0 ug/kg benzo(a)anthracene 3.6 ug/kg chrysene 5.0 ug/kg benzo(b)fluoranthene 3.8 ug/kg were detected in the re-extraction.						
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	0.46	J	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	4.8		1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	6.6		1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	11		1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	4.7	J	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	2.7		1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	5.7		1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	7.0		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.0	J	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.8	J	20	6.5	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126359
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-4 SDG#: PH066-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.1		1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	2.6		1.8	0.72	1
12969	Pyrene	129-00-0	6.5		1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.61
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	12		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	51		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,500		42.1	7.58	1
06944	Antimony	7440-36-0	4.21	U	4.21	0.778	1
06935	Arsenic	7440-38-2	4.99		4.21	0.736	1
06946	Barium	7440-39-3	125		1.05	0.0347	1
06947	Beryllium	7440-41-7	0.769	J	1.05	0.0705	1
07914	Boron	7440-42-8	4.29	J	10.5	0.884	1
06949	Cadmium	7440-43-9	0.449	J	1.05	0.0799	1
01650	Calcium	7440-70-2	6,050		21.0	3.51	1
06951	Chromium	7440-47-3	26.8		3.16	0.168	1
06952	Cobalt	7440-48-4	8.00		1.05	0.104	1
06953	Copper	7440-50-8	15.3		2.10	0.305	1
01654	Iron	7439-89-6	25,700		42.1	3.81	1
06955	Lead	7439-92-1	7.36		3.16	0.526	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126359
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-4 SDG#: PH066-07

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01656	Lithium		7439-93-2	20.5	4.2	0.36	1
01657	Magnesium		7439-95-4	5,240	10.5	1.76	1
06958	Manganese		7439-96-5	435	1.05	0.0873	1
06960	Molybdenum		7439-98-7	0.332 J	2.10	0.179	1
06961	Nickel		7440-02-0	16.2	2.10	0.137	1
10145	Phosphorus		7723-14-0	306	10.5	3.04	1
01662	Potassium		7440-09-7	4,540	105	8.77	1
01667	Sodium		7440-23-5	148	105	17.6	1
06969	Tin		7440-31-5	2.94 J	10.5	0.231	1
06970	Titanium		7440-32-6	1,200	1.05	0.179	1
06971	Vanadium		7440-62-2	50.0	1.05	0.137	1
06972	Zinc		7440-66-6	63.6	4.21	0.210	1
10146	Zirconium		7440-67-7	6.17	5.26	0.884	1
		SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium		7782-49-2	0.247 J	0.421	0.105	2
06142	Silver		7440-22-4	0.0404 J	0.210	0.0273	2
06144	Strontium		7440-24-6	32.9	0.421	0.0715	2
06145	Thallium		7440-28-0	0.441	0.210	0.0316	2
		SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A		7439-97-6	0.0170 U	0.0170	0.0102	1
Wet Chemistry		**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D		n.a.	8.04	0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3		n.a.	7.7	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126359
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-4 SDG#: PH066-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0295	JQ	1.06	0.0275	1
11031	12378-PeCDD	40321-76-4	0.0910	JQ	5.29	0.0397	1
11031	123478-HxCDD	39227-28-6	0.0489	J	5.29	0.0257	1
11031	123678-HxCDD	57653-85-7	0.332	JQ	5.29	0.0269	1
11031	123789-HxCDD	19408-74-3	0.473	J	5.29	0.0250	1
11031	1234678-HpCDD	35822-46-9	0.560	JBQ	5.29	0.0272	1
11031	OCDD	3268-87-9	5.04	JB	10.6	0.0222	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0290	1
11031	12378-PeCDF	57117-41-6	0.223	JBQ	5.29	0.0208	1
11031	23478-PeCDF	57117-31-4	0.137	JQ	5.29	0.0180	1
11031	123478-HxCDF	70648-26-9	0.0745	JB	5.29	0.0137	1
11031	123678-HxCDF	57117-44-9	0.0749	JBQ	5.29	0.0144	1
11031	123789-HxCDF	72918-21-9	0.705	J	5.29	0.0146	1
11031	234678-HxCDF	60851-34-5	0.0519	JBQ	5.29	0.0135	1
11031	1234678-HpCDF	67562-39-4	0.0549	JBQ	5.29	0.0105	1
11031	1234789-HpCDF	55673-89-7	0.0349	JBQ	5.29	0.0119	1
11031	OCDF	39001-02-0	0.195	JQ	10.6	0.0216	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.132				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	102	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	106	23 - 140
13C12-OCDD	120	17 - 157
13C12-2378-TCDF	87	24 - 169
13C12-12378-PeCDF	108	24 - 185
13C12-23478-PeCDF	110	21 - 178
13C12-123478-HxCDF	87	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	92	28 - 136
13C12-123789-HxCDF	99	29 - 147
13C12-1234678-HpCDF	106	28 - 143
13C12-1234789-HpCDF	111	26 - 138
13C12-OCDF	119	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126359
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-4 SDG#: PH066-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126359
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-4 SDG#: PH066-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13198SLD026	07/25/2013 05:44	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/24/2013 14:46	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13198SLD026	07/17/2013 18:00	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198B16A	07/18/2013 19:19	Laura M Krieger	24.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319431704	07/13/2013 13:52	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319431704	07/13/2013 13:52	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 18:09	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/19/2013 02:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/20/2013 04:04	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126359
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 10:45 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

580-4 SDG#: PH066-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 11:10	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 12:55	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 12:55	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 10:09	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 12:55	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 08:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401A	07/13/2013 14:28	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126360
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 11:00 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58010 SDG#: PH066-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	350	U	350	170	1
10726	Benzidine	92-87-5	1,700	U	1,700	730	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	350	U	350	170	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	17	1
10726	2-butoxy-Ethanol	111-76-2	180	U	180	180	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Carbazole	86-74-8	35	U	35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	17	1
10726	4-Chloroaniline	106-47-8	35	U	35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	17	1
10726	Dibenzofuran	132-64-9	35	U	35	17	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	17	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	17	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	100	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	17	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	17	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	690	U	690	310	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	17	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1
10726	Hexachloroethane	67-72-1	170	U	170	35	1
10726	Isophorone	78-59-1	35	U	35	17	1
10726	2-Methylphenol	95-48-7	35	U	35	17	1
10726	4-Methylphenol	106-44-5	35	U	35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	70	1
10726	4-Nitroaniline	100-01-6	170	U	170	70	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126360
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 11:00 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58010 SDG#: PH066-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Nitrobenzene	98-95-3	35	U	35	17	1
10726	2-Nitrophenol	88-75-5	35	U	35	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenol	108-95-2	35	U	35	17	1
10726	2-phenoxy-Ethanol	122-99-6	180	U	180	180	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyridine	110-86-1	170	U	170	70	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	170	U	170	35	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	17	1
	Due to a laboratory error, 2,6-dichlorophenol was not spiked into the associated QC. The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of: fluoranthene 5.3 ug/kg pyrene 8.8 ug/kg benzo(a)anthracene 5.8 ug/kg chrysene 8.0 ug/kg benzo(a)pyrene 8.0 ug/kg benzo(g,h,i)perylene 3.4 ug/kg was detected in the re-extraction.						
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	0.59	J	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	6.7		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	8.0		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	12		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	5.3	J	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	3.1		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	4.9		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	8.5		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.1	J	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.6	J	19	6.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126360
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 11:00 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58010 SDG#: PH066-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Fluoranthene	206-44-0	6.6		1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.5		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.5	J	1.7	0.70	1
12969	Pyrene	129-00-0	9.9		1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	23.85
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	9.0		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	37		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,600		41.7	7.52	1
06944	Antimony	7440-36-0	4.17	U	4.17	0.772	1
06935	Arsenic	7440-38-2	8.23		4.17	0.730	1
06946	Barium	7440-39-3	69.8		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.609	J	1.04	0.0699	1
07914	Boron	7440-42-8	10.4	U	10.4	0.876	1
06949	Cadmium	7440-43-9	0.321	J	1.04	0.0792	1
01650	Calcium	7440-70-2	4,860		20.9	3.48	1
06951	Chromium	7440-47-3	19.8		3.13	0.167	1
06952	Cobalt	7440-48-4	4.53		1.04	0.103	1
06953	Copper	7440-50-8	9.10		2.09	0.302	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126360
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 11:00 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58010 SDG#: PH066-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01654	Iron	7439-89-6	24,900		41.7	3.77	1
06955	Lead	7439-92-1	4.88		3.13	0.521	1
01656	Lithium	7439-93-2	18.9		4.2	0.35	1
01657	Magnesium	7439-95-4	4,010		10.4	1.74	1
06958	Manganese	7439-96-5	245		1.04	0.0865	1
06960	Molybdenum	7439-98-7	1.08	J	2.09	0.177	1
06961	Nickel	7440-02-0	12.1		2.09	0.136	1
10145	Phosphorus	7723-14-0	326		10.4	3.01	1
01662	Potassium	7440-09-7	1,800		104	8.70	1
01667	Sodium	7440-23-5	117		104	17.4	1
06969	Tin	7440-31-5	2.85	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,120		1.04	0.177	1
06971	Vanadium	7440-62-2	42.4		1.04	0.136	1
06972	Zinc	7440-66-6	52.5		4.17	0.209	1
10146	Zirconium	7440-67-7	4.17	J	5.21	0.876	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.105	J	0.417	0.104	2
06142	Silver	7440-22-4	0.209	U	0.209	0.0271	2
06144	Strontium	7440-24-6	20.4		0.417	0.0709	2
06145	Thallium	7440-28-0	0.320		0.209	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.73		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126360
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 11:00 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58010 SDG#: PH066-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0524	JQ	1.00	0.0310	1
11031	12378-PeCDD	40321-76-4	0.198	J	5.00	0.0511	1
11031	123478-HxCDD	39227-28-6	0.0653	JQ	5.00	0.0264	1
11031	123678-HxCDD	57653-85-7	0.115	JQ	5.00	0.0283	1
11031	123789-HxCDD	19408-74-3	0.0783	JQ	5.00	0.0277	1
11031	1234678-HpCDD	35822-46-9	0.316	JB	5.00	0.0399	1
11031	OCDD	3268-87-9	2.19	JB	10.0	0.0426	1
11031	2378-TCDF	51207-31-9	1.00	U	1.00	0.0317	1
11031	12378-PeCDF	57117-41-6	0.167	JB	5.00	0.0230	1
11031	23478-PeCDF	57117-31-4	0.230	JQ	5.00	0.0213	1
11031	123478-HxCDF	70648-26-9	0.122	JB	5.00	0.0141	1
11031	123678-HxCDF	57117-44-9	0.111	JBQ	5.00	0.0143	1
11031	123789-HxCDF	72918-21-9	0.0682	J	5.00	0.0161	1
11031	234678-HxCDF	60851-34-5	0.0612	JBQ	5.00	0.0143	1
11031	1234678-HpCDF	67562-39-4	0.0890	JBQ	5.00	0.0130	1
11031	1234789-HpCDF	55673-89-7	0.0340	JBQ	5.00	0.0187	1
11031	OCDF	39001-02-0	0.136	JQ	10.0	0.0437	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.226				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	100	23 - 140
13C12-OCDD	113	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	97	24 - 185
13C12-23478-PeCDF	94	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	86	28 - 136
13C12-123789-HxCDF	89	29 - 147
13C12-1234678-HpCDF	109	28 - 143
13C12-1234789-HpCDF	94	26 - 138
13C12-OCDF	94	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126360
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 11:00 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58010 SDG#: PH066-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126360
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 11:00 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58010 SDG#: PH066-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13198SLD026	07/25/2013 06:08	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/24/2013 15:18	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13198SLD026	07/17/2013 18:00	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198B16A	07/18/2013 19:57	Laura M Krieger	23.85
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319431704	07/13/2013 13:53	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319431704	07/13/2013 13:53	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 18:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/19/2013 03:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/20/2013 05:00	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-580-SA8-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126360
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 11:00 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58010 SDG#: PH066-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 11:14	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 12:57	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 12:57	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 10:11	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 12:57	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 08:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401A	07/13/2013 14:28	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126361
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:40 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-0 SDG#: PH066-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	0.84	J	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	0.96	J	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.3	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.3	J	19	6.4	1
12969	Fluoranthene	206-44-0	0.85	J	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	13	J	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	7.0		5.4	2.1	1
12952	EFH (C30-C40)	n.a.	15		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126361
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:40 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-0 SDG#: PH066-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,200		41.6	7.50	1
06944	Antimony	7440-36-0	4.16	U	4.16	0.770	1
06935	Arsenic	7440-38-2	5.41		4.16	0.728	1
06946	Barium	7440-39-3	119		1.04	0.0343	1
06947	Beryllium	7440-41-7	0.810	J	1.04	0.0697	1
07914	Boron	7440-42-8	2.82	J	10.4	0.874	1
06949	Cadmium	7440-43-9	0.496	J	1.04	0.0791	1
01650	Calcium	7440-70-2	4,080		20.8	3.48	1
06951	Chromium	7440-47-3	28.8		3.12	0.166	1
06952	Cobalt	7440-48-4	8.01		1.04	0.103	1
06953	Copper	7440-50-8	16.1		2.08	0.302	1
01654	Iron	7439-89-6	26,300		41.6	3.77	1
06955	Lead	7439-92-1	9.00		3.12	0.520	1
01656	Lithium	7439-93-2	20.4		4.2	0.35	1
01657	Magnesium	7439-95-4	5,110		10.4	1.74	1
06958	Manganese	7439-96-5	438		1.04	0.0864	1
06960	Molybdenum	7439-98-7	0.314	J	2.08	0.177	1
06961	Nickel	7440-02-0	17.1		2.08	0.135	1
10145	Phosphorus	7723-14-0	248		10.4	3.01	1
01662	Potassium	7440-09-7	4,870		104	8.68	1
01667	Sodium	7440-23-5	77.6	J	104	17.4	1
06969	Tin	7440-31-5	2.85	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,310		1.04	0.177	1
06971	Vanadium	7440-62-2	54.2		1.04	0.135	1
06972	Zinc	7440-66-6	63.2		4.16	0.208	1
10146	Zirconium	7440-67-7	5.56		5.20	0.874	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.207	J	0.416	0.104	2
06142	Silver	7440-22-4	0.0503	J	0.208	0.0271	2
06144	Strontium	7440-24-6	28.7		0.416	0.0708	2
06145	Thallium	7440-28-0	0.457		0.208	0.0312	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.27		0.0100	0.0100	1
	The pH was measured in water at 20.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126361
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:40 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-0 SDG#: PH066-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0438	J	1.05	0.0259	1
11031	12378-PeCDD	40321-76-4	0.147	JQ	5.27	0.0462	1
11031	123478-HxCDD	39227-28-6	0.0682	JQ	5.27	0.0309	1
11031	123678-HxCDD	57653-85-7	0.758	J	5.27	0.0335	1
11031	123789-HxCDD	19408-74-3	1.02	J	5.27	0.0315	1
11031	1234678-HpCDD	35822-46-9	1.63	JB	5.27	0.0371	1
11031	OCDD	3268-87-9	16.7	B	10.5	0.0407	1
11031	2378-TCDF	51207-31-9	1.05	U	1.05	0.0429	1
11031	12378-PeCDF	57117-41-6	0.495	JB	5.27	0.0191	1
11031	23478-PeCDF	57117-31-4	0.145	JQ	5.27	0.0210	1
11031	123478-HxCDF	70648-26-9	0.101	JBQ	5.27	0.0176	1
11031	123678-HxCDF	57117-44-9	0.120	JBQ	5.27	0.0155	1
11031	123789-HxCDF	72918-21-9	1.36	J	5.27	0.0210	1
11031	234678-HxCDF	60851-34-5	0.102	JBQ	5.27	0.0173	1
11031	1234678-HpCDF	67562-39-4	0.345	JB	5.27	0.0126	1
11031	1234789-HpCDF	55673-89-7	0.0554	JB	5.27	0.0254	1
11031	OCDF	39001-02-0	0.720	J	10.5	0.0387	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.398				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	101	24 - 185
13C12-23478-PeCDF	91	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	90	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	117	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126361
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:40 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-0 SDG#: PH066-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126361
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:40 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-0 SDG#: PH066-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/20/2013 15:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 18:46	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/19/2013 00:22	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/20/2013 05:57	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 11:18	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 13:00	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 13:00	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 10:12	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126361
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:40 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-0 SDG#: PH066-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 13:00	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 08:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401A	07/13/2013 14:28	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126362
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:50 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-4 SDG#: PH066-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.44	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	0.83	J	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	0.80	J	1.7	0.69	1
12969	Pyrene	129-00-0	0.78	J	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.61
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126362
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:50 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-4 SDG#: PH066-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,200		39.2	7.07	1
06944	Antimony	7440-36-0	3.92	U	3.92	0.726	1
06935	Arsenic	7440-38-2	5.45		3.92	0.687	1
06946	Barium	7440-39-3	71.1		0.981	0.0324	1
06947	Beryllium	7440-41-7	0.418	J	0.981	0.0657	1
07914	Boron	7440-42-8	9.81	U	9.81	0.824	1
06949	Cadmium	7440-43-9	0.294	J	0.981	0.0745	1
01650	Calcium	7440-70-2	3,380		19.6	3.28	1
06951	Chromium	7440-47-3	18.1		2.94	0.157	1
06952	Cobalt	7440-48-4	5.09		0.981	0.0971	1
06953	Copper	7440-50-8	7.24		1.96	0.284	1
01654	Iron	7439-89-6	20,900		39.2	3.55	1
06955	Lead	7439-92-1	3.38		2.94	0.490	1
01656	Lithium	7439-93-2	21.4		3.9	0.33	1
01657	Magnesium	7439-95-4	4,800		9.81	1.64	1
06958	Manganese	7439-96-5	251		0.981	0.0814	1
06960	Molybdenum	7439-98-7	0.204	J	1.96	0.167	1
06961	Nickel	7440-02-0	9.72		1.96	0.128	1
10145	Phosphorus	7723-14-0	384		9.81	2.83	1
01662	Potassium	7440-09-7	2,460		98.1	8.18	1
01667	Sodium	7440-23-5	86.7	J	98.1	16.4	1
06969	Tin	7440-31-5	2.97	J	9.81	0.216	1
06970	Titanium	7440-32-6	1,150		0.981	0.167	1
06971	Vanadium	7440-62-2	37.4		0.981	0.128	1
06972	Zinc	7440-66-6	58.5		3.92	0.196	1
10146	Zirconium	7440-67-7	3.05	J	4.90	0.824	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.392	U	0.392	0.0981	2
06142	Silver	7440-22-4	0.196	U	0.196	0.0255	2
06144	Strontium	7440-24-6	15.6		0.392	0.0667	2
06145	Thallium	7440-28-0	0.298		0.196	0.0294	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164	U	0.0164	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.70		0.0100	0.0100	1
	The pH was measured in water at 20.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126362
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:50 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-4 SDG#: PH066-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126362
LL Group # 1403853
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Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:50 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-4 SDG#: PH066-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.983	U	0.983	0.0336	1
11031	12378-PeCDD	40321-76-4	0.0469	JQ	4.91	0.0444	1
11031	123478-HxCDD	39227-28-6	4.91	U	4.91	0.0203	1
11031	123678-HxCDD	57653-85-7	4.91	U	4.91	0.0219	1
11031	123789-HxCDD	19408-74-3	0.0290	JQ	4.91	0.0219	1
11031	1234678-HpCDD	35822-46-9	0.0525	JB	4.91	0.0270	1
11031	OCDD	3268-87-9	0.180	JBQ	9.83	0.0314	1
11031	2378-TCDF	51207-31-9	0.0283	JQ	0.983	0.0279	1
11031	12378-PeCDF	57117-41-6	4.91	U	4.91	0.0170	1
11031	23478-PeCDF	57117-31-4	0.0294	JQ	4.91	0.0174	1
11031	123478-HxCDF	70648-26-9	0.0516	JBQ	4.91	0.0113	1
11031	123678-HxCDF	57117-44-9	0.0291	JB	4.91	0.0103	1
11031	123789-HxCDF	72918-21-9	0.0210	JQ	4.91	0.0157	1
11031	234678-HxCDF	60851-34-5	0.0203	JBQ	4.91	0.0112	1
11031	1234678-HpCDF	67562-39-4	0.0193	JBQ	4.91	0.00968	1
11031	1234789-HpCDF	55673-89-7	0.0482	JBQ	4.91	0.0196	1
11031	OCDF	39001-02-0	0.0513	JQ	9.83	0.0384	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00340				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	90	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	95	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	112	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126362
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:50 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-4 SDG#: PH066-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126362
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:50 by VC

Submitted: 07/13/2013 09:20
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-4 SDG#: PH066-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/20/2013 15:33	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198B16A	07/18/2013 20:35	Laura M Krieger	24.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319431704	07/13/2013 13:54	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319431704	07/13/2013 13:55	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 19:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/18/2013 23:19	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/20/2013 06:54	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-581-SA8-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126362
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 12:50 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

581-4 SDG#: PH066-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 11:22	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 13:02	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 13:02	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 10:14	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 13:02	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 09:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401A	07/13/2013 14:28	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126363
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-0 SDG#: PH066-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	110		18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	2.8	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	6.6	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126363
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-0 SDG#: PH066-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,200		38.8	6.99	1
06944	Antimony	7440-36-0	3.88	U	3.88	0.717	1
06935	Arsenic	7440-38-2	3.51	J	3.88	0.678	1
06946	Barium	7440-39-3	112		0.969	0.0320	1
06947	Beryllium	7440-41-7	0.542	J	0.969	0.0649	1
07914	Boron	7440-42-8	0.814	J	9.69	0.814	1
06949	Cadmium	7440-43-9	0.360	J	0.969	0.0736	1
01650	Calcium	7440-70-2	2,060		19.4	3.24	1
06951	Chromium	7440-47-3	18.3		2.91	0.155	1
06952	Cobalt	7440-48-4	4.75		0.969	0.0959	1
06953	Copper	7440-50-8	9.63		1.94	0.281	1
01654	Iron	7439-89-6	19,000		38.8	3.51	1
06955	Lead	7439-92-1	4.49		2.91	0.484	1
01656	Lithium	7439-93-2	20.1		3.9	0.33	1
01657	Magnesium	7439-95-4	4,090		9.69	1.62	1
06958	Manganese	7439-96-5	322		0.969	0.0804	1
06960	Molybdenum	7439-98-7	0.453	J	1.94	0.165	1
06961	Nickel	7440-02-0	10.8		1.94	0.126	1
10145	Phosphorus	7723-14-0	574		9.69	2.80	1
01662	Potassium	7440-09-7	3,950		96.9	8.08	1
01667	Sodium	7440-23-5	67.7	J	96.9	16.2	1
06969	Tin	7440-31-5	2.50	J	9.69	0.213	1
06970	Titanium	7440-32-6	1,220		0.969	0.165	1
06971	Vanadium	7440-62-2	31.7		0.969	0.126	1
06972	Zinc	7440-66-6	60.6		3.88	0.194	1
10146	Zirconium	7440-67-7	3.20	J	4.84	0.814	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.107	J	0.388	0.0969	2
06142	Silver	7440-22-4	0.194	U	0.194	0.0252	2
06144	Strontium	7440-24-6	17.8		0.388	0.0659	2
06145	Thallium	7440-28-0	0.285		0.194	0.0291	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.04		0.0100	0.0100	1
	The pH was measured in water at 20.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126363
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-0 SDG#: PH066-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.978	U	0.978	0.0374	1
11031	12378-PeCDD	40321-76-4	0.0615	JQ	4.89	0.0553	1
11031	123478-HxCDD	39227-28-6	4.89	U	4.89	0.0435	1
11031	123678-HxCDD	57653-85-7	0.352	JQ	4.89	0.0465	1
11031	123789-HxCDD	19408-74-3	0.556	J	4.89	0.0456	1
11031	1234678-HpCDD	35822-46-9	1.88	JB	4.89	0.0447	1
11031	OCDD	3268-87-9	21.1	B	9.78	0.0303	1
11031	2378-TCDF	51207-31-9	0.0401	JQ	0.978	0.0389	1
11031	12378-PeCDF	57117-41-6	0.114	JB	4.89	0.0229	1
11031	23478-PeCDF	57117-31-4	4.89	U	4.89	0.0236	1
11031	123478-HxCDF	70648-26-9	0.0163	JBQ	4.89	0.0156	1
11031	123678-HxCDF	57117-44-9	0.0670	JB	4.89	0.0149	1
11031	123789-HxCDF	72918-21-9	0.374	JQ	4.89	0.0183	1
11031	234678-HxCDF	60851-34-5	0.0344	JBQ	4.89	0.0151	1
11031	1234678-HpCDF	67562-39-4	0.209	JBQ	4.89	0.0123	1
11031	1234789-HpCDF	55673-89-7	0.0386	JBQ	4.89	0.0215	1
11031	OCDF	39001-02-0	0.372	J	9.78	0.0355	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0908				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	91	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	104	23 - 140
13C12-OCDD	118	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	110	24 - 185
13C12-23478-PeCDF	98	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	97	26 - 123
13C12-234678-HxCDF	91	28 - 136
13C12-123789-HxCDF	94	29 - 147
13C12-1234678-HpCDF	131	28 - 143
13C12-1234789-HpCDF	97	26 - 138
13C12-OCDF	96	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126363
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-0 SDG#: PH066-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126363
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-0 SDG#: PH066-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/20/2013 16:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 19:23	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/18/2013 23:40	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/20/2013 07:50	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 11:26	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 13:05	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 13:05	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 10:16	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126363
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:30 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-0 SDG#: PH066-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 13:05	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 09:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401A	07/13/2013 14:28	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126364
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:40 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-6 SDG#: PH066-12*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	25.1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126364
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:40 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-6 SDG#: PH066-12*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	4.6	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,800		39.8	7.17	1
06944	Antimony	7440-36-0	3.98	U	3.98	0.736	1
06935	Arsenic	7440-38-2	3.25	J	3.98	0.696	1
06946	Barium	7440-39-3	66.0		0.994	0.0328	1
06947	Beryllium	7440-41-7	0.483	J	0.994	0.0666	1
07914	Boron	7440-42-8	9.94	U	9.94	0.835	1
06949	Cadmium	7440-43-9	0.203	J	0.994	0.0756	1
01650	Calcium	7440-70-2	1,750		19.9	3.32	1
06951	Chromium	7440-47-3	14.7		2.98	0.159	1
06952	Cobalt	7440-48-4	2.72		0.994	0.0984	1
06953	Copper	7440-50-8	5.33		1.99	0.288	1
01654	Iron	7439-89-6	15,400		39.8	3.60	1
06955	Lead	7439-92-1	3.47		2.98	0.497	1
01656	Lithium	7439-93-2	20.4		4.0	0.34	1
01657	Magnesium	7439-95-4	3,380		9.94	1.66	1
06958	Manganese	7439-96-5	144		0.994	0.0825	1
06960	Molybdenum	7439-98-7	1.99	U	1.99	0.169	1
06961	Nickel	7440-02-0	6.82		1.99	0.129	1
10145	Phosphorus	7723-14-0	166		9.94	2.87	1
01662	Potassium	7440-09-7	1,710		99.4	8.29	1
01667	Sodium	7440-23-5	111		99.4	16.6	1
06969	Tin	7440-31-5	2.70	J	9.94	0.219	1
06970	Titanium	7440-32-6	1,100		0.994	0.169	1
06971	Vanadium	7440-62-2	26.9		0.994	0.129	1
06972	Zinc	7440-66-6	37.0		3.98	0.199	1
10146	Zirconium	7440-67-7	2.46	J	4.97	0.835	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.398	U	0.398	0.0994	2
06142	Silver	7440-22-4	0.0650	J	0.199	0.0259	2
06144	Strontium	7440-24-6	17.3		0.398	0.0676	2
06145	Thallium	7440-28-0	0.269		0.199	0.0298	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0170	U	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.82		0.0100	0.0100	1
	The pH was measured in water at 20.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126364
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:40 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-6 SDG#: PH066-12*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126364
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:40 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-6 SDG#: PH066-12*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.996	U	0.996	0.0262	1
11031	12378-PeCDD	40321-76-4	4.98	U	4.98	0.0401	1
11031	123478-HxCDD	39227-28-6	4.98	U	4.98	0.0190	1
11031	123678-HxCDD	57653-85-7	4.98	U	4.98	0.0210	1
11031	123789-HxCDD	19408-74-3	4.98	U	4.98	0.0206	1
11031	1234678-HpCDD	35822-46-9	0.0629	JB	4.98	0.0277	1
11031	OCDD	3268-87-9	0.227	JBQ	9.96	0.0241	1
11031	2378-TCDF	51207-31-9	0.996	U	0.996	0.0235	1
11031	12378-PeCDF	57117-41-6	0.0307	JBQ	4.98	0.0146	1
11031	23478-PeCDF	57117-31-4	4.98	U	4.98	0.0149	1
11031	123478-HxCDF	70648-26-9	0.00854	JBQ	4.98	0.00796	1
11031	123678-HxCDF	57117-44-9	0.0176	JB	4.98	0.00765	1
11031	123789-HxCDF	72918-21-9	0.0155	JQ	4.98	0.0116	1
11031	234678-HxCDF	60851-34-5	4.98	U	4.98	0.00807	1
11031	1234678-HpCDF	67562-39-4	0.0255	JBQ	4.98	0.00734	1
11031	1234789-HpCDF	55673-89-7	0.0177	JB	4.98	0.0147	1
11031	OCDF	39001-02-0	0.110	J	9.96	0.0365	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00259				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	98	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	91	28 - 130
13C12-123789-HxCDD	90	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	101	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	113	24 - 185
13C12-23478-PeCDF	103	21 - 178
13C12-123478-HxCDF	93	26 - 152
13C12-123678-HxCDF	105	26 - 123
13C12-234678-HxCDF	94	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	123	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126364
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:40 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-6 SDG#: PH066-12*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126364
LL Group # 1403853
Account # 13013

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3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-6 SDG#: PH066-12*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13198SLB026	07/20/2013 16:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13198SLB026	07/17/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198B16A	07/18/2013 21:13	Laura M Krieger	25.1
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319431704	07/13/2013 13:56	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319431704	07/13/2013 13:56	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131980021A	07/18/2013 19:41	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131980021A	07/18/2013 02:30	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131980025A	07/19/2013 00:01	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131980025A	07/18/2013 07:45	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13198003	07/20/2013 08:47	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13198003	07/17/2013 09:45	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-587-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7126364
LL Group # 1403853
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/12/2013 13:40 by VC

Submitted: 07/13/2013 09:20
Reported: 08/01/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

587-6 SDG#: PH066-12*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	131990637001	07/24/2013 11:30	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637001B	07/23/2013 13:07	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131990637001A	07/23/2013 13:07	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131990637001A	07/24/2013 10:17	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131990637001A	07/23/2013 13:07	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638001	07/23/2013 09:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637001	07/22/2013 12:56	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638001	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13194039401B	07/13/2013 14:28	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401A	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13198SLB026	Sample number(s): 7126350-7126353,7126355-7126357,7126359-7126364									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	106		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	98		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	98		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	101		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	112		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	99		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	101		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	101		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	124		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	125		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	102		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	102		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	130*		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	108		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	124		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	104		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	104		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	86		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	125		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	97		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	103		71-120		
Batch number: 13198SLD026	Sample number(s): 7126350-7126353,7126355-7126357,7126359-7126360									
Acenaphthene	17	U	17.	3	ug/kg	105		83-111		
Acenaphthylene	17	U	17.	3	ug/kg	110		83-127		
Aniline	330 U		330.	170	ug/kg	86		44-103		
Anthracene	17	U	17.	3	ug/kg	112		82-118		
Benzidine	1,700 U		1,700.	700	ug/kg	48		25-94		
Benzo(a)anthracene	17	U	17.	3	ug/kg	101		73-123		
Benzo(a)pyrene	17	U	17.	3	ug/kg	109		80-123		
Benzo(b)fluoranthene	17	U	17.	3	ug/kg	115		76-124		
Benzo(g,h,i)perylene	17	U	17.	3	ug/kg	110		77-122		
Benzo(k)fluoranthene	17	U	17.	3	ug/kg	103		75-123		
Benzoic acid	500 U		500.	170	ug/kg	98		41-122		
Benzyl alcohol	330		330.	170	ug/kg	94		78-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1'-Biphenyl	33	U	33.	17	ug/kg	102		77-111		
4-Bromophenyl-phenylether	33	U	33.	17	ug/kg	114		79-117		
2-butoxy-Ethanol	170	U	170.	170	ug/kg					
Butylbenzylphthalate	170	U	170.	67	ug/kg	103		80-118		
Di-n-butylphthalate	170	U	170.	67	ug/kg	107		79-112		
Carbazole	33	U	33.	17	ug/kg	105		79-118		
4-Chloro-3-methylphenol	33	U	33.	17	ug/kg	103		80-124		
4-Chloroaniline	33	U	33.	17	ug/kg	49		10-97		
bis(2-Chloroethoxy)methane	33	U	33.	17	ug/kg	105		77-112		
bis(2-Chloroethyl)ether	33	U	33.	17	ug/kg	100		77-115		
bis(2-Chloroisopropyl)ether	33	U	33.	17	ug/kg	95		64-114		
2-Chloronaphthalene	33	U	33.	7	ug/kg	88		56-144		
2-Chlorophenol	33	U	33.	17	ug/kg	107		80-122		
4-Chlorophenyl-phenylether	33	U	33.	17	ug/kg	102		79-110		
Chrysene	17	U	17.	3	ug/kg	98		69-119		
Dibenz(a,h)anthracene	17	U	17.	3	ug/kg	111		77-125		
Dibenzofuran	33	U	33.	17	ug/kg	104		78-116		
1,2-Dichlorobenzene	33	U	33.	17	ug/kg	99		79-112		
1,3-Dichlorobenzene	33	U	33.	17	ug/kg	102		79-113		
1,4-Dichlorobenzene	33	U	33.	17	ug/kg	97		79-112		
3,3'-Dichlorobenzidine	330	U	330.	100	ug/kg	49		20-111		
2,4-Dichlorophenol	33	U	33.	17	ug/kg	108		81-123		
2,6-Dichlorophenol	33	U	33.	17	ug/kg					
Diethylphthalate	170	U	170.	67	ug/kg	102		82-113		
2,4-Dimethylphenol	33	U	33.	17	ug/kg	106		83-120		
3,5-Dimethylphenol	170	U	170.	33	ug/kg	116		70-130		
Dimethylphthalate	170	U	170.	67	ug/kg	104		82-113		
4,6-Dinitro-2-methylphenol	500	U	500.	170	ug/kg	88		56-132		
2,4-Dinitrophenol	660	U	660.	300	ug/kg	75		26-145		
1,2-Diphenylhydrazine	33	U	33.	17	ug/kg	118*		77-111		
bis(2-Ethylhexyl)phthalate	170	U	170.	67	ug/kg	100		75-124		
Fluoranthene	17	U	17.	3	ug/kg	103		79-123		
Fluorene	17	U	17.	3	ug/kg	103		81-117		
Hexachlorobenzene	17	U	17.	3	ug/kg	116		74-118		
Hexachlorobutadiene	33	U	33.	17	ug/kg	98		76-115		
Hexachlorocyclopentadiene	500	U	500.	170	ug/kg	128		66-135		
Hexachloroethane	170	U	170.	33	ug/kg	95		76-109		
Indeno(1,2,3-cd)pyrene	17	U	17.	3	ug/kg	112		77-122		
Isophorone	33	U	33.	17	ug/kg	103		76-112		
1-Methylnaphthalene	17	U	17.	3	ug/kg	104		77-115		
2-Methylnaphthalene	17	U	17.	3	ug/kg	96		82-120		
2-Methylphenol	33	U	33.	17	ug/kg	100		75-126		
4-Methylphenol	33	U	33.	17	ug/kg	97		73-124		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	17	U	17.	3	ug/kg	102		77-115		
NDPA as diphenylamine	170 U		170.	33	ug/kg	109		70-130		
2-Nitroaniline	33	U	33.	17	ug/kg	102		83-118		
3-Nitroaniline	170 U		170.	67	ug/kg	99		69-122		
4-Nitroaniline	170 U		170.	67	ug/kg	77		51-107		
Nitrobenzene	33	U	33.	17	ug/kg	96		73-118		
2-Nitrophenol	33	U	33.	17	ug/kg	104		81-114		
4-Nitrophenol	500 U		500.	170	ug/kg	87		49-136		
N-Nitroso-di-n-propylamine	33	U	33.	17	ug/kg	91		70-113		
N-Nitrosodimethylamine	170 U		170.	67	ug/kg	98		67-116		
N-Nitrosodiphenylamine	33	U	33.	17	ug/kg	110		83-118		
Di-n-octylphthalate	170 U		170.	67	ug/kg	105		75-136		
Pentachlorophenol	170 U		170.	33	ug/kg	114		56-132		
Phenanthrene	17	U	17.	3	ug/kg	107		77-119		
Phenol	33	U	33.	17	ug/kg	101		69-126		
2-phenoxy-Ethanol	170 U		170.	170	ug/kg					
Pyrene	17	U	17.	3	ug/kg	101		81-114		
Pyridine	170 U		170.	67	ug/kg	84		48-99		
1,2,3,4-Tetrahydronaphthalene	170 U		170.	33	ug/kg					
1,2,4-Trichlorobenzene	33	U	33.	17	ug/kg	110*		80-109		
2,4,5-Trichlorophenol	33	U	33.	17	ug/kg	111		80-117		
2,4,6-Trichlorophenol	33	U	33.	17	ug/kg	105		81-123		
Batch number: 13196B94A	Sample number(s): 7126358									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	108	108	75-135	0	30
Batch number: 13198B16A	Sample number(s): 7126351-7126353,7126355-7126356,7126359-7126360,7126362,7126364									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	73		67-119		
Batch number: 131980021A	Sample number(s): 7126350-7126353,7126355-7126357,7126359-7126364									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	79	78	36-106	2	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	100		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	107		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 131980025A	Sample number(s): 7126350-7126353,7126355-7126357,7126359-7126364									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	103		70-123		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	107		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	106		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	106		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	80		49-107		
Batch number: 131990637001	Sample number(s): 7126350-7126357,7126359-7126364									
Aluminum	40.0	U	40.0	7.21	mg/kg	98		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	103		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	99		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	101		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	101		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	101		80-120		
Calcium	6.97	J	20.0	3.34	mg/kg	99		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	103		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	102		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	107		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	97		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	101		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	96		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	101		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	104		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	103		80-120		
Potassium	100 U		100.	8.34	mg/kg	97		80-120		
Sodium	100 U		100.	16.7	mg/kg	96		80-120		
Tin	1.67	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	0.455	J	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 131990637001A	Sample number(s): 7126350-7126357,7126359-7126364									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	101		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	113		80-120		
Batch number: 131990637001B	Sample number(s): 7126350-7126357,7126359-7126364									
Selenium	0.400	U	0.400	0.100	mg/kg	119		80-120		
Batch number: 132030638001	Sample number(s): 7126350-7126357,7126359-7126364									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	113		85-120		
Batch number: 13194039401A	Sample number(s): 7126350-7126351,7126354-7126357,7126359-7126363									
15a pH by 9045D						99		95-105		
Batch number: 13194039401B	Sample number(s): 7126364									
15a pH by 9045D						99		95-105		
Batch number: 13200162401A	Sample number(s): 7126350-7126357,7126359-7126364									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Analysis Name	**Blank Result**	**Blank MRL****	**Blank EDL**	**Report Units**	**OPR %REC**	**OPRD %REC**	**OPR/OPRD Limits**	**RPD**	**RPD Max**
Batch number: 13198003	Sample number(s): 7126350-7126353,7126355-7126357,7126359-7126364								
2378-TCDD	1.00 U	1.00	0.0632	ng/kg	108		67-158		
12378-PeCDD	5.00 U	5.00	0.0768	ng/kg	104		70-142		
123478-HxCDD	5.00 U	5.00	0.0307	ng/kg	105		70-164		
123678-HxCDD	5.00 U	5.00	0.0326	ng/kg	97		76-134		
123789-HxCDD	5.00 U	5.00	0.0346	ng/kg	100		64-162		
1234678-HpCDD	0.0588 J	5.00	0.0459	ng/kg	97		70-140		
OCDD	0.262 J	10.0	0.0417	ng/kg	97		78-144		
2378-TCDF	1.00 U	1.00	0.0567	ng/kg	112		75-158		
12378-PeCDF	0.0697 J	5.00	0.0272	ng/kg	103		80-134		
23478-PeCDF	5.00 U	5.00	0.0280	ng/kg	106		68-160		
123478-HxCDF	0.0344 J	5.00	0.0176	ng/kg	100		72-134		
123678-HxCDF	0.0260 J	5.00	0.0157	ng/kg	100		84-130		
123789-HxCDF	5.00 U	5.00	0.0229	ng/kg	94		78-130		
234678-HxCDF	0.0292 J	5.00	0.0167	ng/kg	94		70-156		
1234678-HpCDF	0.0270 J	5.00	0.0102	ng/kg	95		82-122		
1234789-HpCDF	0.0381 J	5.00	0.0180	ng/kg	95		78-138		
OCDF	10.0 U	10.0	0.0530	ng/kg	91		63-170		
TEQ WHO 2005 - EDLx0.0	0.00290			ng/kg					

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13198SLB026	Sample number(s): 7126350-7126353,7126355-7126357,7126359-7126364 UNSPK: 7126351								
Acenaphthene	93	93	48-127	0	30				
Acenaphthylene	90	92	49-121	2	30				
Anthracene	97	91	52-126	6	30				
Benzo(a)anthracene	106	83	32-135	22	30				
Benzo(a)pyrene	100	81	36-138	18	30				
Benzo(b)fluoranthene	122	97	26-142	18	30				
Benzo(e)pyrene	94	81	70-130	12	30				
Benzo(g,h,i)perylene	48	45	33-141	6	30				
Benzo(k)fluoranthene	113	95	47-129	16	30				
Butylbenzylphthalate	125	124	59-153	1	30				
Di-n-butylphthalate	119	120	62-154	1	30				
Chrysene	105	78	29-148	24	30				
Dibenz(a,h)anthracene	64	65	34-125	2	30				
Diethylphthalate	125	135*	76-127	8	30				
Dimethylphthalate	103	104	62-136	1	30				
Bis(2-Ethylhexyl)phthalate	110	114	39-167	3	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Fluoranthene	120	81	47-135	33*	30				
Fluorene	95	95	50-129	0	30				
Indeno(1,2,3-cd)pyrene	61	58	17-136	5	30				
1-Methylnaphthalene	101	100	50-131	1	30				
2-Methylnaphthalene	98	96	28-144	2	30				
Naphthalene	95	95	31-148	0	30				
N-Nitrosodimethylamine	79	80	48-113	2	30				
Di-n-octylphthalate	172*	178*	52-162	3	30				
Phenanthrene	105	87	29-142	17	30				
Pyrene	116	78	26-143	33*	30				
Batch number: 13198SLD026	Sample number(s): 7126350-7126353,7126355-7126357,7126359-7126360 UNSPK: 7126351								
Acenaphthene	95	100	60-120	5	30				
Acenaphthylene	100	103	47-137	2	30				
Aniline	59	57	10-131	3	30				
Anthracene	100	99	41-142	1	30				
Benzidine	0*	0*	35-141	0	30				
Benzo(a)anthracene	90	90	32-150	1	30				
Benzo(a)pyrene	101	102	33-145	1	30				
Benzo(b)fluoranthene	102	97	29-150	4	30				
Benzo(g,h,i)perylene	106	104	48-134	2	30				
Benzo(k)fluoranthene	97	102	41-139	4	30				
Benzoic acid	79	79	23-170	0	30				
Benzyl alcohol	88	89	32-145	1	30				
1,1'-Biphenyl	98	102	36-138	4	30				
4-Bromophenyl-phenylether	113	109	66-122	4	30				
Butylbenzylphthalate	97	95	42-146	2	30				
Di-n-butylphthalate	95	97	49-134	2	30				
Carbazole	92	93	58-126	0	30				
4-Chloro-3-methylphenol	88	87	50-137	1	30				
4-Chloroaniline	53	45	11-114	15	30				
bis(2-Chloroethoxy)methane	96	95	58-122	1	30				
bis(2-Chloroethyl)ether	95	94	54-128	1	30				
bis(2-Chloroisopropyl)ether	93	91	50-115	2	30				
2-Chloronaphthalene	117	115	50-140	2	30				
2-Chlorophenol	96	104	51-139	8	30				
4-Chlorophenyl-phenylether	88	96	65-117	9	30				
Chrysene	88	84	33-142	4	30				
Dibenz(a,h)anthracene	101	105	45-142	4	30				
Dibenzofuran	96	96	60-120	0	30				
1,2-Dichlorobenzene	96	95	45-127	0	30				
1,3-Dichlorobenzene	94	97	46-123	4	30				
1,4-Dichlorobenzene	89	92	40-132	3	30				
3,3'-Dichlorobenzidine	58	63	10-143	8	30				
2,4-Dichlorophenol	100	98	54-135	2	30				
Diethylphthalate	87	93	53-132	6	30				
2,4-Dimethylphenol	83	83	39-147	1	30				
3,5-Dimethylphenol	101	100	70-130	1	30				
Dimethylphthalate	90	95	49-129	6	30				
4,6-Dinitro-2-methylphenol	99	94	10-148	4	30				
2,4-Dinitrophenol	77	74	20-143	4	30				
1,2-Diphenylhydrazine	119	116	51-145	2	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
bis(2-Ethylhexyl)phthalate	95	93	38-151	2	30				
Fluoranthene	81	81	30-151	1	30				
Fluorene	89	94	55-128	6	30				
Hexachlorobenzene	105	107	46-132	2	30				
Hexachlorobutadiene	100	95	58-120	4	30				
Hexachlorocyclopentadiene	86	86	10-153	1	30				
Hexachloroethane	96	97	24-138	1	30				
Indeno(1,2,3-cd)pyrene	103	105	46-139	2	30				
Isophorone	95	91	59-122	4	30				
1-Methylnaphthalene	97	94	36-139	2	30				
2-Methylnaphthalene	89	86	45-134	4	30				
2-Methylphenol	85	90	32-146	6	30				
4-Methylphenol	83	85	31-150	3	30				
Naphthalene	95	94	35-141	1	30				
NDPA as diphenylamine	102	101	70-130	1	30				
2-Nitroaniline	91	94	63-137	4	30				
3-Nitroaniline	84	91	31-145	8	30				
4-Nitroaniline	69	75	25-137	8	30				
Nitrobenzene	93	91	46-133	2	30				
2-Nitrophenol	100	96	52-137	4	30				
4-Nitrophenol	75	78	25-142	4	30				
N-Nitroso-di-n-propylamine	87	89	45-133	2	30				
N-Nitrosodimethylamine	82	81	69-111	1	30				
N-Nitrosodiphenylamine	103	102	59-135	1	30				
Di-n-octylphthalate	100	101	48-155	1	30				
Pentachlorophenol	84	82	23-145	3	30				
Phenanthrene	96	97	34-147	1	30				
Phenol	88	90	34-146	2	30				
Pyrene	95	95	29-148	1	30				
Pyridine	60	60	16-108	1	30				
1,2,4-Trichlorobenzene	101	98	66-116	3	30				
2,4,5-Trichlorophenol	96	100	41-141	4	30				
2,4,6-Trichlorophenol	92	99	41-142	8	30				
Batch number: 13198B16A	Sample number(s): 7126351-7126353,7126355-7126356,7126359-7126360,7126362,7126364 UNSPK: 7126351								
11a TPH by EPA 8015B GRO	77	74	39-118	2	30				
Batch number: 131980021A	Sample number(s): 7126350-7126353,7126355-7126357,7126359-7126364 UNSPK: 7126351								
PCB-1016	89	94	16-146	7	50				
PCB-1260	93	96	40-134	5	50				
Batch number: 131980025A	Sample number(s): 7126350-7126353,7126355-7126357,7126359-7126364 UNSPK: 7126351								
EFH (C12-C14)	90	93	49-123	4	20				
EFH (C15-C20)	154*	125*	49-123	21*	20				
EFH (C21-C30)	273*	111	49-123	52*	20				
EFH (C30-C40)	364 (2)	26 (2)	49-123	49*	20				
EFH (C8-C11)	76	77	49-123	1	20				
Batch number: 131990637001	Sample number(s): 7126350-7126357,7126359-7126364 UNSPK: 7126351 BKG: 7126351								
Aluminum	4971 (2)	6312 (2)	75-125	8	20	22,300	26,300	16	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Antimony	35*	29*	75-125	21*	20	3.92	U	4.00	U	0 (1)	20
Arsenic	102	104	75-125	0	20	5.05		5.61		11 (1)	20
Barium	111	104	75-125	5	20	102		125		20	20
Beryllium	104	106	75-125	0	20	0.733	J	0.862	J	16 (1)	20
Boron	96	96	75-125	1	20	2.43	J	2.64	J	8 (1)	20
Cadmium	91	90	75-125	2	20	0.472	J	0.442	J	6 (1)	20
Calcium	162 (2)	200 (2)	75-125	3	20	4,510		4,810		6	20
Chromium	135*	145*	75-125	3	20	26.3		30.9		16	20
Cobalt	94	93	75-125	1	20	7.53		9.02		18	20
Copper	103	99	75-125	3	20	15.0		15.9		6	20
Iron	3655 (2)	5430 (2)	75-125	6	20	24,300		27,800		13	20
Lead	97	94	75-125	3	20	7.58		7.84		3 (1)	20
Lithium	104	105	75-125	0	20	18.1		21.1		15 (1)	20
Magnesium	556 (2)	709 (2)	75-125	5	20	4,920		5,530		12	20
Manganese	126 (2)	196 (2)	75-125	8	20	330		497		40*	20
Molybdenum	92	89	75-125	4	20	0.368	J	0.268	J	31* (1)	20
Nickel	97	98	75-125	0	20	15.8		18.7		17	20
Phosphorus	67*	49*	75-125	6	20	253		224		12	20
Potassium	151 (2)	103 (2)	75-125	8	20	4,600		4,490		2	20
Sodium	94	95	75-125	0	20	189		196		4 (1)	20
Tin	88	85	75-125	4	20	2.69	J	2.83	J	5 (1)	20
Titanium	502 (2)	480 (2)	75-125	2	20	1,070		1,150		8	20
Vanadium	128*	136*	75-125	3	20	48.6		57.8		17	20
Zinc	110	109	75-125	1	20	57.8		62.5		8	20
Zirconium	97	94	75-125	4	20	6.41		7.48		15 (1)	20
Batch number: 131990637001A	Sample number(s): 7126350-7126357,7126359-7126364 UNSPK: 7126351 BKG: 7126351										
Silver	129*	137*	75-125	5	20	0.0492	J	0.0723	J	38* (1)	20
Strontium	123	132*	75-125	2	20	29.5		34.3		15	20
Thallium	145*	170*	75-125	9	20	0.355		0.363		2 (1)	20
Batch number: 131990637001B	Sample number(s): 7126350-7126357,7126359-7126364 UNSPK: 7126351 BKG: 7126351										
Selenium	108	138*	75-125	21*	20	0.245	J	0.245	J	0 (1)	20
Batch number: 132030638001	Sample number(s): 7126350-7126357,7126359-7126364 UNSPK: 7126351 BKG: 7126351										
3a Mercury 7471A	116	118	65-135	1	20	0.0158	U	0.0159	U	0 (1)	20
Batch number: 13194039401A	Sample number(s): 7126350-7126351,7126354-7126357,7126359-7126363 BKG: 7126351										
15a pH by 9045D						6.12		6.09		0	3
Batch number: 13194039401B	Sample number(s): 7126364 BKG: 7126364										
15a pH by 9045D						6.82		6.85		0	3
Batch number: 13200162401A	Sample number(s): 7126350-7126357,7126359-7126364 BKG: 7126351										
14a Moisture Content by 160.3						11.6		10.5		10	20
14a Moisture Content by 160.3						11.6		10.5		10	20
14a Moisture Content by 160.3						11.6		10.5		10	20
Batch number: 13198003	Sample number(s): 7126350-7126353,7126355-7126357,7126359-7126364 UNSPK: 7126351										
2378-TCDD	109	100	40-135	11	20						
12378-PeCDD	106	107	40-135	1	20						

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
123478-HxCDD	107	103	40-135	7	20				
123678-HxCDD	101	99	40-135	5	20				
123789-HxCDD	100	101	40-135	1	20				
1234678-HpCDD	96	93	40-135	5	20				
OCDD	92	91	40-135	4	20				
2378-TCDF	103	102	40-135	4	20				
12378-PeCDF	101	102	40-135	2	20				
23478-PeCDF	105	105	40-135	3	20				
123478-HxCDF	95	96	40-135	1	20				
123678-HxCDF	98	96	40-135	5	20				
123789-HxCDF	97	93	40-135	7	20				
234678-HxCDF	96	96	40-135	3	20				
1234678-HpCDF	94	93	40-135	4	20				
1234789-HpCDF	92	94	40-135	0	20				
OCDF	89	88	40-135	4	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13198SLB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7126350	79	85	92
7126351	80	87	97
7126352	84	92	102
7126353	84	93	101
7126355	82	89	97
7126356	84	92	100
7126357	77	86	91
7126359	83	91	95
7126360	84	91	98
7126361	84	89	100
7126362	88	91	103
7126363	83	87	103
7126364	86	93	101
Blank	84	92	102
LCS	90	98	105
MS	84	92	102
MSD	84	93	101
Limits:	54-129	61-134	55-129

Analysis Name: 8a SVOCs by EPA 8270D
Batch number: 13198SLD026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Surrogate Quality Control

7126350	97	103	90	95	101	101
7126351	96	105	83	95	106	103
7126352	94	99	80	99	106	107
7126353	94	101	86	97	107	106
7126355	89	94	81	88	101	99
7126356	97	103	86	98	106	110
7126357	95	101	81	100	108	104
7126359	90	96	84	95	109	106
7126360	91	98	73	94	101	101
Blank	83	92	96	86	95	104
LCS	101	110	106	104	110	114
MS	94	99	80	99	106	107
MSD	94	101	86	97	107	106
Limits:	25-120	25-130	35-130	40-130	45-130	45-130

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13196B94A

	Trifluorotoluene-F
7126358	71
Blank	71
LCS	77
LCSD	76
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13198B16A

	Trifluorotoluene-F
7126351	63
7126352	67
7126353	66
7126355	70
7126356	67
7126359	69
7126360	70
7126362	71
7126364	71
Blank	69
LCS	72
MS	67
MSD	66
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 131980021A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7126350	108	98
7126351	100	93
7126352	108	92
7126353	109	96

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Surrogate Quality Control

7126355	112	95
7126356	112	98
7126357	109	96
7126359	110	93
7126360	111	100
7126361	117	101
7126362	125*	107
7126363	121*	103
7126364	117	106
Blank	113	103
LCS	118	111
LCSD	115	111
MS	108	92
MSD	109	96
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131980025A

	Chlorobenzene	Orthoterphenyl
7126350	83	88
7126351	89	93
7126352	88	89
7126353	90	95
7126355	89	92
7126356	90	97
7126357	78	83
7126359	90	98
7126360	91	97
7126361	93	99
7126362	91	97
7126363	90	99
7126364	89	96
Blank	94	102
LCS	96	104
MS	88	89
MSD	90	95
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13198003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7126350	86	100	88	97	92	100
7126351	77	108	90	96	96	100
7126352	79	102	89	95	91	88
7126353	62	89	78	85	83	87
7126355	90	112	99	103	99	103
7126356	80	105	89	95	93	96
7126357	79	100	85	92	89	91
7126359	81	110	87	89	92	99
7126360	73	94	83	87	86	89
7126361	71	91	78	90	81	80
7126362	65	84	80	95	82	76

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1403853
Reported: 08/01/13 at 08:58 AM

Surrogate Quality Control

7126363	74	98	85	97	91	94
7126364	78	103	93	105	94	85
Blank	55	79	74	88	80	76
MS	79	102	89	95	91	88
MSD	62	89	78	85	83	87
OPR	58	86	77	85	86	80
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7126350	104	86	90	88	83	86
7126351	103	108	104	97	87	90
7126352	102	91	90	96	79	88
7126353	106	91	95	81	78	83
7126355	110	107	117	100	90	94
7126356	107	91	88	97	85	90
7126357	110	88	83	94	84	85
7126359	106	111	119	102	85	86
7126360	109	94	94	85	83	84
7126361	117	74	68	87	79	79
7126362	112	71	69	78	77	82
7126363	131	97	96	91	83	90
7126364	123	80	75	98	84	91
Blank	101	74	71	66	72	79
MS	102	91	90	96	79	88
MSD	106	91	95	81	78	83
OPR	110	78	78	80	81	87
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7126350	84	87	99	86	105
7126351	92	106	116	87	109
7126352	87	89	98	88	106
7126353	79	96	111	68	94
7126355	95	102	124	100	113
7126356	88	91	101	90	103
7126357	85	94	97	84	109
7126359	89	106	120	87	108
7126360	85	100	113	77	97
7126361	80	88	94	73	101
7126362	81	86	95	67	90
7126363	89	104	118	80	110
7126364	90	91	101	82	113
Blank	76	79	85	57	82
MS	87	89	98	88	106
MSD	79	96	111	68	94
OPR	82	88	95	62	89
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Cap#1403853 Sample# 7126350-64

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/12/2013
CarrierName: FedEx
AirbillNo: 796220468732

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130712-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	Hex Cr 7196/7199	pH 9040 (Water)	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-578-SA8-SB-0.0-0.5	7/12/13 08:35	SO	None	2 - SS-Sleeve	10 day	X	X			X	X	X		X	X											X											TIC for Tetralin
SL-578-SA8-SB-0.0-0.5	7/12/13 08:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-578-SA8-SB-4.0-5.0MS	7/12/13 09:15	SO	None	6 - 16 oz glass	10 day	X	X			X	X	X		X	X			X								X											TIC for Tetralin. MS/MSD
SL-878-SA8-SB-4.0-5.0	7/12/13 09:30	SO	None	2 - 16 oz glass	10 day	X	X			X	X	X		X	X			X								X											TIC for Tetralin.
SL-578-SA8-SB-9.0-10.0	7/12/13 09:45	SO	None	2 - 16 oz glass	10 day	X	X			X	X	X		X	X			X								X											TIC for Tetralin.
SL-580-SA8-SB-0.0-0.5	7/12/13 10:30	SO	None	2 - SS-Sleeve	10 day	X	X			X	X	X		X	X											X											TIC for Tetralin
SL-580-SA8-SB-0.0-0.5	7/12/13 10:30	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stacy Mysel	07/12/2013	1500									
									Patty	7/13/13	0920

acct# 13013 Cap# 1403853 sample# 7126350-64

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/12/2013
CarrierName: FedEx
AirbillNo: 796220468732

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130712-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-071213	7/12/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-578-SA8-SB-4.0-5.0MS	7/12/13 09:15	SO	HCl	6 - Encore	10 day																			X												MS/MSD
SL-878-SA8-SB-4.0-5.0	7/12/13 09:30	SO	HCl	2 - Encore	10 day																			X												
SL-578-SA8-SB-9.0-10.0	7/12/13 09:45	SO	HCl	2 - Encore	10 day																			X												
SL-580-SA8-SB-4.0-5.0	7/12/13 10:45	SO	None	2 - 16 oz glass	10 day	X	X			X	X	X		X	X				X						X											TIC for Tetralin
SL-580-SA8-SB-10.5-11.5	7/12/13 11:00	SO	None	2 - 16 oz glass	10 day	X	X			X	X	X		X	X				X						X											TIC for Tetralin
SL-580-SA8-SB-4.0-5.0	7/12/13 10:45	SO	HCl	2 - Encore	10 day																			X												
SL-580-SA8-SB-10.5-11.5	7/12/13 11:00	SO	HCl	2 - Encore	10 day																			X												
SL-581-SA8-SB-0.0-0.5	7/12/13 12:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-581-SA8-SB-0.0-0.5	7/12/13 12:40	SO	None	1 - 4 oz glass	10 day														X																	
SL-581-SA8-SB-4.5-5.5	7/12/13 12:50	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X										
SL-581-SA8-SB-4.5-5.5	7/12/13 12:50	SO	None	2 - Encore	10 day																			X												
SL-587-SA8-SB-0.0-0.5	7/12/13 13:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-587-SA8-SB-0.0-0.5	7/12/13 13:30	SO	None	1 - 4 oz glass	10 day														X																	
SL-587-SA8-SB-6.5-7.5	7/12/13 13:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X										
SL-587-SA8-SB-6.5-7.5	7/12/13 13:40	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Foster

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Myers	07/12/2013	1500									
									Patty	7/13/13	0920

COC Rev 2

COC: 20130712-02, Page No: 1 of 1

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C#1403853

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 7/13/2013

Time of Receipt: 0920

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	0.5	TB	WI	Y	B	
2	↓	0.7	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat Glu 3472 **Date/Time:** 7/13/13 1007

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH067

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

July 30, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/16/2013
Group Number: 1404272
SDG: PH067
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-501-SA8-SB-0.0-0.5 Soil	7128144
SL-501-SA8-SB-0.0-0.5MS Soil	7128145
SL-501-SA8-SB-0.0-0.5MSD Soil	7128146
SL-501-SA8-SB-0.0-0.5DUP Soil	7128147
SL-801-SA8-SB-0.0-0.5 Soil	7128148
SL-501-SA8-SB-4.0-5.0 Soil	7128149
SL-501-SA8-SB-9.0-10.0 Soil	7128150
SL-501-SA8-SB-12.0-13.0 Soil	7128151
SL-502-SA8-SB-0.0-0.5 Soil	7128152
SL-502-SA8-SB-4.0-5.0 Soil	7128153
SL-502-SA8-SB-7.5-8.5 Soil	7128154
TB-071513 Water	7128155
SL-503-SA8-SB-0.0-0.5 Soil	7128156
SL-503-SA8-SB-3.0-4.0 Soil	7128157
SL-511-SA8-SB-0.0-0.5 Soil	7128158
SL-511-SA8-SB-6.0-7.0 Soil	7128159

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-501-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128144
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	0.49	J	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	3.3		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	5.2		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	6.9		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	4.4	J	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	3.7		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	7.5		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	8.0		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.2	J	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J	19	6.3	1
12969	Fluoranthene	206-44-0	6.5		1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	3.4		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.3	J	1.7	0.70	1
12969	Naphthalene	91-20-3	2.3		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	3.2		1.7	0.70	1
12969	Pyrene	129-00-0	6.9		1.7	0.70	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	93	U	93	46	1
10401	2,4-DB	94-82-6	18	U	18	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.86	U	0.86	0.18	1
10590	Alpha BHC	319-84-6	0.86	U	0.86	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.86	U	0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	2.7		1.8	0.34	1
10590	p,p-DDT	50-29-3	2.0		1.8	0.36	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128144
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	0.86	U	0.86	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.86	U	0.86	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.86	U	0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.86	U	0.86	0.18	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	8.1	J	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.6	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	24		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	51		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,500		41.1	7.41	1
06944	Antimony	7440-36-0	4.11	U	4.11	0.760	1
06935	Arsenic	7440-38-2	3.89	J	4.11	0.719	1
06946	Barium	7440-39-3	103		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.605	J	1.03	0.0689	1
07914	Boron	7440-42-8	6.11	J	10.3	0.863	1
06949	Cadmium	7440-43-9	0.352	J	1.03	0.0781	1
01650	Calcium	7440-70-2	3,910		20.6	3.43	1
06951	Chromium	7440-47-3	20.7		3.08	0.164	1
06952	Cobalt	7440-48-4	5.94		1.03	0.102	1
06953	Copper	7440-50-8	12.2		2.06	0.298	1
01654	Iron	7439-89-6	20,900		41.1	3.72	1
06955	Lead	7439-92-1	35.3		3.08	0.514	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128144
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	21.5		4.1	0.35	1
01657	Magnesium	7439-95-4	4,540		10.3	1.72	1
06958	Manganese	7439-96-5	393		1.03	0.0853	1
06960	Molybdenum	7439-98-7	0.441	J	2.06	0.175	1
06961	Nickel	7440-02-0	12.4		2.06	0.134	1
10145	Phosphorus	7723-14-0	434		10.3	2.97	1
01662	Potassium	7440-09-7	3,510		103	8.57	1
01667	Sodium	7440-23-5	77.0	J	103	17.2	1
06969	Tin	7440-31-5	2.77	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,050		1.03	0.175	1
06971	Vanadium	7440-62-2	37.3		1.03	0.134	1
06972	Zinc	7440-66-6	62.7		4.11	0.206	1
10146	Zirconium	7440-67-7	1.14	J	5.14	0.863	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.245	J	0.411	0.103	2
06142	Silver	7440-22-4	0.0421	J	0.206	0.0267	2
06144	Strontium	7440-24-6	20.9		0.411	0.0699	2
06145	Thallium	7440-28-0	0.284		0.206	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0276		0.0171	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.26		0.0100	0.0100	1
	The pH was measured in water at 23.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128144
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
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Fairfax VA 22030

50100 SDG#: PH067-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0816	JQ	1.01	0.0656	1
11031	12378-PeCDD	40321-76-4	0.263	JQ	5.05	0.0829	1
11031	123478-HxCDD	39227-28-6	0.303	JQ	5.05	0.0729	1
11031	123678-HxCDD	57653-85-7	1.14	J	5.05	0.0805	1
11031	123789-HxCDD	19408-74-3	0.996	JB	5.05	0.0819	1
11031	1234678-HpCDD	35822-46-9	19.1	B	5.05	0.0928	1
11031	OCDD	3268-87-9	240	B	10.1	0.0610	1
11031	2378-TCDF	51207-31-9	0.540	J	1.01	0.0809	1
11031	12378-PeCDF	57117-41-6	1.09	JB	5.05	0.0476	1
11031	23478-PeCDF	57117-31-4	0.653	JQ	5.05	0.0470	1
11031	123478-HxCDF	70648-26-9	0.312	JBQ	5.05	0.0405	1
11031	123678-HxCDF	57117-44-9	0.379	JBQ	5.05	0.0411	1
11031	123789-HxCDF	72918-21-9	0.415	J	5.05	0.0454	1
11031	234678-HxCDF	60851-34-5	0.262	JB	5.05	0.0407	1
11031	1234678-HpCDF	67562-39-4	3.22	JB	5.05	0.0327	1
11031	1234789-HpCDF	55673-89-7	0.317	JQ	5.05	0.0567	1
11031	OCDF	39001-02-0	5.69	JB	10.1	0.0547	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.665				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128144
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

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3201 Jermantown Road
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Fairfax VA 22030

50100 SDG#: PH067-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128144
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

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Fairfax VA 22030

50100 SDG#: PH067-01BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 06:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	131980028A	07/19/2013 16:30	Matthew S Listner	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132010011A	07/23/2013 14:32	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 13:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132010011A	07/21/2013 08:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	131980028A	07/18/2013 07:30	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 20:04	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/24/2013 20:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128144
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
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50100 SDG#: PH067-01BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 10:27	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 16:57	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 16:57	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:04	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 16:57	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:25	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401A	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128145
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

50100 SDG#: PH067-01MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	35		1.7	0.70	1
12969	Acenaphthylene	208-96-8	32		1.7	0.35	1
12969	Anthracene	120-12-7	31		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	32		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	30		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	36		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	30		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	24		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	36		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	44		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	43		19	6.3	1
12969	Chrysene	218-01-9	34		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	29		1.7	0.70	1
12969	Diethylphthalate	84-66-2	45		19	6.3	1
12969	Dimethylphthalate	131-11-3	36		19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	46		19	6.3	1
12969	Fluoranthene	206-44-0	33		1.7	0.70	1
12969	Fluorene	86-73-7	33		1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	28		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	36		1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	35		1.7	0.70	1
12969	Naphthalene	91-20-3	35		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	29		1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	43		19	6.3	1
12969	Phenanthrene	85-01-8	34		1.7	0.70	1
12969	Pyrene	129-00-0	32		1.7	0.70	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	140		93	46	1
10401	2,4-DB	94-82-6	18	U	18	6.4	1
10401	Dicamba	1918-00-9	10	J	12	4.2	1
10401	Dinoseb	88-85-7	62		25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	150		18	9.3	1
10401	MCPA	94-74-6	10,000		2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	8,100		2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	3.1		0.86	0.18	1
10590	Alpha BHC	319-84-6	3.5		0.86	0.18	1
10590	Beta BHC	319-85-7	3.3		2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	3.4		0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	7.7		1.8	0.34	1
10590	p,p-DDE	72-55-9	8.4		1.8	0.34	1
10590	p,p-DDT	50-29-3	8.3		1.8	0.36	1

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Sample Description: SL-501-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128145
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

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Fairfax VA 22030

50100 SDG#: PH067-01MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	3.3		0.86	0.47	1
10590	Dieldrin	60-57-1	7.7		1.8	0.34	1
10590	Endosulfan I	959-98-8	3.5		0.86	0.23	1
10590	Endosulfan II	33213-65-9	6.9		1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	7.1		1.8	0.34	1
10590	Endrin	72-20-8	7.5		1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	6.1		1.8	0.34	1
10590	Endrin Ketone	53494-70-5	6.9		1.9	0.62	1
10590	Heptachlor	76-44-8	3.6		0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	3.3		0.86	0.18	1
10590	Methoxychlor	72-43-5	40		7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	170		18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	48		18	4.6	1
10592	PCB-1260	11096-82-5	190		18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.0	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	16		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	36		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,100		40.7	7.34	1
06944	Antimony	7440-36-0	24.6		4.07	0.753	1
06935	Arsenic	7440-38-2	17.9		4.07	0.712	1
06946	Barium	7440-39-3	301		1.02	0.0336	1
06947	Beryllium	7440-41-7	5.78		1.02	0.0682	1
07914	Boron	7440-42-8	206		10.2	0.855	1
06949	Cadmium	7440-43-9	5.17		1.02	0.0773	1
01650	Calcium	7440-70-2	3,620		20.4	3.40	1
06951	Chromium	7440-47-3	41.3		3.05	0.163	1
06952	Cobalt	7440-48-4	54.2		1.02	0.101	1
06953	Copper	7440-50-8	38.4		2.04	0.295	1
01654	Iron	7439-89-6	20,900		40.7	3.68	1
06955	Lead	7439-92-1	23.1		3.05	0.509	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128145
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	122	4.1	0.35	1
01657	Magnesium	7439-95-4	4,830	10.2	1.70	1
06958	Manganese	7439-96-5	385	1.02	0.0845	1
06960	Molybdenum	7439-98-7	189	2.04	0.173	1
06961	Nickel	7440-02-0	60.3	2.04	0.132	1
10145	Phosphorus	7723-14-0	459	10.2	2.94	1
01662	Potassium	7440-09-7	4,630	102	8.49	1
01667	Sodium	7440-23-5	1,090	102	17.0	1
06969	Tin	7440-31-5	351	10.2	0.224	1
06970	Titanium	7440-32-6	1,390	1.02	0.173	1
06971	Vanadium	7440-62-2	90.3	1.02	0.132	1
06972	Zinc	7440-66-6	106	4.07	0.204	1
10146	Zirconium	7440-67-7	86.2	5.09	0.855	1
	SW-846 6020A		mg/kg	mg/kg	mg/kg	
06141	Selenium	7782-49-2	2.25	0.407	0.102	2
06142	Silver	7440-22-4	10.9	0.204	0.0265	2
06144	Strontium	7440-24-6	30.2	0.407	0.0692	2
06145	Thallium	7440-28-0	0.716	0.204	0.0305	2
	SW-846 7471B		mg/kg	mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.201	0.0166	0.010	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	4.6	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128145
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.0		1.04	0.0914	1
11031	12378-PeCDD	40321-76-4	108		5.20	0.0907	1
11031	123478-HxCDD	39227-28-6	101		5.20	0.0897	1
11031	123678-HxCDD	57653-85-7	101		5.20	0.0966	1
11031	123789-HxCDD	19408-74-3	102	B	5.20	0.0910	1
11031	1234678-HpCDD	35822-46-9	105	B	5.20	0.0866	1
11031	OCDD	3268-87-9	264	B	10.4	0.0567	1
11031	2378-TCDF	51207-31-9	19.8		1.04	0.0932	1
11031	12378-PeCDF	57117-41-6	99.6	B	5.20	0.0638	1
11031	23478-PeCDF	57117-31-4	100		5.20	0.0633	1
11031	123478-HxCDF	70648-26-9	99.0	B	5.20	0.0740	1
11031	123678-HxCDF	57117-44-9	99.5	B	5.20	0.0662	1
11031	123789-HxCDF	72918-21-9	97.1		5.20	0.0842	1
11031	234678-HxCDF	60851-34-5	96.2	B	5.20	0.0724	1
11031	1234678-HpCDF	67562-39-4	97.5	B	5.20	0.0498	1
11031	1234789-HpCDF	55673-89-7	97.0		5.20	0.0889	1
11031	OCDF	39001-02-0	196	B	10.4	0.0732	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	86	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128145
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 07:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	131980028A	07/19/2013 16:56	Matthew S Listner	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132010011A	07/23/2013 14:48	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 13:31	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132010011A	07/21/2013 08:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	131980028A	07/18/2013 07:30	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 20:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/24/2013 21:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128145
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 10:39	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:04	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:04	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:11	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:04	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:35	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128146
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	34		1.7	0.70	1
12969	Acenaphthylene	208-96-8	32		1.7	0.35	1
12969	Anthracene	120-12-7	32		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	32		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	29		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	36		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	30		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	24		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	34		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	44		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	44		19	6.3	1
12969	Chrysene	218-01-9	34		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	29		1.7	0.70	1
12969	Diethylphthalate	84-66-2	44		19	6.3	1
12969	Dimethylphthalate	131-11-3	36		19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	45		19	6.3	1
12969	Fluoranthene	206-44-0	33		1.7	0.70	1
12969	Fluorene	86-73-7	33		1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	28		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	36		1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	35		1.7	0.70	1
12969	Naphthalene	91-20-3	35		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	29		1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	43		19	6.3	1
12969	Phenanthrene	85-01-8	33		1.7	0.70	1
12969	Pyrene	129-00-0	33		1.7	0.70	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	120		94	46	1
10401	2,4-DB	94-82-6	18	U	18	6.5	1
10401	Dicamba	1918-00-9	6.7	J	13	4.2	1
10401	Dinoseb	88-85-7	32		25	9.4	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	140		18	9.4	1
10401	MCPA	94-74-6	11,000		2,600	800	1
10401	MCPP (Mecoprop)	93-65-2	8,000		2,600	790	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.86	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.79	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	2.9		0.87	0.18	1
10590	Alpha BHC	319-84-6	3.3		0.87	0.18	1
10590	Beta BHC	319-85-7	3.2		2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	3.3		0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	7.5		1.8	0.35	1
10590	p,p-DDE	72-55-9	7.2		1.8	0.35	1
10590	p,p-DDT	50-29-3	7.6		1.8	0.37	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128146
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	3.2		0.87	0.47	1
10590	Dieldrin	60-57-1	7.5		1.8	0.35	1
10590	Endosulfan I	959-98-8	3.4		0.87	0.23	1
10590	Endosulfan II	33213-65-9	6.7		1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	6.8		1.8	0.35	1
10590	Endrin	72-20-8	7.3		1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	5.9		1.8	0.35	1
10590	Endrin Ketone	53494-70-5	6.8		1.9	0.63	1
10590	Heptachlor	76-44-8	3.5		0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	3.2		0.87	0.18	1
10590	Methoxychlor	72-43-5	38		7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	180		18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	49		18	4.6	1
10592	PCB-1260	11096-82-5	210		18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	4.1	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	14		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	32		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,400		41.1	7.41	1
06944	Antimony	7440-36-0	23.3		4.11	0.760	1
06935	Arsenic	7440-38-2	18.9		4.11	0.719	1
06946	Barium	7440-39-3	311		1.03	0.0339	1
06947	Beryllium	7440-41-7	5.88		1.03	0.0689	1
07914	Boron	7440-42-8	208		10.3	0.863	1
06949	Cadmium	7440-43-9	5.20		1.03	0.0781	1
01650	Calcium	7440-70-2	3,820		20.6	3.43	1
06951	Chromium	7440-47-3	42.7		3.08	0.164	1
06952	Cobalt	7440-48-4	54.6		1.03	0.102	1
06953	Copper	7440-50-8	39.3		2.06	0.298	1
01654	Iron	7439-89-6	22,100		41.1	3.72	1
06955	Lead	7439-92-1	22.3		3.08	0.514	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128146
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	123	4.1	0.35	1
01657	Magnesium	7439-95-4	5,100	10.3	1.72	1
06958	Manganese	7439-96-5	375	1.03	0.0853	1
06960	Molybdenum	7439-98-7	190	2.06	0.175	1
06961	Nickel	7440-02-0	61.2	2.06	0.134	1
10145	Phosphorus	7723-14-0	469	10.3	2.97	1
01662	Potassium	7440-09-7	4,770	103	8.57	1
01667	Sodium	7440-23-5	1,090	103	17.2	1
06969	Tin	7440-31-5	351	10.3	0.226	1
06970	Titanium	7440-32-6	1,510	1.03	0.175	1
06971	Vanadium	7440-62-2	93.9	1.03	0.134	1
06972	Zinc	7440-66-6	108	4.11	0.206	1
10146	Zirconium	7440-67-7	85.4	5.14	0.863	1
	SW-846 6020A		mg/kg	mg/kg	mg/kg	
06141	Selenium	7782-49-2	2.22	0.411	0.103	2
06142	Silver	7440-22-4	11.1	0.206	0.0267	2
06144	Strontium	7440-24-6	28.9	0.411	0.0699	2
06145	Thallium	7440-28-0	0.700	0.206	0.0308	2
	SW-846 7471B		mg/kg	mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.194	0.0162	0.0097	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	4.6	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128146
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.3		1.03	0.108	1
11031	12378-PeCDD	40321-76-4	108		5.17	0.119	1
11031	123478-HxCDD	39227-28-6	104		5.17	0.0774	1
11031	123678-HxCDD	57653-85-7	100		5.17	0.0869	1
11031	123789-HxCDD	19408-74-3	101	B	5.17	0.0812	1
11031	1234678-HpCDD	35822-46-9	98.3	B	5.17	0.0996	1
11031	OCDD	3268-87-9	233	B	10.3	0.0874	1
11031	2378-TCDF	51207-31-9	19.2		1.03	0.0987	1
11031	12378-PeCDF	57117-41-6	101	B	5.17	0.0760	1
11031	23478-PeCDF	57117-31-4	99.0		5.17	0.0676	1
11031	123478-HxCDF	70648-26-9	99.8	B	5.17	0.0715	1
11031	123678-HxCDF	57117-44-9	99.6	B	5.17	0.0703	1
11031	123789-HxCDF	72918-21-9	95.9		5.17	0.0877	1
11031	234678-HxCDF	60851-34-5	98.2	B	5.17	0.0689	1
11031	1234678-HpCDF	67562-39-4	96.3	B	5.17	0.0623	1
11031	1234789-HpCDF	55673-89-7	97.0		5.17	0.103	1
11031	OCDF	39001-02-0	204	B	10.3	0.142	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	112	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	94	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128146
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 07:35	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	131980028A	07/19/2013 17:23	Matthew S Listner	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132010011A	07/23/2013 15:03	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 13:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132010011A	07/21/2013 08:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	131980028A	07/18/2013 07:30	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 20:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/24/2013 22:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128146
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 10:43	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:06	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:06	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:13	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:06	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:37	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128147
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,300		41.5	7.48	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.768	1
06935	Arsenic	7440-38-2	4.41		4.15	0.726	1
06946	Barium	7440-39-3	98.9		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.622	J	1.04	0.0695	1
07914	Boron	7440-42-8	5.74	J	10.4	0.872	1
06949	Cadmium	7440-43-9	0.268	J	1.04	0.0789	1
01650	Calcium	7440-70-2	2,830		20.8	3.47	1
06951	Chromium	7440-47-3	20.5		3.11	0.166	1
06952	Cobalt	7440-48-4	5.89		1.04	0.103	1
06953	Copper	7440-50-8	11.4		2.08	0.301	1
01654	Iron	7439-89-6	20,500		41.5	3.76	1
06955	Lead	7439-92-1	8.46		3.11	0.519	1
01656	Lithium	7439-93-2	20.1		4.2	0.35	1
01657	Magnesium	7439-95-4	4,430		10.4	1.73	1
06958	Manganese	7439-96-5	321		1.04	0.0861	1
06960	Molybdenum	7439-98-7	0.451	J	2.08	0.176	1
06961	Nickel	7440-02-0	11.8		2.08	0.135	1
10145	Phosphorus	7723-14-0	386		10.4	3.00	1
01662	Potassium	7440-09-7	3,130		104	8.66	1
01667	Sodium	7440-23-5	75.6	J	104	17.3	1
06969	Tin	7440-31-5	2.67	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,060		1.04	0.176	1
06971	Vanadium	7440-62-2	37.6		1.04	0.135	1
06972	Zinc	7440-66-6	54.4		4.15	0.208	1
10146	Zirconium	7440-67-7	0.992	J	5.19	0.872	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.253	J	0.415	0.104	2
06142	Silver	7440-22-4	0.0291	J	0.208	0.0270	2
06144	Strontium	7440-24-6	21.6		0.415	0.0706	2
06145	Thallium	7440-28-0	0.313		0.208	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0121	J	0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.27		0.0100	0.0100	1
	The pH was measured in water at 23 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	4.6		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	4.7		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128147
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:10 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50100 SDG#: PH067-01DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 10:35	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:02	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:02	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:08	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:02	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:33	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401A	07/16/2013 20:30	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-801-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128148
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80100 SDG#: PH067-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	0.77	J	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	0.94	J	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	2.2		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.94	J	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	9.3		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	3.9		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	J	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	J	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	0.72	J	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.0	J	1.7	0.70	1
12969	Naphthalene	91-20-3	2.4		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	10	J	19	6.3	1
12969	Phenanthrene	85-01-8	1.4	J	1.7	0.70	1
12969	Pyrene	129-00-0	2.1		1.7	0.70	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	94	U	94	46	1
10401	2,4-DB	94-82-6	18	U	18	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.4	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.4	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.3	J	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	J	1.8	0.36	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-801-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128148
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80100 SDG#: PH067-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	13	J	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.4	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	20		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	41		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,400		40.6	7.32	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.752	1
06935	Arsenic	7440-38-2	4.41		4.06	0.711	1
06946	Barium	7440-39-3	104		1.02	0.0335	1
06947	Beryllium	7440-41-7	0.842	J	1.02	0.0680	1
07914	Boron	7440-42-8	16.1		10.2	0.853	1
06949	Cadmium	7440-43-9	0.374	J	1.02	0.0772	1
01650	Calcium	7440-70-2	5,920		20.3	3.39	1
06951	Chromium	7440-47-3	21.4		3.05	0.162	1
06952	Cobalt	7440-48-4	5.67		1.02	0.101	1
06953	Copper	7440-50-8	11.2		2.03	0.295	1
01654	Iron	7439-89-6	21,900		40.6	3.68	1
06955	Lead	7439-92-1	18.4		3.05	0.508	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-801-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128148
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80100 SDG#: PH067-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	21.7		4.1	0.35	1
01657	Magnesium	7439-95-4	4,900		10.2	1.70	1
06958	Manganese	7439-96-5	410		1.02	0.0843	1
06960	Molybdenum	7439-98-7	2.03	U	2.03	0.173	1
06961	Nickel	7440-02-0	12.6		2.03	0.132	1
10145	Phosphorus	7723-14-0	466		10.2	2.93	1
01662	Potassium	7440-09-7	3,740		102	8.47	1
01667	Sodium	7440-23-5	85.6	J	102	17.0	1
06969	Tin	7440-31-5	2.68	J	10.2	0.223	1
06970	Titanium	7440-32-6	1,150		1.02	0.173	1
06971	Vanadium	7440-62-2	40.9		1.02	0.132	1
06972	Zinc	7440-66-6	65.3		4.06	0.203	1
10146	Zirconium	7440-67-7	0.923	J	5.08	0.853	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.246	J	0.406	0.102	2
06142	Silver	7440-22-4	0.0479	J	0.203	0.0264	2
06144	Strontium	7440-24-6	26.0		0.406	0.0691	2
06145	Thallium	7440-28-0	0.289		0.203	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0493		0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.77		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-801-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128148
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80100 SDG#: PH067-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0473	1
11031	12378-PeCDD	40321-76-4	0.149	JQ	5.10	0.0809	1
11031	123478-HxCDD	39227-28-6	0.265	J	5.10	0.0643	1
11031	123678-HxCDD	57653-85-7	0.803	J	5.10	0.0691	1
11031	123789-HxCDD	19408-74-3	0.808	JB	5.10	0.0701	1
11031	1234678-HpCDD	35822-46-9	11.7	B	5.10	0.0820	1
11031	OCDD	3268-87-9	137	B	10.2	0.0573	1
11031	2378-TCDF	51207-31-9	0.685	J	1.02	0.0794	1
11031	12378-PeCDF	57117-41-6	1.18	JB	5.10	0.0427	1
11031	23478-PeCDF	57117-31-4	0.208	JQ	5.10	0.0396	1
11031	123478-HxCDF	70648-26-9	0.228	JBQ	5.10	0.0373	1
11031	123678-HxCDF	57117-44-9	0.132	JBQ	5.10	0.0376	1
11031	123789-HxCDF	72918-21-9	0.431	J	5.10	0.0416	1
11031	234678-HxCDF	60851-34-5	0.208	JBQ	5.10	0.0358	1
11031	1234678-HpCDF	67562-39-4	2.24	JB	5.10	0.0371	1
11031	1234789-HpCDF	55673-89-7	0.224	JQ	5.10	0.0616	1
11031	OCDF	39001-02-0	4.72	JB	10.2	0.0482	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.516				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-801-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128148
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:15 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80100 SDG#: PH067-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-801-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128148
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:15 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80100 SDG#: PH067-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 08:07	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	131980028A	07/19/2013 17:49	Matthew S Listner	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132010011A	07/23/2013 15:18	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 14:08	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132010011A	07/21/2013 08:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	131980028A	07/18/2013 07:30	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 21:28	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/25/2013 13:04	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/23/2013 22:41	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/23/2013 22:41	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/23/2013 22:41	John P Hook	1
06953	Copper	SW-846 6010C	1	131990637002	07/23/2013 22:41	John P Hook	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/23/2013 22:41	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-801-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128148
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80100 SDG#: PH067-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/23/2013 22:41	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/23/2013 22:41	John P Hook	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 10:50	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:11	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:11	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:18	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:11	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401A	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128149
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH067-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.2	J	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	0.65	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.5	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.67
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	96	U	96	47	1
10401	2,4-DB	94-82-6	18	U	18	7.3	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.6	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.6	1
10401	MCPA	94-74-6	2,700	U	2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	800	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.87	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.80	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128149
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH067-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,600		41.5	7.48	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.768	1
06935	Arsenic	7440-38-2	4.45		4.15	0.726	1
06946	Barium	7440-39-3	110		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.833	J	1.04	0.0695	1
07914	Boron	7440-42-8	5.00	J	10.4	0.871	1
06949	Cadmium	7440-43-9	0.111	J	1.04	0.0788	1
01650	Calcium	7440-70-2	3,080		20.7	3.46	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128149
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH067-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06951	Chromium	7440-47-3	23.9	3.11	0.166	1
06952	Cobalt	7440-48-4	6.02	1.04	0.103	1
06953	Copper	7440-50-8	12.4	2.07	0.301	1
01654	Iron	7439-89-6	24,900	41.5	3.75	1
06955	Lead	7439-92-1	6.77	3.11	0.519	1
01656	Lithium	7439-93-2	23.9	4.1	0.35	1
01657	Magnesium	7439-95-4	4,930	10.4	1.73	1
06958	Manganese	7439-96-5	297	1.04	0.0861	1
06960	Molybdenum	7439-98-7	0.417 J	2.07	0.176	1
06961	Nickel	7440-02-0	13.4	2.07	0.135	1
10145	Phosphorus	7723-14-0	271	10.4	3.00	1
01662	Potassium	7440-09-7	2,740	104	8.65	1
01667	Sodium	7440-23-5	105	104	17.3	1
06969	Tin	7440-31-5	3.04 J	10.4	0.228	1
06970	Titanium	7440-32-6	1,200	1.04	0.176	1
06971	Vanadium	7440-62-2	47.0	1.04	0.135	1
06972	Zinc	7440-66-6	49.3	4.15	0.207	1
10146	Zirconium	7440-67-7	1.89 J	5.19	0.871	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.283 J	0.415	0.104	2
06142	Silver	7440-22-4	0.0344 J	0.207	0.0270	2
06144	Strontium	7440-24-6	25.7	0.415	0.0705	2
06145	Thallium	7440-28-0	0.318	0.207	0.0311	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0107 J	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.35	0.0100	0.0100	1
	The pH was measured in water at 23 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.4	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128149
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH067-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0786	1
11031	12378-PeCDD	40321-76-4	0.0925	JQ	5.30	0.0694	1
11031	123478-HxCDD	39227-28-6	0.0621	JQ	5.30	0.0560	1
11031	123678-HxCDD	57653-85-7	0.301	JQ	5.30	0.0609	1
11031	123789-HxCDD	19408-74-3	0.471	JBQ	5.30	0.0603	1
11031	1234678-HpCDD	35822-46-9	1.33	JBQ	5.30	0.0818	1
11031	OCDD	3268-87-9	16.2	B	10.6	0.0416	1
11031	2378-TCDF	51207-31-9	0.105	J	1.06	0.0638	1
11031	12378-PeCDF	57117-41-6	0.132	JBQ	5.30	0.0454	1
11031	23478-PeCDF	57117-31-4	0.0585	JQ	5.30	0.0399	1
11031	123478-HxCDF	70648-26-9	0.0457	JBQ	5.30	0.0272	1
11031	123678-HxCDF	57117-44-9	0.0985	JB	5.30	0.0295	1
11031	123789-HxCDF	72918-21-9	0.123	JQ	5.30	0.0362	1
11031	234678-HxCDF	60851-34-5	0.0570	JBQ	5.30	0.0274	1
11031	1234678-HpCDF	67562-39-4	0.243	JB	5.30	0.0184	1
11031	1234789-HpCDF	55673-89-7	5.30	U	5.30	0.0274	1
11031	OCDF	39001-02-0	0.543	JB	10.6	0.0591	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0278				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128149
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50145 SDG#: PH067-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128149
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:30 by VC

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3201 Jermantown Road
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Fairfax VA 22030

50145 SDG#: PH067-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 08:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013 19:32	Laura M Krieger	23.67
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319731722	07/16/2013 22:19	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319731722	07/16/2013 22:19	Lois E Hiltz	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	131980028A	07/19/2013 18:16	Matthew S Listner	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132010011A	07/23/2013 15:34	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 14:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132010011A	07/21/2013 08:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	131980028A	07/18/2013 07:30	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 17:38	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/25/2013 00:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128149
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:30 by VC

Submitted: 07/16/2013 09:20
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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

50145 SDG#: PH067-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 10:54	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:13	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:13	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:20	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:13	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:41	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401A	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128150
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:45 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50190 SDG#: PH067-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.95
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	39	U	39	13	1
10401	Dalapon	75-99-0	97	U	97	47	1
10401	2,4-DB	94-82-6	18	U	18	6.7	1
10401	Dicamba	1918-00-9	13	U	13	4.3	1
10401	Dinoseb	88-85-7	26	U	26	9.7	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.7	1
10401	MCPA	94-74-6	2,700	U	2,700	820	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	810	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.88	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.81	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.90	U	0.90	0.18	1
10590	Alpha BHC	319-84-6	0.90	U	0.90	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.90	U	0.90	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128150
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:45 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50190 SDG#: PH067-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.36	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.36	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.90	U	0.90	0.49	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.36	1
10590	Endosulfan I	959-98-8	0.90	U	0.90	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.36	1
10590	Endrin	72-20-8	1.8	U	1.8	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.36	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.65	1
10590	Heptachlor	76-44-8	0.90	U	0.90	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.90	U	0.90	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,900		43.3	7.80	1
06944	Antimony	7440-36-0	4.33	U	4.33	0.801	1
06935	Arsenic	7440-38-2	4.76		4.33	0.758	1
06946	Barium	7440-39-3	119		1.08	0.0357	1
06947	Beryllium	7440-41-7	0.863	J	1.08	0.0725	1
07914	Boron	7440-42-8	6.30	J	10.8	0.909	1
06949	Cadmium	7440-43-9	0.110	J	1.08	0.0823	1
01650	Calcium	7440-70-2	3,440		21.6	3.61	1
06951	Chromium	7440-47-3	26.8		3.25	0.173	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128150
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:45 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50190 SDG#: PH067-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	6.98		1.08	0.107	1
06953	Copper	7440-50-8	11.4		2.16	0.314	1
01654	Iron	7439-89-6	26,300		43.3	3.92	1
06955	Lead	7439-92-1	6.16		3.25	0.541	1
01656	Lithium	7439-93-2	29.7		4.3	0.37	1
01657	Magnesium	7439-95-4	5,160		10.8	1.81	1
06958	Manganese	7439-96-5	294		1.08	0.0898	1
06960	Molybdenum	7439-98-7	2.16	U	2.16	0.184	1
06961	Nickel	7440-02-0	14.8		2.16	0.141	1
10145	Phosphorus	7723-14-0	160		10.8	3.13	1
01662	Potassium	7440-09-7	1,910		108	9.03	1
01667	Sodium	7440-23-5	178		108	18.1	1
06969	Tin	7440-31-5	3.12	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,310		1.08	0.184	1
06971	Vanadium	7440-62-2	51.7		1.08	0.141	1
06972	Zinc	7440-66-6	46.7		4.33	0.216	1
10146	Zirconium	7440-67-7	2.66	J	5.41	0.909	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.433	U	0.433	0.108	2
06142	Silver	7440-22-4	0.0487	J	0.216	0.0281	2
06144	Strontium	7440-24-6	28.6		0.433	0.0736	2
06145	Thallium	7440-28-0	0.284		0.216	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173	U	0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.09		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128150
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:45 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50190 SDG#: PH067-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0702	1
11031	12378-PeCDD	40321-76-4	5.33	U	5.33	0.0705	1
11031	123478-HxCDD	39227-28-6	5.33	U	5.33	0.0426	1
11031	123678-HxCDD	57653-85-7	5.33	U	5.33	0.0466	1
11031	123789-HxCDD	19408-74-3	0.0503	JBQ	5.33	0.0472	1
11031	1234678-HpCDD	35822-46-9	0.138	JB	5.33	0.0455	1
11031	OCDD	3268-87-9	1.06	JBQ	10.7	0.0333	1
11031	2378-TCDF	51207-31-9	1.07	U	1.07	0.0544	1
11031	12378-PeCDF	57117-41-6	5.33	U	5.33	0.0334	1
11031	23478-PeCDF	57117-31-4	5.33	U	5.33	0.0286	1
11031	123478-HxCDF	70648-26-9	0.0259	JBQ	5.33	0.0189	1
11031	123678-HxCDF	57117-44-9	5.33	U	5.33	0.0174	1
11031	123789-HxCDF	72918-21-9	0.0522	JQ	5.33	0.0211	1
11031	234678-HxCDF	60851-34-5	0.0265	JBQ	5.33	0.0174	1
11031	1234678-HpCDF	67562-39-4	0.0422	JBQ	5.33	0.0117	1
11031	1234789-HpCDF	55673-89-7	0.0295	J	5.33	0.0162	1
11031	OCDF	39001-02-0	0.198	JB	10.7	0.0508	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00184				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128150
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:45 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50190 SDG#: PH067-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128150
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:45 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50190 SDG#: PH067-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 09:11	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013 20:10	Laura M Krieger	24.95
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319731722	07/16/2013 22:21	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319731722	07/16/2013 22:22	Lois E Hiltz	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	131980028A	07/19/2013 18:42	Matthew S Listner	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132010011A	07/23/2013 15:49	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 14:45	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132010011A	07/21/2013 08:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	131980028A	07/18/2013 07:30	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 17:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/25/2013 01:36	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128150
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 11:45 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50190 SDG#: PH067-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 11:05	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:20	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:20	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:27	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:20	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401A	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-12.0-13.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128151
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 12:00 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50112 SDG#: PH067-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.75
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	96	U	96	47	1
10401	2,4-DB	94-82-6	18	U	18	6.6	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.6	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.6	1
10401	MCPA	94-74-6	2,700	U	2,700	810	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	800	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.87	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.80	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.88	U	0.88	0.18	1
10590	Alpha BHC	319-84-6	0.88	U	0.88	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.88	U	0.88	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-12.0-13.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128151
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 12:00 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50112 SDG#: PH067-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.88	U	0.88	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.88	U	0.88	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.88	U	0.88	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.88	U	0.88	0.18	1
10590	Methoxychlor	72-43-5	7.1	U	7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,600		41.4	7.45	1
06944	Antimony	7440-36-0	4.14	U	4.14	0.765	1
06935	Arsenic	7440-38-2	5.53		4.14	0.724	1
06946	Barium	7440-39-3	106		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.767	J	1.03	0.0693	1
07914	Boron	7440-42-8	5.26	J	10.3	0.869	1
06949	Cadmium	7440-43-9	0.0910	J	1.03	0.0786	1
01650	Calcium	7440-70-2	3,410		20.7	3.45	1
06951	Chromium	7440-47-3	24.7		3.10	0.165	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-12.0-13.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128151
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 12:00 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50112 SDG#: PH067-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	5.85		1.03	0.102	1
06953	Copper	7440-50-8	11.6		2.07	0.300	1
01654	Iron	7439-89-6	24,700		41.4	3.74	1
06955	Lead	7439-92-1	5.75		3.10	0.517	1
01656	Lithium	7439-93-2	32.5		4.1	0.35	1
01657	Magnesium	7439-95-4	5,080		10.3	1.73	1
06958	Manganese	7439-96-5	320		1.03	0.0858	1
06960	Molybdenum	7439-98-7	2.07	U	2.07	0.176	1
06961	Nickel	7440-02-0	14.6		2.07	0.134	1
10145	Phosphorus	7723-14-0	176		10.3	2.99	1
01662	Potassium	7440-09-7	1,710		103	8.62	1
01667	Sodium	7440-23-5	176		103	17.3	1
06969	Tin	7440-31-5	2.89	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,320		1.03	0.176	1
06971	Vanadium	7440-62-2	47.3		1.03	0.134	1
06972	Zinc	7440-66-6	47.7		4.14	0.207	1
10146	Zirconium	7440-67-7	2.62	J	5.17	0.869	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.414	U	0.414	0.103	2
06142	Silver	7440-22-4	0.0697	J	0.207	0.0269	2
06144	Strontium	7440-24-6	24.7		0.414	0.0703	2
06145	Thallium	7440-28-0	0.259		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.87		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-12.0-13.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128151
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 12:00 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50112 SDG#: PH067-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0524	1
11031	12378-PeCDD	40321-76-4	5.26	U	5.26	0.0509	1
11031	123478-HxCDD	39227-28-6	0.0304	J	5.26	0.0292	1
11031	123678-HxCDD	57653-85-7	5.26	U	5.26	0.0328	1
11031	123789-HxCDD	19408-74-3	0.0562	JBQ	5.26	0.0315	1
11031	1234678-HpCDD	35822-46-9	0.252	JBQ	5.26	0.0397	1
11031	OCDD	3268-87-9	2.26	JB	10.5	0.0289	1
11031	2378-TCDF	51207-31-9	1.05	U	1.05	0.0437	1
11031	12378-PeCDF	57117-41-6	0.0530	JB	5.26	0.0271	1
11031	23478-PeCDF	57117-31-4	5.26	U	5.26	0.0252	1
11031	123478-HxCDF	70648-26-9	0.0331	JBQ	5.26	0.0153	1
11031	123678-HxCDF	57117-44-9	0.0301	JBQ	5.26	0.0157	1
11031	123789-HxCDF	72918-21-9	0.0198	JQ	5.26	0.0181	1
11031	234678-HxCDF	60851-34-5	0.0238	JBQ	5.26	0.0155	1
11031	1234678-HpCDF	67562-39-4	0.0569	JBQ	5.26	0.0122	1
11031	1234789-HpCDF	55673-89-7	5.26	U	5.26	0.0191	1
11031	OCDF	39001-02-0	0.183	JB	10.5	0.0439	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00543				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	87	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-12.0-13.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128151
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 12:00 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50112 SDG#: PH067-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-12.0-13.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128151
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 12:00 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50112 SDG#: PH067-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 09:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013 20:48	Laura M Krieger	24.75
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319731722	07/16/2013 22:24	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319731722	07/16/2013 22:25	Lois E Hiltz	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	131980028A	07/19/2013 19:09	Matthew S Listner	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132010011A	07/23/2013 16:04	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 15:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132010011A	07/21/2013 08:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	131980028A	07/18/2013 07:30	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 18:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/25/2013 02:33	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-501-SA8-SB-12.0-13.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128151
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 12:00 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50112 SDG#: PH067-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 11:09	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:22	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:22	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:29	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:22	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401A	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128152
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 08:40 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50200 SDG#: PH067-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	4.8		1.8	0.70	1
12969	Acenaphthylene	208-96-8	5.8		1.8	0.35	1
12969	Anthracene	120-12-7	63		1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	120		1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	32		1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	60		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	25		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	7.2		1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	39		1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	8.2	J	19	6.3	1
12969	Chrysene	218-01-9	130		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	3.3		1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J	19	6.3	1
12969	Fluoranthene	206-44-0	630		18	7.0	10
12969	Fluorene	86-73-7	12		1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	8.3		1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	23		1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	87		1.8	0.70	1
12969	Naphthalene	91-20-3	150		1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	460		18	7.0	10
12969	Pyrene	129-00-0	500		18	7.0	10
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	140		35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	29		18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.9	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	27		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	91		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128152
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 08:40 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50200 SDG#: PH067-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,600		42.1	7.58	1
06944	Antimony	7440-36-0	4.21	U	4.21	0.778	1
06935	Arsenic	7440-38-2	4.11	J	4.21	0.736	1
06946	Barium	7440-39-3	121		1.05	0.0347	1
06947	Beryllium	7440-41-7	0.562	J	1.05	0.0705	1
07914	Boron	7440-42-8	7.28	J	10.5	0.883	1
06949	Cadmium	7440-43-9	0.787	J	1.05	0.0799	1
01650	Calcium	7440-70-2	5,170		21.0	3.51	1
06951	Chromium	7440-47-3	20.9		3.15	0.168	1
06952	Cobalt	7440-48-4	5.81		1.05	0.104	1
06953	Copper	7440-50-8	14.8		2.10	0.305	1
01654	Iron	7439-89-6	20,400		42.1	3.81	1
06955	Lead	7439-92-1	30.3		3.15	0.526	1
01656	Lithium	7439-93-2	20.3		4.2	0.36	1
01657	Magnesium	7439-95-4	4,570		10.5	1.76	1
06958	Manganese	7439-96-5	376		1.05	0.0873	1
06960	Molybdenum	7439-98-7	2.10	U	2.10	0.179	1
06961	Nickel	7440-02-0	13.8		2.10	0.137	1
10145	Phosphorus	7723-14-0	532		10.5	3.04	1
01662	Potassium	7440-09-7	4,240		105	8.77	1
01667	Sodium	7440-23-5	82.3	J	105	17.6	1
06969	Tin	7440-31-5	2.89	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,100		1.05	0.179	1
06971	Vanadium	7440-62-2	37.3		1.05	0.137	1
06972	Zinc	7440-66-6	66.9		4.21	0.210	1
10146	Zirconium	7440-67-7	2.27	J	5.26	0.883	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.255	J	0.421	0.105	2
06142	Silver	7440-22-4	0.0425	J	0.210	0.0273	2
06144	Strontium	7440-24-6	29.6		0.421	0.0715	2
06145	Thallium	7440-28-0	0.290		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0408		0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.62		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128152
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 08:40 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50200 SDG#: PH067-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.12	Q	1.02	0.254	1
11031	12378-PeCDD	40321-76-4	8.29		5.10	0.523	1
11031	123478-HxCDD	39227-28-6	26.5		5.10	0.202	1
11031	123678-HxCDD	57653-85-7	26.2		5.10	0.205	1
11031	123789-HxCDD	19408-74-3	24.9	B	5.10	0.223	1
11031	1234678-HpCDD	35822-46-9	957	B	5.10	0.335	1
11031	OCDD	3268-87-9	5,590	EB	10.2	0.202	1
11031	2378-TCDF	51207-31-9	0.571	J	1.02	0.193	1
11031	12378-PeCDF	57117-41-6	4.56	JB	5.10	0.104	1
11031	23478-PeCDF	57117-31-4	1.46	JQ	5.10	0.107	1
11031	123478-HxCDF	70648-26-9	4.75	JB	5.10	0.107	1
11031	123678-HxCDF	57117-44-9	3.19	JB	5.10	0.112	1
11031	123789-HxCDF	72918-21-9	5.10	U	5.10	0.135	1
11031	234678-HxCDF	60851-34-5	2.77	JB	5.10	0.100	1
11031	1234678-HpCDF	67562-39-4	46.2	B	5.10	0.0825	1
11031	1234789-HpCDF	55673-89-7	5.30		5.10	0.104	1
11031	OCDF	39001-02-0	73.7	B	10.2	0.0694	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	29.1				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128152
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 08:40 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50200 SDG#: PH067-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128152
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 08:40 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50200 SDG#: PH067-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 10:14	Mark A Clark	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/24/2013 07:20	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 15:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 22:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/25/2013 03:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 11:13	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:25	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:25	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128152
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 08:40 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50200 SDG#: PH067-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:32	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:25	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401A	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128153
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 09:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50245 SDG#: PH067-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	0.67	J	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	0.82	J	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.9		1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	6.0		1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	2.9		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	19	6.5	1
12969	Fluoranthene	206-44-0	2.7		1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.2	J	1.8	0.72	1
12969	Naphthalene	91-20-3	2.5		1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	2.1		1.8	0.72	1
12969	Pyrene	129-00-0	2.3		1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.85
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	44		36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	6.8	J	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128153
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 09:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50245 SDG#: PH067-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	15		5.4	2.1	1
12952	EFH (C30-C40)	n.a.	42		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,500		41.5	7.49	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.768	1
06935	Arsenic	7440-38-2	5.52		4.15	0.727	1
06946	Barium	7440-39-3	96.9		1.04	0.0343	1
06947	Beryllium	7440-41-7	0.753	J	1.04	0.0696	1
07914	Boron	7440-42-8	4.78	J	10.4	0.872	1
06949	Cadmium	7440-43-9	0.221	J	1.04	0.0789	1
01650	Calcium	7440-70-2	4,150		20.8	3.47	1
06951	Chromium	7440-47-3	24.9		3.12	0.166	1
06952	Cobalt	7440-48-4	6.39		1.04	0.103	1
06953	Copper	7440-50-8	12.7		2.08	0.301	1
01654	Iron	7439-89-6	24,300		41.5	3.76	1
06955	Lead	7439-92-1	20.5		3.12	0.519	1
01656	Lithium	7439-93-2	26.8		4.2	0.35	1
01657	Magnesium	7439-95-4	4,860		10.4	1.73	1
06958	Manganese	7439-96-5	293		1.04	0.0862	1
06960	Molybdenum	7439-98-7	0.278	J	2.08	0.177	1
06961	Nickel	7440-02-0	13.4		2.08	0.135	1
10145	Phosphorus	7723-14-0	258		10.4	3.00	1
01662	Potassium	7440-09-7	2,710		104	8.66	1
01667	Sodium	7440-23-5	117		104	17.3	1
06969	Tin	7440-31-5	3.08	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,170		1.04	0.177	1
06971	Vanadium	7440-62-2	46.3		1.04	0.135	1
06972	Zinc	7440-66-6	52.3		4.15	0.208	1
10146	Zirconium	7440-67-7	2.50	J	5.19	0.872	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.189	J	0.415	0.104	2
06142	Silver	7440-22-4	0.0428	J	0.208	0.0270	2
06144	Strontium	7440-24-6	24.5		0.415	0.0706	2
06145	Thallium	7440-28-0	0.277		0.208	0.0312	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164	J	0.0176	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.21		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.4		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128153
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 09:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50245 SDG#: PH067-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128153
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 09:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50245 SDG#: PH067-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.149	JQ	1.08	0.0830	1
11031	12378-PeCDD	40321-76-4	0.906	JQ	5.38	0.145	1
11031	123478-HxCDD	39227-28-6	1.75	J	5.38	0.111	1
11031	123678-HxCDD	57653-85-7	2.30	J	5.38	0.116	1
11031	123789-HxCDD	19408-74-3	2.14	JB	5.38	0.118	1
11031	1234678-HpCDD	35822-46-9	76.6	B	5.38	0.147	1
11031	OCDD	3268-87-9	571	B	10.8	0.0841	1
11031	2378-TCDF	51207-31-9	0.205	J	1.08	0.0906	1
11031	12378-PeCDF	57117-41-6	1.75	JB	5.38	0.0532	1
11031	23478-PeCDF	57117-31-4	0.440	J	5.38	0.0482	1
11031	123478-HxCDF	70648-26-9	0.715	JB	5.38	0.0533	1
11031	123678-HxCDF	57117-44-9	0.566	JBQ	5.38	0.0511	1
11031	123789-HxCDF	72918-21-9	0.513	J	5.38	0.0599	1
11031	234678-HxCDF	60851-34-5	0.396	JB	5.38	0.0474	1
11031	1234678-HpCDF	67562-39-4	4.77	JB	5.38	0.0373	1
11031	1234789-HpCDF	55673-89-7	0.577	JQ	5.38	0.0554	1
11031	OCDF	39001-02-0	8.63	JB	10.8	0.0499	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.97				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128153
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 09:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50245 SDG#: PH067-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128153
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 09:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50245 SDG#: PH067-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 10:46	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013 21:26	Laura M Krieger	23.85
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319731722	07/16/2013 22:29	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319731722	07/16/2013 22:30	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 15:41	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 21:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/25/2013 07:24	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128153
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 09:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50245 SDG#: PH067-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 11:17	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:27	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:27	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:34	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:27	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401A	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128154
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 10:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50278 SDG#: PH067-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	0.43	J	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	0.88	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	5.9		1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.4	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	15	J	19	6.5	1
12969	Fluoranthene	206-44-0	1.5	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.7	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.1	J	1.8	0.72	1
12969	Pyrene	129-00-0	1.4	J	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	27.35
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	17	J	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128154
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 10:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50278 SDG#: PH067-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	13		5.4	2.1	1
12952	EFH (C30-C40)	n.a.	28		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,800		42.6	7.68	1
06944	Antimony	7440-36-0	4.26	U	4.26	0.789	1
06935	Arsenic	7440-38-2	5.31		4.26	0.746	1
06946	Barium	7440-39-3	83.3		1.07	0.0352	1
06947	Beryllium	7440-41-7	0.602	J	1.07	0.0714	1
07914	Boron	7440-42-8	1.86	J	10.7	0.895	1
06949	Cadmium	7440-43-9	0.220	J	1.07	0.0810	1
01650	Calcium	7440-70-2	3,610		21.3	3.56	1
06951	Chromium	7440-47-3	21.5		3.20	0.171	1
06952	Cobalt	7440-48-4	6.32		1.07	0.106	1
06953	Copper	7440-50-8	10.5		2.13	0.309	1
01654	Iron	7439-89-6	22,600		42.6	3.86	1
06955	Lead	7439-92-1	7.93		3.20	0.533	1
01656	Lithium	7439-93-2	29.9		4.3	0.36	1
01657	Magnesium	7439-95-4	4,730		10.7	1.78	1
06958	Manganese	7439-96-5	274		1.07	0.0885	1
06960	Molybdenum	7439-98-7	2.13	U	2.13	0.181	1
06961	Nickel	7440-02-0	14.6		2.13	0.139	1
10145	Phosphorus	7723-14-0	249		10.7	3.08	1
01662	Potassium	7440-09-7	2,050		107	8.89	1
01667	Sodium	7440-23-5	127		107	17.8	1
06969	Tin	7440-31-5	2.95	J	10.7	0.234	1
06970	Titanium	7440-32-6	1,030		1.07	0.181	1
06971	Vanadium	7440-62-2	39.1		1.07	0.139	1
06972	Zinc	7440-66-6	47.5		4.26	0.213	1
10146	Zirconium	7440-67-7	2.80	J	5.33	0.895	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.158	J	0.426	0.107	2
06142	Silver	7440-22-4	0.0505	J	0.213	0.0277	2
06144	Strontium	7440-24-6	21.4		0.426	0.0725	2
06145	Thallium	7440-28-0	0.255		0.213	0.0320	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0118	J	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.4 C.	n.a.	7.14		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128154
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 10:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50278 SDG#: PH067-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128154
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 10:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50278 SDG#: PH067-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0961	JQ	1.05	0.0579	1
11031	12378-PeCDD	40321-76-4	0.268	JQ	5.24	0.0834	1
11031	123478-HxCDD	39227-28-6	0.665	J	5.24	0.0848	1
11031	123678-HxCDD	57653-85-7	0.871	JQ	5.24	0.0870	1
11031	123789-HxCDD	19408-74-3	0.638	JB	5.24	0.0884	1
11031	1234678-HpCDD	35822-46-9	29.9	B	5.24	0.0961	1
11031	OCDD	3268-87-9	211	B	10.5	0.0559	1
11031	2378-TCDF	51207-31-9	0.0929	JQ	1.05	0.0541	1
11031	12378-PeCDF	57117-41-6	0.541	JB	5.24	0.0336	1
11031	23478-PeCDF	57117-31-4	0.206	JQ	5.24	0.0311	1
11031	123478-HxCDF	70648-26-9	0.309	JB	5.24	0.0313	1
11031	123678-HxCDF	57117-44-9	0.228	JBQ	5.24	0.0315	1
11031	123789-HxCDF	72918-21-9	0.324	JQ	5.24	0.0394	1
11031	234678-HxCDF	60851-34-5	0.227	JBQ	5.24	0.0325	1
11031	1234678-HpCDF	67562-39-4	1.83	JBQ	5.24	0.0257	1
11031	1234789-HpCDF	55673-89-7	0.230	JQ	5.24	0.0395	1
11031	OCDF	39001-02-0	3.40	JB	10.5	0.0419	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.541				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128154
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 10:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50278 SDG#: PH067-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128154
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 10:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50278 SDG#: PH067-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 11:18	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16A	07/17/2013 22:04	Marie D Beamenderfer	27.35
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319731722	07/16/2013 22:32	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319731722	07/16/2013 22:33	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 15:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 21:07	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/25/2013 08:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128154
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 10:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50278 SDG#: PH067-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 11:21	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:29	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:29	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:36	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:29	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401A	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7128155
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 08:00

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

V15TB SDG#: PH067-09TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13198A20A	07/18/2013 17:17	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13198A20A	07/18/2013 17:17	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128156
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:55 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH067-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.4	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	2.4		1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	3.3		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	19	6.5	1
12969	Fluoranthene	206-44-0	1.4	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	0.84	J	1.8	0.72	1
12969	Naphthalene	91-20-3	2.4		1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.0	J	1.8	0.72	1
12969	Pyrene	129-00-0	1.2	J	1.8	0.72	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	19		18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	6.7		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	15		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128156
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:55 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH067-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,500		41.4	7.45	1
06944	Antimony	7440-36-0	4.14	U	4.14	0.765	1
06935	Arsenic	7440-38-2	4.58		4.14	0.724	1
06946	Barium	7440-39-3	107		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.614	J	1.03	0.0693	1
07914	Boron	7440-42-8	5.29	J	10.3	0.868	1
06949	Cadmium	7440-43-9	0.375	J	1.03	0.0786	1
01650	Calcium	7440-70-2	11,700		20.7	3.45	1
06951	Chromium	7440-47-3	23.4		3.10	0.165	1
06952	Cobalt	7440-48-4	6.76		1.03	0.102	1
06953	Copper	7440-50-8	14.4		2.07	0.300	1
01654	Iron	7439-89-6	22,400		41.4	3.74	1
06955	Lead	7439-92-1	9.56		3.10	0.517	1
01656	Lithium	7439-93-2	21.9		4.1	0.35	1
01657	Magnesium	7439-95-4	4,900		10.3	1.73	1
06958	Manganese	7439-96-5	365		1.03	0.0858	1
06960	Molybdenum	7439-98-7	0.191	J	2.07	0.176	1
06961	Nickel	7440-02-0	13.8		2.07	0.134	1
10145	Phosphorus	7723-14-0	375		10.3	2.99	1
01662	Potassium	7440-09-7	4,340		103	8.62	1
01667	Sodium	7440-23-5	151		103	17.3	1
06969	Tin	7440-31-5	2.88	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,210		1.03	0.176	1
06971	Vanadium	7440-62-2	43.2		1.03	0.134	1
06972	Zinc	7440-66-6	59.7		4.14	0.207	1
10146	Zirconium	7440-67-7	2.26	J	5.17	0.868	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.225	J	0.414	0.103	2
06142	Silver	7440-22-4	0.0964	J	0.207	0.0269	2
06144	Strontium	7440-24-6	33.7		0.414	0.0703	2
06145	Thallium	7440-28-0	0.326		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0244		0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.20		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128156
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:55 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH067-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0652	1
11031	12378-PeCDD	40321-76-4	0.148	JQ	5.19	0.0922	1
11031	123478-HxCDD	39227-28-6	0.270	JQ	5.19	0.0794	1
11031	123678-HxCDD	57653-85-7	0.868	J	5.19	0.0852	1
11031	123789-HxCDD	19408-74-3	0.815	JB	5.19	0.0831	1
11031	1234678-HpCDD	35822-46-9	20.3	B	5.19	0.103	1
11031	OCDD	3268-87-9	284	B	10.4	0.0843	1
11031	2378-TCDF	51207-31-9	1.04	U	1.04	0.107	1
11031	12378-PeCDF	57117-41-6	2.52	JB	5.19	0.0504	1
11031	23478-PeCDF	57117-31-4	0.210	JQ	5.19	0.0522	1
11031	123478-HxCDF	70648-26-9	0.303	JB	5.19	0.0389	1
11031	123678-HxCDF	57117-44-9	0.441	JB	5.19	0.0396	1
11031	123789-HxCDF	72918-21-9	0.471	J	5.19	0.0453	1
11031	234678-HxCDF	60851-34-5	0.213	JBQ	5.19	0.0392	1
11031	1234678-HpCDF	67562-39-4	2.16	JB	5.19	0.0445	1
11031	1234789-HpCDF	55673-89-7	0.209	JQ	5.19	0.0690	1
11031	OCDF	39001-02-0	3.21	JB	10.4	0.0604	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.676				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128156
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:55 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH067-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128156
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:55 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH067-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 11:50	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 16:18	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 19:23	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/25/2013 09:18	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 11:25	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:32	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:32	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:39	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128156
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:55 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH067-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:32	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401A	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128157
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 15:05 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50334 SDG#: PH067-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.3
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128157
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 15:05 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50334 SDG#: PH067-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,900		41.9	7.54	1
06944	Antimony	7440-36-0	4.19	U	4.19	0.774	1
06935	Arsenic	7440-38-2	2.66	J	4.19	0.732	1
06946	Barium	7440-39-3	76.8		1.05	0.0345	1
06947	Beryllium	7440-41-7	0.400	J	1.05	0.0701	1
07914	Boron	7440-42-8	2.99	J	10.5	0.879	1
06949	Cadmium	7440-43-9	0.243	J	1.05	0.0795	1
01650	Calcium	7440-70-2	5,060		20.9	3.49	1
06951	Chromium	7440-47-3	16.5		3.14	0.167	1
06952	Cobalt	7440-48-4	4.88		1.05	0.104	1
06953	Copper	7440-50-8	9.26		2.09	0.303	1
01654	Iron	7439-89-6	18,800		41.9	3.79	1
06955	Lead	7439-92-1	3.71		3.14	0.523	1
01656	Lithium	7439-93-2	23.2		4.2	0.36	1
01657	Magnesium	7439-95-4	5,040		10.5	1.75	1
06958	Manganese	7439-96-5	749		1.05	0.0868	1
06960	Molybdenum	7439-98-7	2.09	U	2.09	0.178	1
06961	Nickel	7440-02-0	11.4		2.09	0.136	1
10145	Phosphorus	7723-14-0	367		10.5	3.02	1
01662	Potassium	7440-09-7	1,670		105	8.73	1
01667	Sodium	7440-23-5	112		105	17.5	1
06969	Tin	7440-31-5	2.71	J	10.5	0.230	1
06970	Titanium	7440-32-6	1,080		1.05	0.178	1
06971	Vanadium	7440-62-2	32.2		1.05	0.136	1
06972	Zinc	7440-66-6	46.3		4.19	0.209	1
10146	Zirconium	7440-67-7	1.71	J	5.23	0.879	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.419	U	0.419	0.105	2
06142	Silver	7440-22-4	0.209	U	0.209	0.0272	2
06144	Strontium	7440-24-6	14.1		0.419	0.0711	2
06145	Thallium	7440-28-0	0.230		0.209	0.0314	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175	U	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.85		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128157
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 15:05 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50334 SDG#: PH067-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128157
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 15:05 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50334 SDG#: PH067-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0443	1
11031	12378-PeCDD	40321-76-4	0.0679	JQ	5.17	0.0479	1
11031	123478-HxCDD	39227-28-6	5.17	U	5.17	0.0344	1
11031	123678-HxCDD	57653-85-7	0.140	JQ	5.17	0.0375	1
11031	123789-HxCDD	19408-74-3	0.222	JBQ	5.17	0.0372	1
11031	1234678-HpCDD	35822-46-9	0.403	JBQ	5.17	0.0435	1
11031	OCDD	3268-87-9	2.77	JB	10.3	0.0266	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0442	1
11031	12378-PeCDF	57117-41-6	0.118	JBQ	5.17	0.0253	1
11031	23478-PeCDF	57117-31-4	0.0300	JQ	5.17	0.0233	1
11031	123478-HxCDF	70648-26-9	0.0484	JBQ	5.17	0.0121	1
11031	123678-HxCDF	57117-44-9	0.0283	JBQ	5.17	0.0150	1
11031	123789-HxCDF	72918-21-9	0.436	J	5.17	0.0204	1
11031	234678-HxCDF	60851-34-5	5.17	U	5.17	0.0163	1
11031	1234678-HpCDF	67562-39-4	0.0653	JBQ	5.17	0.0131	1
11031	1234789-HpCDF	55673-89-7	0.0431	J	5.17	0.0174	1
11031	OCDF	39001-02-0	0.162	JB	10.3	0.0393	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0449				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128157
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 15:05 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50334 SDG#: PH067-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128157
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 15:05 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50334 SDG#: PH067-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 12:22	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16B	07/18/2013 14:26	Laura M Krieger	25.3
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319731722	07/16/2013 22:35	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319731722	07/16/2013 22:36	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 16:36	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 18:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/25/2013 10:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128157
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 15:05 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50334 SDG#: PH067-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 11:29	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:34	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:34	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:41	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:34	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 11:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401B	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128158
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51100 SDG#: PH067-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.5	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.58	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.8		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	13		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128158
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51100 SDG#: PH067-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,500		40.9	7.37	1
06944	Antimony	7440-36-0	4.09	U	4.09	0.757	1
06935	Arsenic	7440-38-2	3.19	J	4.09	0.716	1
06946	Barium	7440-39-3	102		1.02	0.0338	1
06947	Beryllium	7440-41-7	0.578	J	1.02	0.0685	1
07914	Boron	7440-42-8	3.23	J	10.2	0.859	1
06949	Cadmium	7440-43-9	0.269	J	1.02	0.0777	1
01650	Calcium	7440-70-2	2,630		20.5	3.42	1
06951	Chromium	7440-47-3	20.6		3.07	0.164	1
06952	Cobalt	7440-48-4	6.06		1.02	0.101	1
06953	Copper	7440-50-8	11.8		2.05	0.297	1
01654	Iron	7439-89-6	21,500		40.9	3.70	1
06955	Lead	7439-92-1	4.63		3.07	0.511	1
01656	Lithium	7439-93-2	23.2		4.1	0.35	1
01657	Magnesium	7439-95-4	5,000		10.2	1.71	1
06958	Manganese	7439-96-5	325		1.02	0.0849	1
06960	Molybdenum	7439-98-7	0.217	J	2.05	0.174	1
06961	Nickel	7440-02-0	12.1		2.05	0.133	1
10145	Phosphorus	7723-14-0	452		10.2	2.96	1
01662	Potassium	7440-09-7	4,010		102	8.53	1
01667	Sodium	7440-23-5	75.7	J	102	17.1	1
06969	Tin	7440-31-5	2.71	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,180		1.02	0.174	1
06971	Vanadium	7440-62-2	37.3		1.02	0.133	1
06972	Zinc	7440-66-6	58.8		4.09	0.205	1
10146	Zirconium	7440-67-7	1.47	J	5.11	0.859	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.204	J	0.409	0.102	2
06142	Silver	7440-22-4	0.0411	J	0.205	0.0266	2
06144	Strontium	7440-24-6	20.8		0.409	0.0696	2
06145	Thallium	7440-28-0	0.266		0.205	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.56		0.0100	0.0100	1
	The pH was measured in water at 22.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128158
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51100 SDG#: PH067-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0541	1
11031	12378-PeCDD	40321-76-4	5.01	U	5.01	0.0539	1
11031	123478-HxCDD	39227-28-6	0.0339	JQ	5.01	0.0253	1
11031	123678-HxCDD	57653-85-7	5.01	U	5.01	0.0279	1
11031	123789-HxCDD	19408-74-3	0.0499	JBQ	5.01	0.0273	1
11031	1234678-HpCDD	35822-46-9	0.0766	JBQ	5.01	0.0352	1
11031	OCDD	3268-87-9	0.345	JBQ	10.0	0.0267	1
11031	2378-TCDF	51207-31-9	1.00	U	1.00	0.0429	1
11031	12378-PeCDF	57117-41-6	5.01	U	5.01	0.0284	1
11031	23478-PeCDF	57117-31-4	5.01	U	5.01	0.0260	1
11031	123478-HxCDF	70648-26-9	0.0362	JBQ	5.01	0.0138	1
11031	123678-HxCDF	57117-44-9	5.01	U	5.01	0.0140	1
11031	123789-HxCDF	72918-21-9	0.0613	JQ	5.01	0.0158	1
11031	234678-HxCDF	60851-34-5	0.0157	JB	5.01	0.0135	1
11031	1234678-HpCDF	67562-39-4	0.0266	JBQ	5.01	0.0121	1
11031	1234789-HpCDF	55673-89-7	0.0230	JQ	5.01	0.0196	1
11031	OCDF	39001-02-0	0.0970	JBQ	10.0	0.0380	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00155				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128158
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51100 SDG#: PH067-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128158
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51100 SDG#: PH067-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 12:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 16:54	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 19:44	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/25/2013 11:11	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 11:32	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:36	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:36	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:43	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128158
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:15 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51100 SDG#: PH067-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:36	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 12:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401B	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128159
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51167 SDG#: PH067-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.78	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.78	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.78	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.78	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.78	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.78	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.27
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128159
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51167 SDG#: PH067-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,400		45.4	8.18	1
06944	Antimony	7440-36-0	4.54	U	4.54	0.839	1
06935	Arsenic	7440-38-2	6.16		4.54	0.794	1
06946	Barium	7440-39-3	71.5		1.13	0.0374	1
06947	Beryllium	7440-41-7	0.595	J	1.13	0.0760	1
07914	Boron	7440-42-8	1.56	J	11.3	0.953	1
06949	Cadmium	7440-43-9	0.128	J	1.13	0.0862	1
01650	Calcium	7440-70-2	3,090		22.7	3.79	1
06951	Chromium	7440-47-3	22.1		3.40	0.181	1
06952	Cobalt	7440-48-4	5.33		1.13	0.112	1
06953	Copper	7440-50-8	8.71		2.27	0.329	1
01654	Iron	7439-89-6	22,800		45.4	4.11	1
06955	Lead	7439-92-1	4.95		3.40	0.567	1
01656	Lithium	7439-93-2	27.2		4.5	0.39	1
01657	Magnesium	7439-95-4	5,550		11.3	1.89	1
06958	Manganese	7439-96-5	283		1.13	0.0941	1
06960	Molybdenum	7439-98-7	2.27	U	2.27	0.193	1
06961	Nickel	7440-02-0	10.6		2.27	0.147	1
10145	Phosphorus	7723-14-0	298		11.3	3.28	1
01662	Potassium	7440-09-7	1,880		113	9.46	1
01667	Sodium	7440-23-5	125		113	18.9	1
06969	Tin	7440-31-5	3.54	J	11.3	0.250	1
06970	Titanium	7440-32-6	1,240		1.13	0.193	1
06971	Vanadium	7440-62-2	40.9		1.13	0.147	1
06972	Zinc	7440-66-6	48.9		4.54	0.227	1
10146	Zirconium	7440-67-7	1.99	J	5.67	0.953	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.142	J	0.454	0.113	2
06142	Silver	7440-22-4	0.104	J	0.227	0.0295	2
06144	Strontium	7440-24-6	19.4		0.454	0.0771	2
06145	Thallium	7440-28-0	0.298		0.227	0.0340	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0323		0.0187	0.0112	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.24		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.4		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128159
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51167 SDG#: PH067-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128159
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:30 by VC

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Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51167 SDG#: PH067-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.15	U	1.15	0.0841	1
11031	12378-PeCDD	40321-76-4	5.77	U	5.77	0.0943	1
11031	123478-HxCDD	39227-28-6	5.77	U	5.77	0.0499	1
11031	123678-HxCDD	57653-85-7	5.77	U	5.77	0.0535	1
11031	123789-HxCDD	19408-74-3	5.77	U	5.77	0.0526	1
11031	1234678-HpCDD	35822-46-9	0.112	JBQ	5.77	0.0530	1
11031	OCDD	3268-87-9	0.347	JBQ	11.5	0.0505	1
11031	2378-TCDF	51207-31-9	1.15	U	1.15	0.0768	1
11031	12378-PeCDF	57117-41-6	5.77	U	5.77	0.0479	1
11031	23478-PeCDF	57117-31-4	5.77	U	5.77	0.0437	1
11031	123478-HxCDF	70648-26-9	0.0353	JBQ	5.77	0.0223	1
11031	123678-HxCDF	57117-44-9	5.77	U	5.77	0.0231	1
11031	123789-HxCDF	72918-21-9	5.77	U	5.77	0.0303	1
11031	234678-HxCDF	60851-34-5	5.77	U	5.77	0.0218	1
11031	1234678-HpCDF	67562-39-4	0.0397	JBQ	5.77	0.0176	1
11031	1234789-HpCDF	55673-89-7	0.0478	JQ	5.77	0.0264	1
11031	OCDF	39001-02-0	11.5	U	11.5	0.0717	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	U				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128159
LL Group # 1404272
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Project Name: SSFL Phase 3 Sampling

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Suite 400
Fairfax VA 22030

51167 SDG#: PH067-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128159
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:30 by VC

Submitted: 07/16/2013 09:20
Reported: 07/30/2013 10:02

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51167 SDG#: PH067-13*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLA026	07/23/2013 13:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLA026	07/18/2013 18:00	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13198A16B	07/18/2013 15:04	Laura M Krieger	24.27
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319731722	07/16/2013 22:37	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319731722	07/16/2013 22:37	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131990015A	07/19/2013 17:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131990015A	07/19/2013 02:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131990018A	07/19/2013 19:02	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131990018A	07/19/2013 08:45	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13204004	07/25/2013 12:08	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13204004	07/23/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-511-SA8-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7128159
LL Group # 1404272
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/15/2013 14:30 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

51167 SDG#: PH067-13*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	131990637002	07/21/2013 11:36	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131990637002B	07/25/2013 17:39	David K Beck	2
06142	Silver	SW-846 6020A	1	131990637002A	07/25/2013 17:39	David K Beck	2
06144	Strontium	SW-846 6020A	1	131990637002A	07/25/2013 21:46	David K Beck	2
06145	Thallium	SW-846 6020A	1	131990637002A	07/25/2013 17:39	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131990638002	07/22/2013 12:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131990637002	07/20/2013 08:30	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131990638002	07/20/2013 10:49	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13197039401B	07/16/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13199162401B	07/18/2013 23:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404272
Reported: 07/30/13 at 10:02 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13199SLA026	Sample number(s): 7128144-7128146,7128148-7128154,7128156-7128159									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	94		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	95		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	99		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	99		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	96		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	98		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	119		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	118		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	100		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	120		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	117		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	100		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	98		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	100		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	82		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	118		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	94		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	100		71-120		
Batch number: 13198A16A	Sample number(s): 7128149-7128151,7128153-7128154									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	74		67-119		
Batch number: 13198A16B	Sample number(s): 7128157,7128159									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	74		67-119		
Batch number: 13198A20A	Sample number(s): 7128155									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	101	75-135	6	30
Batch number: 131980028A	Sample number(s): 7128144-7128146,7128148-7128151									
2,4-D	36	U	36.	12	ug/kg	153*		59-122		
Dalapon	90	U	90.	44	ug/kg	72		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	118		54-131		
Dicamba	12	U	12.	4.0	ug/kg	92		60-123		
Dinoseb	24	U	24.	9.0	ug/kg	18		10-36		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	172*		65-158		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404272
Reported: 07/30/13 at 10:02 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
MCPA	2,500 U		2,500.	760	ug/kg	106		60-127		
MCPP (Mecoprop)	2,500 U		2,500.	750	ug/kg	100		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	129		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	118		63-130		
Batch number: 131990015A	Sample number(s): 7128144-7128146,7128148-7128154,7128156-7128159									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	79	81	36-106	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	104		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	109		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132010011A	Sample number(s): 7128144-7128146,7128148-7128151									
Aldrin	0.83	U	0.83	0.17	ug/kg	85		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	100		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	95		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	99		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	111		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	101		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	103		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	96		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	113		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	100		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	99		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	103		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	106		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	91		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	102		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	102		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	96		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	107		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 131990018A	Sample number(s): 7128144-7128146,7128148-7128154,7128156-7128159									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	103		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	108		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	109		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	102		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	81		49-107		
Batch number: 131990637002	Sample number(s): 7128144-7128154,7128156-7128159									
Aluminum	9.23	J	40.0	7.21	mg/kg	109		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	111		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	99		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404272
Reported: 07/30/13 at 10:02 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	2.24	J	10.0	0.840	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		
Calcium	24.4		20.0	3.34	mg/kg	109		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	99		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	103		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	104		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	104		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	100		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	103		80-120		
Potassium	100 U		100.	8.34	mg/kg	103		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.60	J	10.0	0.220	mg/kg	98		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	100		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	99		80-120		
Zinc	0.513	J	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	101		80-120		
Batch number: 131990637002A	Sample number(s): 7128144-7128154,7128156-7128159									
Silver	0.200	U	0.200	0.0260	mg/kg	112		80-120		
Strontium	0.161	J	0.400	0.0680	mg/kg	108		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	112		80-120		
Batch number: 131990637002B	Sample number(s): 7128144-7128154,7128156-7128159									
Selenium	0.400	U	0.400	0.100	mg/kg	107		80-120		
Batch number: 131990638002	Sample number(s): 7128144-7128154,7128156-7128159									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	110		85-120		
Batch number: 13197039401A	Sample number(s): 7128144,7128147-7128154,7128156									
15a pH by 9045D						100		95-105		
Batch number: 13197039401B	Sample number(s): 7128157-7128159									
15a pH by 9045D						100		95-105		
Batch number: 13199162401B	Sample number(s): 7128144-7128154,7128156-7128159									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13204004	Sample number(s): 7128144-7128146,7128148-7128154,7128156-7128159									
2378-TCDD	1.00	U	1.00	0.0648	ng/kg	104		67-158		
12378-PeCDD	5.00	U	5.00	0.0626	ng/kg	107		70-142		
123478-HxCDD	5.00	U	5.00	0.0332	ng/kg	100		70-164		
123678-HxCDD	5.00	U	5.00	0.0353	ng/kg	100		76-134		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404272
Reported: 07/30/13 at 10:02 AM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123789-HxCDD	0.0383	J	5.00	0.0355	ng/kg	97		64-162		
1234678-HpCDD	0.0781	J	5.00	0.0457	ng/kg	95		70-140		
OCDD	0.316	J	10.0	0.0357	ng/kg	97		78-144		
2378-TCDF	1.00	U	1.00	0.0552	ng/kg	98		75-158		
12378-PeCDF	0.0603	J	5.00	0.0311	ng/kg	96		80-134		
23478-PeCDF	5.00	U	5.00	0.0302	ng/kg	99		68-160		
123478-HxCDF	0.0595	J	5.00	0.0201	ng/kg	99		72-134		
123678-HxCDF	0.0378	J	5.00	0.0203	ng/kg	98		84-130		
123789-HxCDF	5.00	U	5.00	0.0265	ng/kg	94		78-130		
234678-HxCDF	0.0469	J	5.00	0.0192	ng/kg	94		70-156		
1234678-HpCDF	0.0390	J	5.00	0.0118	ng/kg	93		82-122		
1234789-HpCDF	5.00	U	5.00	0.0217	ng/kg	94		78-138		
OCDF	0.0824	J	10.0	0.0559	ng/kg	95		63-170		
TEQ WHO 2005 - EDLx0.0	0.000500				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13199SLA026	Sample number(s): 7128144-7128146,7128148-7128154,7128156-7128159 UNSPK: 7128144								
Acenaphthene	100	98	48-127	2	30				
Acenaphthylene	91	92	49-121	1	30				
Anthracene	88	91	52-126	4	30				
Benzo(a)anthracene	82	83	32-135	1	30				
Benzo(a)pyrene	70	69	36-138	2	30				
Benzo(b)fluoranthene	83	83	26-142	0	30				
Benzo(e)pyrene	74	74	70-130	0	30				
Benzo(g,h,i)perylene	57	58	33-141	1	30				
Benzo(k)fluoranthene	82	77	47-129	6	30				
Butylbenzylphthalate	125	125	59-153	0	30				
Di-n-butylphthalate	122	125	62-154	2	30				
Chrysene	75	73	29-148	2	30				
Dibenz(a,h)anthracene	79	80	34-125	1	30				
Diethylphthalate	128*	126	76-127	2	30				
Dimethylphthalate	103	103	62-136	1	30				
Bis(2-Ethylhexyl)phthalate	95	91	39-167	3	30				
Fluoranthene	75	76	47-135	0	30				
Fluorene	94	94	50-129	1	30				
Indeno(1,2,3-cd)pyrene	70	70	17-136	0	30				
1-Methylnaphthalene	103	102	50-131	1	30				
2-Methylnaphthalene	98	96	28-144	2	30				
Naphthalene	95	94	31-148	1	30				
N-Nitrosodimethylamine	84	84	48-113	0	30				
Di-n-octylphthalate	122	123	52-162	1	30				
Phenanthrene	87	86	29-142	2	30				
Pyrene	73	74	26-143	1	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404272
Reported: 07/30/13 at 10:02 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13198A16A	Sample number(s): 7128149-7128151,7128153-7128154 UNSPK: P125061								
11a TPH by EPA 8015B GRO	72	72	39-118	0	30				
Batch number: 13198A16B	Sample number(s): 7128157,7128159 UNSPK: P125061								
11a TPH by EPA 8015B GRO	72	72	39-118	0	30				
Batch number: 131980028A	Sample number(s): 7128144-7128146,7128148-7128151 UNSPK: 7128144								
2,4-D	0*	0*	42-143	0	35				
Dalapon	63	56	19-109	10	50				
2,4-DB	0*	0*	10-179	0	50				
Dicamba	116	77	45-147	40	50				
Dinoseb	42	22	10-52	62*	35				
2,4-DP (Dichlorprop)	170	165	32-171	2	50				
MCPA	120	125	23-169	5	50				
MCPP (Mecoprop)	93	91	24-164	1	50				
2,4,5-T	0*	0*	12-172	0	35				
2,4,5-TP	0*	0*	10-142	0	35				
Batch number: 131990015A	Sample number(s): 7128144-7128146,7128148-7128154,7128156-7128159 UNSPK: 7128144								
PCB-1016	99	104	16-146	5	50				
PCB-1260	106	118	40-134	11	50				
Batch number: 132010011A	Sample number(s): 7128144-7128146,7128148-7128151 UNSPK: 7128144								
Aldrin	89	83	16-126	7	50				
Alpha BHC	98	94	14-140	3	50				
Beta BHC	92	91	10-173	1	50				
Gamma BHC - Lindane	96	92	30-137	3	50				
p,p-DDD	110	106	43-149	3	50				
p,p-DDE	82	65	18-161	16	50				
p,p-DDT	85	76	12-193	8	50				
Delta BHC	94	89	13-153	5	50				
Dieldrin	109	105	19-154	3	50				
Endosulfan I	100	97	16-137	3	50				
Endosulfan II	98	95	10-156	3	50				
Endosulfan Sulfate	102	97	10-181	4	50				
Endrin	107	103	30-152	3	50				
Endrin Aldehyde	85	81	10-152	3	35				
Endrin Ketone	98	95	10-160	2	50				
Heptachlor	100	97	16-152	2	50				
Heptachlor Epoxide	94	90	17-167	4	50				
Methoxychlor	110	105	34-168	4	50				
Batch number: 131990018A	Sample number(s): 7128144-7128146,7128148-7128154,7128156-7128159 UNSPK: 7128144								
EFH (C12-C14)	114	104	49-123	10	20				
EFH (C15-C20)	90	57	49-123	19	20				
EFH (C21-C30)	-182 (2)	-241 (2)	49-123	17	20				
EFH (C30-C40)	-286 (2)	-356 (2)	49-123	11	20				
EFH (C8-C11)	87	84	49-123	4	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404272
Reported: 07/30/13 at 10:02 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131990637002	Sample number(s): 7128144-7128154,7128156-7128159					UNSPK: 7128144	BKG: 7128144		
Aluminum	1766 (2)	2388 (2)	75-125	6	20	16,700	16,500	1	20
Antimony	48*	45*	75-125	5	20	3.92 U	3.96 U	0 (1)	20
Arsenic	92	97	75-125	5	20	3.71 J	4.21	13 (1)	20
Barium	97	101	75-125	3	20	98.2	94.3	4	20
Beryllium	102	103	75-125	2	20	0.577 J	0.593 J	3 (1)	20
Boron	98	98	75-125	1	20	5.83 J	5.47 J	6 (1)	20
Cadmium	95	94	75-125	1	20	0.336 J	0.255 J	27* (1)	20
Calcium	-71 (2)	-21 (2)	75-125	5	20	3,730	2,700	32*	20
Chromium	101	107	75-125	3	20	19.7	19.5	1	20
Cobalt	95	95	75-125	1	20	5.66	5.62	1	20
Copper	103	105	75-125	2	20	11.7	10.9	7	20
Iron	-25 (2)	1180 (2)	75-125	6	20	19,900	19,600	2	20
Lead	-80*	-84*	75-125	3	20	33.7	8.07	123* (1)	20
Lithium	99	99	75-125	1	20	20.5	19.1	7 (1)	20
Magnesium	140 (2)	269 (2)	75-125	5	20	4,330	4,230	2	20
Manganese	-17 (2)	-35 (2)	75-125	3	20	375	306	20	20
Molybdenum	93	92	75-125	0	20	0.421 J	0.431 J	2 (1)	20
Nickel	94	95	75-125	1	20	11.8	11.2	5	20
Phosphorus	24 (2)	33 (2)	75-125	2	20	414	368	12	20
Potassium	110	123	75-125	3	20	3,350	2,990	11	20
Sodium	100	99	75-125	0	20	73.5 J	72.1 J	2 (1)	20
Tin	86	85	75-125	0	20	2.64 J	2.55 J	4 (1)	20
Titanium	334 (2)	450 (2)	75-125	8	20	999	1,010	1	20
Vanadium	104	110	75-125	4	20	35.6	35.9	1	20
Zinc	84	88	75-125	2	20	59.9	51.9	14	20
Zirconium	84	82	75-125	1	20	1.09 J	0.947 J	14 (1)	20
Batch number: 131990637002A	Sample number(s): 7128144-7128154,7128156-7128159					UNSPK: 7128144	BKG: 7128144		
Silver	107	107	75-125	1	20	0.0402 J	0.0277 J	37* (1)	20
Strontium	115	98	75-125	4	20	19.9	20.6	3	20
Thallium	106	101	75-125	2	20	0.271	0.299	10 (1)	20
Batch number: 131990637002B	Sample number(s): 7128144-7128154,7128156-7128159					UNSPK: 7128144	BKG: 7128144		
Selenium	98	96	75-125	1	20	0.234 J	0.241 J	3 (1)	20
Batch number: 131990638002	Sample number(s): 7128144-7128154,7128156-7128159					UNSPK: 7128144	BKG: 7128144		
3a Mercury 7471A	104	103	65-135	4	20	0.0263	0.0115 J	78* (1)	20
Batch number: 13197039401A	Sample number(s): 7128144,7128147-7128154,7128156					BKG: 7128144			
15a pH by 9045D						6.26	6.27	0	3
Batch number: 13197039401B	Sample number(s): 7128157-7128159					BKG: 7128159			
15a pH by 9045D						6.24	6.25	0	3
Batch number: 13199162401B	Sample number(s): 7128144-7128154,7128156-7128159					BKG: 7128144			
14a Moisture Content by 160.3						4.6	4.7	2	20
14a Moisture Content by 160.3						4.6	4.7	2	20
14a Moisture Content by 160.3						4.6	4.7	2	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404272
Reported: 07/30/13 at 10:02 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13204004	Sample number(s): 7128144-7128146,7128148-7128154,7128156-7128159 UNSPK: 7128144								
2378-TCDD	106	103	40-135	3	20				
12378-PeCDD	103	104	40-135	0	20				
123478-HxCDD	97	100	40-135	2	20				
123678-HxCDD	96	96	40-135	1	20				
123789-HxCDD	97	96	40-135	1	20				
1234678-HpCDD	82	77	40-135	6	20				
OCDD	11*	-3*	40-135	12	20				
2378-TCDF	93	90	40-135	3	20				
12378-PeCDF	95	97	40-135	1	20				
23478-PeCDF	96	95	40-135	1	20				
123478-HxCDF	95	96	40-135	1	20				
123678-HxCDF	95	96	40-135	0	20				
123789-HxCDF	93	92	40-135	1	20				
234678-HxCDF	92	95	40-135	2	20				
1234678-HpCDF	91	90	40-135	1	20				
1234789-HpCDF	93	94	40-135	0	20				
OCDF	92	96	40-135	4	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13199SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7128144	86	89	107
7128145	85	82	105
7128146	87	81	108
7128148	74	77	90
7128149	88	93	105
7128150	90	98	109
7128151	87	95	105
7128152	86	87	103
7128153	91	97	109
7128154	93	100	110
7128156	86	91	105
7128157	90	98	107
7128158	86	83	105
7128159	90	97	106
Blank	93	99	109
LCS	91	98	108
MS	85	82	105
MSD	87	81	108
Limits:	54-129	61-134	55-129

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404272
Reported: 07/30/13 at 10:02 AM

Surrogate Quality Control

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13198A16A

	Trifluorotoluene-F
7128149	64
7128150	72
7128151	67
7128153	70
7128154	67
Blank	74
LCS	71
MS	68
MSD	68
Limits:	61-122

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13198A16B

	Trifluorotoluene-F
7128157	74
7128159	73
Blank	68
LCS	71
MS	68
MSD	68
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13198A20A

	Trifluorotoluene-F
7128155	87
Blank	87
LCS	120
LCSD	121
Limits:	63-135

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 131980028A

	2,4-Dichlorophenylacetic acid
7128144	80
7128145	93
7128146	90
7128148	82
7128149	75
7128150	79
7128151	82
Blank	77
LCS	93
MS	93

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404272
Reported: 07/30/13 at 10:02 AM

Surrogate Quality Control

MSD	90	
Limits:	50-150	

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 131990015A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7128144	112	89
7128145	113	103
7128146	117	106
7128148	116	105
7128149	120	106
7128150	114	104
7128151	116	101
7128152	111	96
7128153	119	100
7128154	120	109
7128156	120	108
7128157	124*	103
7128158	121*	107
7128159	132*	120
Blank	115	112
LCS	120	108
LCSD	121*	113
MS	113	103
MSD	117	106
Limits:	45-120	45-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132010011A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7128144	83	98
7128145	87	101
7128146	80	97
7128148	84	98
7128149	89	102
7128150	78	99
7128151	83	108
Blank	84	100
LCS	87	104
MS	87	101
MSD	80	97
Limits:	50-130	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131990018A

	Chlorobenzene	Orthoterphenyl
7128144	92	97
7128145	99	105
7128146	96	99
7128148	81	89

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404272
Reported: 07/30/13 at 10:02 AM

Surrogate Quality Control

7128149	93	98
7128150	86	91
7128151	86	91
7128152	86	92
7128153	98	106
7128154	89	95
7128156	96	101
7128157	99	103
7128158	87	91
7128159	95	102
Blank	95	101
LCS	98	102
MS	100	105
MSD	96	99
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13204004

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7128144	74	81	74	79	77	83
7128145	73	83	72	82	74	81
7128146	66	77	66	73	70	73
7128148	71	68	62	67	65	70
7128149	64	73	67	71	71	69
7128150	63	79	72	77	75	75
7128151	79	87	80	82	77	85
7128152	71	79	73	74	72	74
7128153	70	85	71	75	75	77
7128154	72	83	75	77	72	76
7128156	73	79	70	73	69	75
7128157	68	80	82	75	63	66
7128158	67	72	64	67	64	72
7128159	59	69	65	69	68	64
Blank	59	71	62	69	68	66
MS	73	83	72	82	74	81
MSD	66	77	66	73	70	73
OPR	67	85	69	79	76	75
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7128144	91	70	68	81	78	82
7128145	104	75	67	86	81	85
7128146	85	66	94	77	74	77
7128148	75	59	54	74	72	78
7128149	76	68	72	75	76	77
7128150	86	81	72	78	80	84
7128151	84	70	60	88	83	86
7128152	79	79	75	81	76	80
7128153	87	77	74	84	79	83
7128154	82	69	64	83	76	82
7128156	78	67	59	81	73	76
7128157	70	69	62	83	72	73

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404272
Reported: 07/30/13 at 10:02 AM

Surrogate Quality Control

7128158	80	65	59	77	73	78
7128159	79	69	61	70	70	80
Blank	92	67	62	69	72	74
MS	104	75	67	86	81	85
MSD	85	66	94	77	74	77
OPR	104	74	71	86	82	83
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7128144	83	85	86	74	85
7128145	84	91	92	72	89
7128146	77	80	112	63	77
7128148	77	77	72	62	71
7128149	79	78	82	63	70
7128150	83	91	89	63	76
7128151	85	86	84	74	86
7128152	80	86	94	73	83
7128153	83	90	94	74	85
7128154	80	84	86	72	83
7128156	76	77	75	65	84
7128157	72	75	76	66	80
7128158	77	80	78	58	75
7128159	77	82	83	55	68
Blank	74	81	84	58	75
MS	84	91	92	72	89
MSD	77	80	112	63	77
OPR	85	94	101	65	87
Limits:	28-130	23-140	17-157	24-169	24-185

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13013 1404272 7128144-59

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/15/2013
CarrierName: FedEx
AirbillNo: 796234301173

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130715-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-501-SA8-SB-0.0-0.5MS	7/15/13 11:10	SO	None	6 - SS-Sleeve	10 day	X	X					X		X	X						X	X			X											MS/MSD
SL-501-SA8-SB-0.0-0.5MS	7/15/13 11:10	SO	None	1 - 8 oz glass	10 day													X																		MS/MSD
SL-801-SA8-SB-0.0-0.5	7/15/13 11:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X	X			X											
SL-801-SA8-SB-0.0-0.5	7/15/13 11:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-501-SA8-SB-4.0-5.0	7/15/13 11:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X			X	X			X											
SL-501-SA8-SB-9.0-10.0	7/15/13 11:45	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X			X	X			X											
SL-501-SA8-SB-12.0-13.0	7/15/13 12:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X			X	X			X											
SL-502-SA8-SB-0.0-0.5	7/15/13 08:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-502-SA8-SB-0.0-0.5	7/15/13 08:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-502-SA8-SB-4.0-5.0	7/15/13 09:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-502-SA8-SB-4.0-5.0	7/15/13 09:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-502-SA8-SB-7.5-8.5	7/15/13 10:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-502-SA8-SB-7.5-8.5	7/15/13 10:15	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: Y. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Sof Thupe	7/15/2013	1600									
									Pat Gh	7/16/13	0920

13013 1404272 7128144-59

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/15/2013
CarrierName: FedEx
AirbillNo: 796234301173

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130715-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-071513	7/15/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X												
SL-501-SA8-SB-4.0-5.0	7/15/13 11:30	SO	None	2 - Encore	10 day																				X												
SL-501-SA8-SB-9.0-10.0	7/15/13 11:45	SO	None	2 - Encore	10 day																				X												
SL-501-SA8-SB-12.0-13.0	7/15/13 12:00	SO	None	2 - Encore	10 day																				X												
SL-502-SA8-SB-4.0-5.0	7/15/13 09:30	SO	None	2 - Encore	10 day																				X												
SL-502-SA8-SB-7.5-8.5	7/15/13 10:15	SO	None	2 - Encore	10 day																				X												
SL-503-SA8-SB-0.0-0.5	7/15/13 14:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-503-SA8-SB-0.0-0.5	7/15/13 14:55	SO	None	1 - 4 oz glass	10 day														X																		
SL-503-SA8-SB-3.0-4.0	7/15/13 15:05	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X											
SL-511-SA8-SB-0.0-0.5	7/15/13 14:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-511-SA8-SB-0.0-0.5	7/15/13 14:15	SO	None	1 - 4 oz glass	10 day														X																		
SL-511-SA8-SB-6.0-7.0	7/15/13 14:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X											
SL-503-SA8-SB-3.0-4.0	7/15/13 15:05	SO	None	2 - Encore	10 day																				X												
SL-511-SA8-SB-6.0-7.0	7/15/13 14:30	SO	None	2 - Encore	10 day																				X												

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Myers	07/15/2013	1600									
									Pat Ga	7/16/13	0920

COC Rev 2

COC: 20130715-02, Page 1 of 1

1 of 1

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Environmental Sample Administration Receipt Documentation Log

1404272

Client/Project: COM Smith

Date of Receipt: 7/16/13

Time of Receipt: 0920

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.7	TB	WI	Y	B	
2	↓	1.1	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat Gu 3472 **Date/Time:** 7/16/13 1019

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH068

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 01, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/17/2013
Group Number: 1404641
SDG: PH068
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-510-SA8-SB-0.0-0.5 Soil	7129591
TB-071613 Water	7129592
SL-505-SA8-SB-0.0-0.5 Soil	7129593
SL-505-SA8-SB-4.0-5.0 Soil	7129594
SL-504-SA8-SB-0.0-0.5 Soil	7129595
SL-504-SA8-SB-2.5-3.5 Soil	7129596
SL-504-SA8-SB-2.5-3.5MS Soil	7129597
SL-504-SA8-SB-2.5-3.5MSD Soil	7129598
SL-504-SA8-SB-2.5-3.5SS Soil	7129599
SL-504-SA8-SB-2.5-3.5IS Soil	7129600
SL-504-SA8-SB-2.5-3.5PDS Soil	7129601
SL-504-SA8-SB-2.5-3.5DUP Soil	7129602
SL-804-SA8-SB-2.5-3.5 Soil	7129603
SL-507-SA8-SB-0.0-0.5 Soil	7129604
SL-507-SA8-SB-3.0-4.0 Soil	7129605
SL-508-SA8-SB-0.0-0.5 Soil	7129606

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-510-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129591
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51000 SDG#: PH068-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.66	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.66	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.66	1
12969	Benzo(b)fluoranthene	205-99-2	0.71	J	1.7	0.66	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.66	1
12969	Benzo(k)fluoranthene	207-08-9	1.2	J	1.7	0.66	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.1	J	1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.66	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	14	J	18	6.0	1
12969	Fluoranthene	206-44-0	0.93	J	1.7	0.66	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.66	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.66	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.66	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.66	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.66	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.66	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	0.70	J	1.7	0.66	1
12969	Pyrene	129-00-0	0.84	J	1.7	0.66	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	13		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	42		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129591
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51000 SDG#: PH068-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,900		39.7	7.16	1
06944	Antimony	7440-36-0	3.97	U	3.97	0.735	1
06935	Arsenic	7440-38-2	4.37		3.97	0.695	1
06946	Barium	7440-39-3	81.7		0.993	0.0328	1
06947	Beryllium	7440-41-7	0.462	J	0.993	0.0666	1
07914	Boron	7440-42-8	15.5		9.93	0.834	1
06949	Cadmium	7440-43-9	0.393	J	0.993	0.0755	1
01650	Calcium	7440-70-2	2,620		19.9	3.32	1
06951	Chromium	7440-47-3	16.5		2.98	0.159	1
06952	Cobalt	7440-48-4	5.01		0.993	0.0983	1
06953	Copper	7440-50-8	10.3		1.99	0.288	1
01654	Iron	7439-89-6	18,200		39.7	3.60	1
06955	Lead	7439-92-1	10.2		2.98	0.497	1
01656	Lithium	7439-93-2	24.0		4.0	0.34	1
01657	Magnesium	7439-95-4	4,230		9.93	1.66	1
06958	Manganese	7439-96-5	325		0.993	0.0824	1
06960	Molybdenum	7439-98-7	0.373	J	1.99	0.169	1
06961	Nickel	7440-02-0	9.81		1.99	0.129	1
10145	Phosphorus	7723-14-0	510		9.93	2.87	1
01662	Potassium	7440-09-7	3,330		99.3	8.28	1
01667	Sodium	7440-23-5	82.4	J	99.3	16.6	1
06969	Tin	7440-31-5	2.85	J	9.93	0.219	1
06970	Titanium	7440-32-6	1,110		0.993	0.169	1
06971	Vanadium	7440-62-2	31.3		0.993	0.129	1
06972	Zinc	7440-66-6	58.5		3.97	0.199	1
10146	Zirconium	7440-67-7	1.57	J	4.97	0.834	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.133	J	0.397	0.0993	2
06142	Silver	7440-22-4	0.199	U	0.199	0.0258	2
06144	Strontium	7440-24-6	15.4		0.397	0.0675	2
06145	Thallium	7440-28-0	0.242		0.199	0.0298	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0144	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.73		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129591
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51000 SDG#: PH068-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.989	U	0.989	0.0465	1
11031	12378-PeCDD	40321-76-4	0.142	JQ	4.95	0.0588	1
11031	123478-HxCDD	39227-28-6	0.279	JB	4.95	0.0724	1
11031	123678-HxCDD	57653-85-7	0.874	J	4.95	0.0789	1
11031	123789-HxCDD	19408-74-3	0.790	JB	4.95	0.0779	1
11031	1234678-HpCDD	35822-46-9	13.1	B	4.95	0.0752	1
11031	OCDD	3268-87-9	138	B	9.89	0.0437	1
11031	2378-TCDF	51207-31-9	0.151	JQ	0.989	0.0680	1
11031	12378-PeCDF	57117-41-6	0.728	JB	4.95	0.0394	1
11031	23478-PeCDF	57117-31-4	0.146	J	4.95	0.0424	1
11031	123478-HxCDF	70648-26-9	0.372	JBQ	4.95	0.0400	1
11031	123678-HxCDF	57117-44-9	0.339	JB	4.95	0.0397	1
11031	123789-HxCDF	72918-21-9	0.187	JB	4.95	0.0463	1
11031	234678-HxCDF	60851-34-5	0.364	JBQ	4.95	0.0385	1
11031	1234678-HpCDF	67562-39-4	1.98	JB	4.95	0.0286	1
11031	1234789-HpCDF	55673-89-7	0.226	JQ	4.95	0.0478	1
11031	OCDF	39001-02-0	2.98	JB	9.89	0.0522	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.506				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129591
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51000 SDG#: PH068-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129591
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51000 SDG#: PH068-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13201SLA026	07/24/2013 07:53	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13201SLA026	07/22/2013 10:30	Olivia Arosemena	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 02:43	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132030009A	07/23/2013 18:18	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132030009A	07/22/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/26/2013 23:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131980637001	07/26/2013 18:23	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/25/2013 20:47	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 15:55	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131980637001B	07/18/2013 23:01	David K Beck	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 23:01	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 23:01	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 23:01	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129591
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51000 SDG#: PH068-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:23	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13198039402A	07/17/2013 21:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071613 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7129592
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:00

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510TB SDG#: PH068-02TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Acetone	67-64-1	20	U	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071613 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7129592
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:00

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510TB SDG#: PH068-02TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: chlorotrifluoroethane.

GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y132041AA	07/23/2013 12:33	Angela D Sneeringer	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071613 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7129592
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:00

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

510TB SDG#: PH068-02TB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y132041AA	07/23/2013 12:33	Angela D Sneeringer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13198A20A	07/18/2013 17:38	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13198A20A	07/18/2013 17:38	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129593
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH068-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	0.73	J	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.0	J	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.1	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	16	J	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	6.5		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	20		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129593
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH068-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,500		41.6	7.50	1
06944	Antimony	7440-36-0	4.16	U	4.16	0.770	1
06935	Arsenic	7440-38-2	6.15		4.16	0.728	1
06946	Barium	7440-39-3	97.1		1.04	0.0343	1
06947	Beryllium	7440-41-7	0.692	J	1.04	0.0697	1
07914	Boron	7440-42-8	32.5		10.4	0.874	1
06949	Cadmium	7440-43-9	0.543	J	1.04	0.0791	1
01650	Calcium	7440-70-2	33,600		20.8	3.48	1
06951	Chromium	7440-47-3	34.5		3.12	0.167	1
06952	Cobalt	7440-48-4	8.90		1.04	0.103	1
06953	Copper	7440-50-8	18.6		2.08	0.302	1
01654	Iron	7439-89-6	26,900		83.3	7.53	2
06955	Lead	7439-92-1	9.65		3.12	0.520	1
01656	Lithium	7439-93-2	33.0		4.2	0.35	1
01657	Magnesium	7439-95-4	7,910		10.4	1.74	1
06958	Manganese	7439-96-5	405		1.04	0.0864	1
06960	Molybdenum	7439-98-7	0.627	J	2.08	0.177	1
06961	Nickel	7440-02-0	17.4		2.08	0.135	1
10145	Phosphorus	7723-14-0	639		10.4	3.01	1
01662	Potassium	7440-09-7	6,120		104	8.68	1
01667	Sodium	7440-23-5	205		104	17.4	1
06969	Tin	7440-31-5	3.19	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,580		1.04	0.177	1
06971	Vanadium	7440-62-2	67.8		1.04	0.135	1
06972	Zinc	7440-66-6	77.4		4.16	0.208	1
10146	Zirconium	7440-67-7	1.60	J	5.20	0.874	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.329	J	0.416	0.104	2
06142	Silver	7440-22-4	0.0558	J	0.208	0.0271	2
06144	Strontium	7440-24-6	76.9		0.416	0.0708	2
06145	Thallium	7440-28-0	0.364		0.208	0.0312	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0128	J	0.0176	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.81		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129593
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH068-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0700	1
11031	12378-PeCDD	40321-76-4	0.141	JQ	5.22	0.0755	1
11031	123478-HxCDD	39227-28-6	5.22	U	5.22	0.0558	1
11031	123678-HxCDD	57653-85-7	0.195	JQ	5.22	0.0614	1
11031	123789-HxCDD	19408-74-3	0.210	JB	5.22	0.0596	1
11031	1234678-HpCDD	35822-46-9	11.7	B	5.22	0.118	1
11031	OCDD	3268-87-9	290	B	10.4	0.0786	1
11031	2378-TCDF	51207-31-9	1.04	U	1.04	0.0794	1
11031	12378-PeCDF	57117-41-6	1.21	JB	5.22	0.0445	1
11031	23478-PeCDF	57117-31-4	0.128	JQ	5.22	0.0464	1
11031	123478-HxCDF	70648-26-9	0.0906	JBQ	5.22	0.0307	1
11031	123678-HxCDF	57117-44-9	0.0869	JB	5.22	0.0286	1
11031	123789-HxCDF	72918-21-9	0.0867	JBQ	5.22	0.0358	1
11031	234678-HxCDF	60851-34-5	0.0814	JBQ	5.22	0.0272	1
11031	1234678-HpCDF	67562-39-4	0.565	JB	5.22	0.0256	1
11031	1234789-HpCDF	55673-89-7	0.162	JQ	5.22	0.0465	1
11031	OCDF	39001-02-0	1.60	JB	10.4	0.0759	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.276				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129593
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH068-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129593
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH068-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13201SLA026	07/24/2013 05:46	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13201SLA026	07/22/2013 10:30	Olivia Arosemena	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 03:02	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132030009A	07/23/2013 19:00	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132030009A	07/22/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 03:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131980637001	07/26/2013 18:27	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 16:03	Eric L Eby	2
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/25/2013 20:51	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 15:59	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131980637001B	07/18/2013 23:04	David K Beck	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 23:04	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 23:04	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 23:04	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129593
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 08:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50500 SDG#: PH068-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:25	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13198039402A	07/17/2013 21:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129594
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 09:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50540 SDG#: PH068-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	0.50	J	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.27
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129594
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 09:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50540 SDG#: PH068-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,500		43.9	7.91	1
06944	Antimony	7440-36-0	4.39	U	4.39	0.811	1
06935	Arsenic	7440-38-2	5.63		4.39	0.768	1
06946	Barium	7440-39-3	102		1.10	0.0362	1
06947	Beryllium	7440-41-7	0.689	J	1.10	0.0735	1
07914	Boron	7440-42-8	21.2		11.0	0.921	1
06949	Cadmium	7440-43-9	0.357	J	1.10	0.0833	1
01650	Calcium	7440-70-2	4,520		21.9	3.66	1
06951	Chromium	7440-47-3	26.9		3.29	0.175	1
06952	Cobalt	7440-48-4	6.88		1.10	0.109	1
06953	Copper	7440-50-8	12.1		2.19	0.318	1
01654	Iron	7439-89-6	24,800		43.9	3.97	1
06955	Lead	7439-92-1	7.44		3.29	0.548	1
01656	Lithium	7439-93-2	29.0		4.4	0.37	1
01657	Magnesium	7439-95-4	6,010		11.0	1.83	1
06958	Manganese	7439-96-5	385		1.10	0.0910	1
06960	Molybdenum	7439-98-7	2.19	U	2.19	0.186	1
06961	Nickel	7440-02-0	14.3		2.19	0.143	1
10145	Phosphorus	7723-14-0	244		11.0	3.17	1
01662	Potassium	7440-09-7	2,270		110	9.14	1
01667	Sodium	7440-23-5	243		110	18.3	1
06969	Tin	7440-31-5	3.18	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,490		1.10	0.186	1
06971	Vanadium	7440-62-2	52.7		1.10	0.143	1
06972	Zinc	7440-66-6	53.5		4.39	0.219	1
10146	Zirconium	7440-67-7	3.50	J	5.48	0.921	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.132	J	0.439	0.110	2
06142	Silver	7440-22-4	0.0328	J	0.219	0.0285	2
06144	Strontium	7440-24-6	23.5		0.439	0.0746	2
06145	Thallium	7440-28-0	0.225		0.219	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0140	J	0.0174	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.07		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129594
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 09:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50540 SDG#: PH068-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129594
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 09:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50540 SDG#: PH068-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0614	1
11031	12378-PeCDD	40321-76-4	5.41	U	5.41	0.0722	1
11031	123478-HxCDD	39227-28-6	5.41	U	5.41	0.0369	1
11031	123678-HxCDD	57653-85-7	0.0425	JQ	5.41	0.0412	1
11031	123789-HxCDD	19408-74-3	0.0400	JBQ	5.41	0.0394	1
11031	1234678-HpCDD	35822-46-9	0.392	JBQ	5.41	0.0579	1
11031	OCDD	3268-87-9	3.36	JB	10.8	0.0466	1
11031	2378-TCDF	51207-31-9	1.08	U	1.08	0.0553	1
11031	12378-PeCDF	57117-41-6	5.41	U	5.41	0.0358	1
11031	23478-PeCDF	57117-31-4	0.0459	JQ	5.41	0.0377	1
11031	123478-HxCDF	70648-26-9	0.0433	JBQ	5.41	0.0217	1
11031	123678-HxCDF	57117-44-9	0.0333	JBQ	5.41	0.0212	1
11031	123789-HxCDF	72918-21-9	0.0357	JBQ	5.41	0.0296	1
11031	234678-HxCDF	60851-34-5	0.0674	JBQ	5.41	0.0220	1
11031	1234678-HpCDF	67562-39-4	0.0982	JBQ	5.41	0.0154	1
11031	1234789-HpCDF	55673-89-7	5.41	U	5.41	0.0289	1
11031	OCDF	39001-02-0	0.226	JBQ	10.8	0.0699	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.000997				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	52	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129594
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 09:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50540 SDG#: PH068-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129594
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 09:30 by VC

Submitted: 07/17/2013 09:20
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50540 SDG#: PH068-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13201SLA026	07/24/2013 08:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13201SLA026	07/22/2013 10:30	Olivia Arosemena	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/22/2013 20:10	Laura M Krieger	24.27
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319831737	07/17/2013 18:40	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319831737	07/17/2013 18:40	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 03:20	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132030009A	07/23/2013 15:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132030009A	07/22/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 04:25	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131980637001	07/26/2013 18:32	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/25/2013 21:03	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 16:07	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-505-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129594
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 09:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50540 SDG#: PH068-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131980637001B	07/18/2013 23:11	David K Beck	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 23:11	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 23:11	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 23:11	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:27	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13198039402A	07/17/2013 21:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129595
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 11:45 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH068-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	350	U	350	170	1
10726	Benzidine	92-87-5	1,700	U	1,700	720	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	350	U	350	170	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	17	1
10726	Carbazole	86-74-8	35	U	35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	17	1
10726	4-Chloroaniline	106-47-8	35	U	35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	17	1
10726	Dibenzofuran	132-64-9	35	U	35	17	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	17	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	17	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	100	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	17	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	17	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	680	U	680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	17	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1
10726	Hexachloroethane	67-72-1	170	U	170	35	1
10726	Isophorone	78-59-1	35	U	35	17	1
10726	2-Methylphenol	95-48-7	35	U	35	17	1
10726	4-Methylphenol	106-44-5	35	U	35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	35	U	35	17	1
10726	2-Nitrophenol	88-75-5	35	U	35	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129595
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 11:45 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH068-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenol	108-95-2	35	U	35	17	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	17	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	0.87	J	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.1	J	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.90	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.2	U	5.2	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129595
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 11:45 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH068-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	9.6	J	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	4.9	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	11		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,800		40.6	7.32	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.752	1
06935	Arsenic	7440-38-2	6.81		4.06	0.711	1
06946	Barium	7440-39-3	96.0		1.02	0.0335	1
06947	Beryllium	7440-41-7	0.641	J	1.02	0.0680	1
07914	Boron	7440-42-8	31.2		10.2	0.853	1
06949	Cadmium	7440-43-9	0.513	J	1.02	0.0772	1
01650	Calcium	7440-70-2	38,200		20.3	3.39	1
06951	Chromium	7440-47-3	34.9		3.05	0.162	1
06952	Cobalt	7440-48-4	9.15		1.02	0.101	1
06953	Copper	7440-50-8	19.0		2.03	0.295	1
01654	Iron	7439-89-6	29,700		81.2	7.35	2
06955	Lead	7439-92-1	9.86		3.05	0.508	1
01656	Lithium	7439-93-2	30.1		4.1	0.35	1
01657	Magnesium	7439-95-4	7,820		10.2	1.70	1
06958	Manganese	7439-96-5	402		1.02	0.0843	1
06960	Molybdenum	7439-98-7	0.518	J	2.03	0.173	1
06961	Nickel	7440-02-0	17.8		2.03	0.132	1
10145	Phosphorus	7723-14-0	630		10.2	2.93	1
01662	Potassium	7440-09-7	6,080		102	8.47	1
01667	Sodium	7440-23-5	148		102	17.0	1
06969	Tin	7440-31-5	3.11	J	10.2	0.223	1
06970	Titanium	7440-32-6	1,480		1.02	0.173	1
06971	Vanadium	7440-62-2	66.0		1.02	0.132	1
06972	Zinc	7440-66-6	77.3		4.06	0.203	1
10146	Zirconium	7440-67-7	2.16	J	5.08	0.853	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.251	J	0.406	0.102	2
06142	Silver	7440-22-4	0.0343	J	0.203	0.0264	2
06144	Strontium	7440-24-6	86.6		0.406	0.0691	2
06145	Thallium	7440-28-0	0.341		0.203	0.0305	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129595
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 11:45 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH068-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0466	0.0165	0.0099	1
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.52	0.43	0.15	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.8 C.	n.a.	7.25	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	4.4	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129595
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 11:45 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH068-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0531	1
11031	12378-PeCDD	40321-76-4	0.188	JQ	5.18	0.0586	1
11031	123478-HxCDD	39227-28-6	0.280	JBQ	5.18	0.0576	1
11031	123678-HxCDD	57653-85-7	0.891	J	5.18	0.0624	1
11031	123789-HxCDD	19408-74-3	0.497	JB	5.18	0.0649	1
11031	1234678-HpCDD	35822-46-9	43.2	B	5.18	0.118	1
11031	OCDD	3268-87-9	881	B	10.4	0.0835	1
11031	2378-TCDF	51207-31-9	0.0670	JQ	1.04	0.0616	1
11031	12378-PeCDF	57117-41-6	0.752	JB	5.18	0.0360	1
11031	23478-PeCDF	57117-31-4	0.0795	JQ	5.18	0.0370	1
11031	123478-HxCDF	70648-26-9	0.225	JB	5.18	0.0342	1
11031	123678-HxCDF	57117-44-9	0.102	JBQ	5.18	0.0319	1
11031	123789-HxCDF	72918-21-9	0.106	JB	5.18	0.0432	1
11031	234678-HxCDF	60851-34-5	0.213	JB	5.18	0.0350	1
11031	1234678-HpCDF	67562-39-4	2.93	JB	5.18	0.0253	1
11031	1234789-HpCDF	55673-89-7	0.408	JQ	5.18	0.0527	1
11031	OCDF	39001-02-0	8.29	JB	10.4	0.0632	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.944				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129595
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 11:45 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH068-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129595
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 11:45 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH068-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13199SLE026	07/28/2013 20:32	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13207SLA026	07/27/2013 06:26	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13199SLE026	07/19/2013 09:05	Katheryne V Sponheimer	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13207SLA026	07/26/2013 18:45	Sally L Appleyard	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 18:14	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 03:39	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132030009A	07/23/2013 15:31	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132030009A	07/22/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 05:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131980637001	07/26/2013 18:44	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 16:15	Eric L Eby	2
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/25/2013 21:06	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129595
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 11:45 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH068-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 16:11	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131980637001B	07/18/2013 23:14	David K Beck	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 23:14	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 23:14	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 23:14	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:29	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13203243201A	07/23/2013 15:28	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13198039402A	07/17/2013 21:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129596
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	20	U	20	7	0.97
10237	Acrolein	107-02-8	100	U	100	20	0.97
10237	Acrylonitrile	107-13-1	20	U	20	4	0.97
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	0.97
10237	Benzene	71-43-2	5	U	5	0.5	0.97
10237	Bromobenzene	108-86-1	5	U	5	1	0.97
10237	Bromochloromethane	74-97-5	5	U	5	1	0.97
10237	Bromodichloromethane	75-27-4	5	U	5	1	0.97
10237	Bromoform	75-25-2	5	U	5	1	0.97
10237	Bromomethane	74-83-9	5	U	5	2	0.97
10237	2-Butanone	78-93-3	10	U	10	4	0.97
10237	t-Butyl alcohol	75-65-0	51	U	51	20	0.97
10237	n-Butylbenzene	104-51-8	5	U	5	1	0.97
10237	sec-Butylbenzene	135-98-8	5	U	5	1	0.97
10237	tert-Butylbenzene	98-06-6	5	U	5	1	0.97
10237	Carbon Disulfide	75-15-0	5	U	5	1	0.97
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	0.97
10237	Chlorobenzene	108-90-7	5	U	5	1	0.97
10237	Chloroethane	75-00-3	5	U	5	2	0.97
10237	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	0.97
10237	Chloroform	67-66-3	5	U	5	1	0.97
10237	1-Chlorohexane	544-10-5	5	U	5	1	0.97
10237	Chloromethane	74-87-3	5	U	5	2	0.97
10237	2-Chlorotoluene	95-49-8	5	U	5	1	0.97
10237	4-Chlorotoluene	106-43-4	5	U	5	1	0.97
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	0.97
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	0.97
10237	Dibromochloromethane	124-48-1	5	U	5	1	0.97
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	0.97
10237	Dibromomethane	74-95-3	5	U	5	1	0.97
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	0.97
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	0.97
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	0.97
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	0.97
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	0.97
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	0.97
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	0.97
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	0.97
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	0.97
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	0.97
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	0.97
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	0.97
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	0.97
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	0.97
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	0.97
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	0.97
10237	Ethylbenzene	100-41-4	5	U	5	1	0.97
10237	Freon 113	76-13-1	5	U	5	2	0.97
10237	Freon 133a	75-88-7	5	U	5	2	0.97
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	0.97
10237	2-Hexanone	591-78-6	10	U	10	3	0.97

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129596
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	0.97
10237	Isopropylbenzene	98-82-8	5	U	5	1	0.97
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	0.97
10237	Methyl Iodide	74-88-4	5	U	5	3	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	0.97
10237	4-Methyl-2-pentanone	108-10-1	10	U	10	3	0.97
10237	Methylene Chloride	75-09-2	5	U	5	2	0.97
10237	n-Propylbenzene	103-65-1	5	U	5	1	0.97
10237	Styrene	100-42-5	5	U	5	1	0.97
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	0.97
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	0.97
10237	Tetrachloroethene	127-18-4	5	U	5	1	0.97
10237	Toluene	108-88-3	5	U	5	1	0.97
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	0.97
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	0.97
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	0.97
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	0.97
10237	Trichloroethene	79-01-6	5	U	5	1	0.97
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	0.97
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	0.97
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	0.97
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	0.97
10237	Vinyl Acetate	108-05-4	10	U	10	2	0.97
10237	Vinyl Chloride	75-01-4	5	U	5	1	0.97
10237	m+p-Xylene	179601-23-1	5	U	5	1	0.97
10237	o-Xylene	95-47-6	5	U	5	1	0.97
GC/MS Semivolatiles	**SW-846 8270D**		ug/kg		ug/kg	ug/kg	
10726	Aniline	62-53-3	350	U	350	170	1
10726	Benzidine	92-87-5	1,700	U	1,700	730	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	350	U	350	170	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	17	1
10726	Carbazole	86-74-8	35	U	35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	17	1
10726	4-Chloroaniline	106-47-8	35	U	35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	17	1
10726	Dibenzofuran	132-64-9	35	U	35	17	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	17	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	17	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129596
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	100	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	17	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	17	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	680	U	680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	17	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1
10726	Hexachloroethane	67-72-1	170	U	170	35	1
10726	Isophorone	78-59-1	35	U	35	17	1
10726	2-Methylphenol	95-48-7	35	U	35	17	1
10726	4-Methylphenol	106-44-5	35	U	35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	35	U	35	17	1
10726	2-Nitrophenol	88-75-5	35	U	35	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenol	108-95-2	35	U	35	17	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	17	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129596
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	23.9
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.2	U	5.2	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,800		40.8	7.36	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.755	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129596
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	3.88	J	4.08	0.714	1
06946	Barium	7440-39-3	84.4		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.394	J	1.02	0.0684	1
07914	Boron	7440-42-8	18.1		10.2	0.857	1
06949	Cadmium	7440-43-9	0.370	J	1.02	0.0775	1
01650	Calcium	7440-70-2	3,670		20.4	3.41	1
06951	Chromium	7440-47-3	21.8		3.06	0.163	1
06952	Cobalt	7440-48-4	4.81		1.02	0.101	1
06953	Copper	7440-50-8	10.6		2.04	0.296	1
01654	Iron	7439-89-6	22,900		40.8	3.69	1
06955	Lead	7439-92-1	4.43		3.06	0.510	1
01656	Lithium	7439-93-2	29.8		4.1	0.35	1
01657	Magnesium	7439-95-4	6,080		10.2	1.70	1
06958	Manganese	7439-96-5	422		1.02	0.0847	1
06960	Molybdenum	7439-98-7	0.373	J	2.04	0.173	1
06961	Nickel	7440-02-0	12.6		2.04	0.133	1
10145	Phosphorus	7723-14-0	423		10.2	2.95	1
01662	Potassium	7440-09-7	2,220		102	8.51	1
01667	Sodium	7440-23-5	177		102	17.0	1
06969	Tin	7440-31-5	2.86	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,460		1.02	0.173	1
06971	Vanadium	7440-62-2	43.8		1.02	0.133	1
06972	Zinc	7440-66-6	53.6		4.08	0.204	1
10146	Zirconium	7440-67-7	3.17	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.408	U	0.408	0.102	2
06142	Silver	7440-22-4	0.204	U	0.204	0.0265	2
06144	Strontium	7440-24-6	14.9		0.408	0.0694	2
06145	Thallium	7440-28-0	0.238		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	1.4		0.41	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.56		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129596
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0465	1
11031	12378-PeCDD	40321-76-4	5.08	U	5.08	0.0496	1
11031	123478-HxCDD	39227-28-6	0.0400	JBQ	5.08	0.0313	1
11031	123678-HxCDD	57653-85-7	0.0391	JQ	5.08	0.0342	1
11031	123789-HxCDD	19408-74-3	5.08	U	5.08	0.0324	1
11031	1234678-HpCDD	35822-46-9	0.219	JB	5.08	0.0419	1
11031	OCDD	3268-87-9	1.89	JB	10.2	0.0427	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0392	1
11031	12378-PeCDF	57117-41-6	0.203	JB	5.08	0.0235	1
11031	23478-PeCDF	57117-31-4	0.0347	JQ	5.08	0.0261	1
11031	123478-HxCDF	70648-26-9	0.0695	JBQ	5.08	0.0154	1
11031	123678-HxCDF	57117-44-9	0.0354	JB	5.08	0.0148	1
11031	123789-HxCDF	72918-21-9	5.08	U	5.08	0.0230	1
11031	234678-HxCDF	60851-34-5	0.0365	JB	5.08	0.0170	1
11031	1234678-HpCDF	67562-39-4	0.0823	JBQ	5.08	0.0111	1
11031	1234789-HpCDF	55673-89-7	0.0343	JQ	5.08	0.0229	1
11031	OCDF	39001-02-0	0.188	JBQ	10.2	0.0529	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0160				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129596
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129596
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B132052AA	07/24/2013 22:55	Andrea E Lando	0.97
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319831737	07/17/2013 19:12	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319831737	07/17/2013 19:12	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319831737	07/17/2013 18:43	Mitchell R Washel	n.a.
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13199SLE026	07/28/2013 19:20	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLF026	07/23/2013 13:57	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13199SLE026	07/19/2013 09:05	Katheryne V Sponheimer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLF026	07/19/2013 09:05	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 01:14	Laura M Krieger	23.9
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319831737	07/17/2013 18:42	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319831737	07/17/2013 18:43	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 18:27	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 03:57	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132030009A	07/23/2013 15:52	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132030009A	07/22/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 06:18	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129596
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06953	Copper	SW-846 6010C	1	131980637001	07/26/2013 17:59	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/25/2013 20:24	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 15:17	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131980637001B	07/18/2013 22:47	David K Beck	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 22:47	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 22:47	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 22:47	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:31	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13203243201A	07/23/2013 15:49	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13198039402A	07/17/2013 21:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129597
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	230	20	7	0.97
10237	Acrolein	107-02-8	260	100	20	0.97
10237	Acrylonitrile	107-13-1	100	20	4	0.97
10237	t-Amyl methyl ether	994-05-8	20	5	1	0.97
10237	Benzene	71-43-2	20	5	0.5	0.97
10237	Bromobenzene	108-86-1	20	5	1	0.97
10237	Bromochloromethane	74-97-5	21	5	1	0.97
10237	Bromodichloromethane	75-27-4	19	5	1	0.97
10237	Bromoform	75-25-2	19	5	1	0.97
10237	Bromomethane	74-83-9	19	5	2	0.97
10237	2-Butanone	78-93-3	200	10	4	0.97
10237	t-Butyl alcohol	75-65-0	440	51	20	0.97
10237	n-Butylbenzene	104-51-8	18	5	1	0.97
10237	sec-Butylbenzene	135-98-8	19	5	1	0.97
10237	tert-Butylbenzene	98-06-6	19	5	1	0.97
10237	Carbon Disulfide	75-15-0	20	5	1	0.97
10237	Carbon Tetrachloride	56-23-5	21	5	1	0.97
10237	Chlorobenzene	108-90-7	20	5	1	0.97
10237	Chloroethane	75-00-3	17	5	2	0.97
10237	2-Chloroethyl Vinyl Ether	110-75-8	19	10	2	0.97
10237	Chloroform	67-66-3	21	5	1	0.97
10237	1-Chlorohexane	544-10-5	21	5	1	0.97
10237	Chloromethane	74-87-3	20	5	2	0.97
10237	2-Chlorotoluene	95-49-8	19	5	1	0.97
10237	4-Chlorotoluene	106-43-4	19	5	1	0.97
10237	1,2-Dibromo-3-chloropropane	96-12-8	19	5	2	0.97
10237	Dibromochloromethane	124-48-1	20	5	1	0.97
10237	1,2-Dibromoethane	106-93-4	21	5	1	0.97
10237	Dibromomethane	74-95-3	20	5	1	0.97
10237	1,2-Dichlorobenzene	95-50-1	19	5	1	0.97
10237	1,3-Dichlorobenzene	541-73-1	19	5	1	0.97
10237	1,4-Dichlorobenzene	106-46-7	19	5	1	0.97
10237	Dichlorodifluoromethane	75-71-8	21	5	2	0.97
10237	1,1-Dichloroethane	75-34-3	20	5	1	0.97
10237	1,2-Dichloroethane	107-06-2	21	5	1	0.97
10237	1,1-Dichloroethene	75-35-4	22	5	1	0.97
10237	cis-1,2-Dichloroethene	156-59-2	20	5	1	0.97
10237	trans-1,2-Dichloroethene	156-60-5	21	5	1	0.97
10237	1,2-Dichloropropane	78-87-5	21	5	1	0.97
10237	1,3-Dichloropropane	142-28-9	20	5	1	0.97
10237	2,2-Dichloropropane	594-20-7	19	5	1	0.97
10237	1,1-Dichloropropene	563-58-6	21	5	1	0.97
10237	cis-1,3-Dichloropropene	10061-01-5	20	5	1	0.97
10237	trans-1,3-Dichloropropene	10061-02-6	19	5	1	0.97
10237	Ethyl t-butyl ether	637-92-3	20	5	1	0.97
10237	Ethylbenzene	100-41-4	19	5	1	0.97
10237	Freon 113	76-13-1	22	5	2	0.97
10237	Hexachlorobutadiene	87-68-3	16	5	2	0.97
10237	2-Hexanone	591-78-6	110	10	3	0.97
10237	di-Isopropyl ether	108-20-3	21	5	1	0.97
10237	Isopropylbenzene	98-82-8	19	5	1	0.97

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129597
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/kg		ug/kg	ug/kg	
10237	p-Isopropyltoluene	99-87-6	18		5	1	0.97
10237	Methyl Iodide	74-88-4	22		5	3	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	20		5	0.5	0.97
10237	4-Methyl-2-pentanone	108-10-1	110		10	3	0.97
10237	Methylene Chloride	75-09-2	20		5	2	0.97
10237	n-Propylbenzene	103-65-1	20		5	1	0.97
10237	Styrene	100-42-5	19		5	1	0.97
10237	1,1,1,2-Tetrachloroethane	630-20-6	19		5	1	0.97
10237	1,1,2,2-Tetrachloroethane	79-34-5	21		5	1	0.97
10237	Tetrachloroethene	127-18-4	21		5	1	0.97
10237	Toluene	108-88-3	21		5	1	0.97
10237	1,2,3-Trichlorobenzene	87-61-6	16		5	1	0.97
10237	1,2,4-Trichlorobenzene	120-82-1	16		5	1	0.97
10237	1,1,1-Trichloroethane	71-55-6	20		5	1	0.97
10237	1,1,2-Trichloroethane	79-00-5	22		5	1	0.97
10237	Trichloroethene	79-01-6	21		5	1	0.97
10237	Trichlorofluoromethane	75-69-4	21		5	2	0.97
10237	1,2,3-Trichloropropane	96-18-4	22		5	1	0.97
10237	1,2,4-Trimethylbenzene	95-63-6	19		5	1	0.97
10237	1,3,5-Trimethylbenzene	108-67-8	19		5	1	0.97
10237	Vinyl Chloride	75-01-4	21		5	1	0.97
10237	m+p-Xylene	179601-23-1	38		5	1	0.97
10237	o-Xylene	95-47-6	19		5	1	0.97
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Acenaphthene	83-32-9	1,800		18	3	1
10726	Acenaphthylene	208-96-8	1,800		18	3	1
10726	Aniline	62-53-3	870		350	170	1
10726	Anthracene	120-12-7	1,800		18	3	1
10726	Benzidine	92-87-5	1,100	J	1,700	730	1
10726	Benzo(a)anthracene	56-55-3	1,600		18	3	1
10726	Benzo(a)pyrene	50-32-8	1,900		18	3	1
10726	Benzo(b)fluoranthene	205-99-2	1,900		18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	1,800		18	3	1
10726	Benzo(k)fluoranthene	207-08-9	1,700		18	3	1
10726	Benzoic acid	65-85-0	2,400		520	170	1
10726	Benzyl alcohol	100-51-6	1,500		350	170	1
10726	1,1'-Biphenyl	92-52-4	1,700		35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	1,900		35	17	1
10726	Butylbenzylphthalate	85-68-7	1,800		170	69	1
10726	Di-n-butylphthalate	84-74-2	1,800		170	69	1
10726	Carbazole	86-74-8	1,700		35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	1,700		35	17	1
10726	4-Chloroaniline	106-47-8	890		35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,600		35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,500		35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,500		35	17	1

Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129597
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	2-Chloronaphthalene	91-58-7	2,100		34	7	1
10726	2-Chlorophenol	95-57-8	1,700		35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,800		35	17	1
10726	Chrysene	218-01-9	1,500		18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	1,900		18	3	1
10726	Dibenzofuran	132-64-9	1,800		35	17	1
10726	1,2-Dichlorobenzene	95-50-1	1,600		35	17	1
10726	1,3-Dichlorobenzene	541-73-1	1,600		35	17	1
10726	1,4-Dichlorobenzene	106-46-7	1,500		35	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	1,200		350	100	1
10726	2,4-Dichlorophenol	120-83-2	1,800		35	17	1
10726	2,6-Dichlorophenol	87-65-0	1,800		35	17	1
10726	Diethylphthalate	84-66-2	1,700		170	69	1
10726	2,4-Dimethylphenol	105-67-9	1,700		35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	Dimethylphthalate	131-11-3	1,700		170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,400		520	170	1
10726	2,4-Dinitrophenol	51-28-5	2,000		680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	2,000		35	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,700		180	69	1
10726	Fluoranthene	206-44-0	1,500		18	3	1
10726	Fluorene	86-73-7	1,700		18	3	1
10726	Hexachlorobenzene	118-74-1	1,900		18	3	1
10726	Hexachlorobutadiene	87-68-3	1,700		35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	2,800		520	170	1
10726	Hexachloroethane	67-72-1	1,600		170	35	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,900		18	3	1
10726	Isophorone	78-59-1	1,600		35	17	1
10726	1-Methylnaphthalene	90-12-0	1,700		18	3	1
10726	2-Methylnaphthalene	91-57-6	1,600		18	3	1
10726	2-Methylphenol	95-48-7	1,600		35	17	1
10726	4-Methylphenol	106-44-5	1,500		35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	1,700		18	3	1
10726	NDPA as diphenylamine	n.a.	1,800		170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	1,800		35	17	1
10726	3-Nitroaniline	99-09-2	1,600		170	69	1
10726	4-Nitroaniline	100-01-6	1,400		170	69	1
10726	Nitrobenzene	98-95-3	1,600		35	17	1
10726	2-Nitrophenol	88-75-5	1,700		35	17	1
10726	4-Nitrophenol	100-02-7	1,500		520	170	1
10726	N-Nitrosodimethylamine	62-75-9	1,300		170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,400		35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	1,800		35	17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129597
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	Di-n-octylphthalate	117-84-0	1,900	170	69	1
10726	Pentachlorophenol	87-86-5	1,600	180	35	1
10726	Phenanthrene	85-01-8	1,700	18	3	1
10726	Phenol	108-95-2	1,500	35	17	1
10726	Pyrene	129-00-0	1,700	18	3	1
10726	Pyridine	110-86-1	1,100	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	1,700	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	1,800	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	1,800	35	17	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**	**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	33	1.7	0.69	1
12969	Acenaphthylene	208-96-8	32	1.7	0.35	1
12969	Anthracene	120-12-7	33	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	34	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	34	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	40	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	33	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	22	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	34	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	43	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	42	19	6.2	1
12969	Chrysene	218-01-9	34	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	28	1.7	0.69	1
12969	Diethylphthalate	84-66-2	43	19	6.2	1
12969	Dimethylphthalate	131-11-3	35	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	41	19	6.2	1
12969	Fluoranthene	206-44-0	35	1.7	0.69	1
12969	Fluorene	86-73-7	33	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	26	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	34	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	33	1.7	0.69	1
12969	Naphthalene	91-20-3	32	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	27	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	47	19	6.2	1
12969	Phenanthrene	85-01-8	32	1.7	0.69	1
12969	Pyrene	129-00-0	33	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	9.2	1	0.2	23.99
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	110	5.2	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**	**ug/kg**	**ug/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129597
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	170		18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	170		18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.8	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	4.8	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	5.3	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,900		40.4	7.28	1
06944	Antimony	7440-36-0	36.3		4.04	0.748	1
06935	Arsenic	7440-38-2	18.7		4.04	0.707	1
06946	Barium	7440-39-3	320		1.01	0.0333	1
06947	Beryllium	7440-41-7	5.48		1.01	0.0677	1
07914	Boron	7440-42-8	208		10.1	0.849	1
06949	Cadmium	7440-43-9	5.26		1.01	0.0768	1
01650	Calcium	7440-70-2	4,480		20.2	3.37	1
06951	Chromium	7440-47-3	48.9		3.03	0.162	1
06952	Cobalt	7440-48-4	52.4		1.01	0.100	1
06953	Copper	7440-50-8	38.7		2.02	0.293	1
01654	Iron	7439-89-6	23,200		40.4	3.66	1
06955	Lead	7439-92-1	18.8		3.03	0.505	1
01656	Lithium	7439-93-2	125		4.0	0.34	1
01657	Magnesium	7439-95-4	7,220		10.1	1.69	1
06958	Manganese	7439-96-5	489		1.01	0.0839	1
06960	Molybdenum	7439-98-7	194		2.02	0.172	1
06961	Nickel	7440-02-0	67.5		2.02	0.131	1
10145	Phosphorus	7723-14-0	557		10.1	2.92	1
01662	Potassium	7440-09-7	3,500		101	8.43	1
01667	Sodium	7440-23-5	1,200		101	16.9	1
06969	Tin	7440-31-5	370		10.1	0.222	1
06970	Titanium	7440-32-6	1,810		1.01	0.172	1
06971	Vanadium	7440-62-2	95.6		1.01	0.131	1
06972	Zinc	7440-66-6	105		4.04	0.202	1
10146	Zirconium	7440-67-7	103		5.05	0.849	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129597
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.09	0.404	0.101	2
06142	Silver	7440-22-4	10.5	0.202	0.0263	2
06144	Strontium	7440-24-6	22.9	0.404	0.0687	2
06145	Thallium	7440-28-0	0.646	0.202	0.0303	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.197	0.0166	0.010	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.9	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129597
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.5		1.03	0.107	1
11031	12378-PeCDD	40321-76-4	103		5.16	0.111	1
11031	123478-HxCDD	39227-28-6	99.9	B	5.16	0.0829	1
11031	123678-HxCDD	57653-85-7	99.6		5.16	0.0919	1
11031	123789-HxCDD	19408-74-3	96.6	B	5.16	0.0914	1
11031	1234678-HpCDD	35822-46-9	95.3	B	5.16	0.104	1
11031	OCDD	3268-87-9	198	B	10.3	0.0653	1
11031	2378-TCDF	51207-31-9	20.3		1.03	0.0880	1
11031	12378-PeCDF	57117-41-6	101	B	5.16	0.0772	1
11031	23478-PeCDF	57117-31-4	99.7		5.16	0.0774	1
11031	123478-HxCDF	70648-26-9	97.5	B	5.16	0.0896	1
11031	123678-HxCDF	57117-44-9	93.1	B	5.16	0.0772	1
11031	123789-HxCDF	72918-21-9	93.8	B	5.16	0.119	1
11031	234678-HxCDF	60851-34-5	96.5	B	5.16	0.0821	1
11031	1234678-HpCDF	67562-39-4	93.4	B	5.16	0.0657	1
11031	1234789-HpCDF	55673-89-7	95.8		5.16	0.114	1
11031	OCDF	39001-02-0	191	B	10.3	0.0875	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129597
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B132052AA	07/24/2013 23:23	Andrea E Lando	0.97
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319831737	07/17/2013 19:12	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319831737	07/17/2013 19:12	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319831737	07/17/2013 18:51	Mitchell R Washel	n.a.
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13199SLE026	07/28/2013 19:45	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLF026	07/23/2013 14:29	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13199SLE026	07/19/2013 09:05	Katheryne V Sponheimer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLF026	07/19/2013 09:05	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 01:52	Laura M Krieger	23.99
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319831737	07/17/2013 18:48	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319831737	07/17/2013 18:49	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 18:39	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 04:16	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132030009A	07/23/2013 16:13	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132030009A	07/22/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 07:15	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129597
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06953	Copper	SW-846 6010C	1	131980637001	07/26/2013 18:11	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 15:29	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131980637001B	07/23/2013 13:21	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 22:54	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 22:54	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 22:54	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:41	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129598
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	250	21	7	1
10237	Acrolein	107-02-8	370	100	21	1
10237	Acrylonitrile	107-13-1	110	21	4	1
10237	t-Amyl methyl ether	994-05-8	22	5	1	1
10237	Benzene	71-43-2	23	5	0.5	1
10237	Bromobenzene	108-86-1	21	5	1	1
10237	Bromochloromethane	74-97-5	24	5	1	1
10237	Bromodichloromethane	75-27-4	21	5	1	1
10237	Bromoform	75-25-2	21	5	1	1
10237	Bromomethane	74-83-9	23	5	2	1
10237	2-Butanone	78-93-3	220	10	4	1
10237	t-Butyl alcohol	75-65-0	610	52	21	1
10237	n-Butylbenzene	104-51-8	17	5	1	1
10237	sec-Butylbenzene	135-98-8	19	5	1	1
10237	tert-Butylbenzene	98-06-6	20	5	1	1
10237	Carbon Disulfide	75-15-0	24	5	1	1
10237	Carbon Tetrachloride	56-23-5	23	5	1	1
10237	Chlorobenzene	108-90-7	22	5	1	1
10237	Chloroethane	75-00-3	21	5	2	1
10237	2-Chloroethyl Vinyl Ether	110-75-8	21	10	2	1
10237	Chloroform	67-66-3	24	5	1	1
10237	1-Chlorohexane	544-10-5	21	5	1	1
10237	Chloromethane	74-87-3	24	5	2	1
10237	2-Chlorotoluene	95-49-8	20	5	1	1
10237	4-Chlorotoluene	106-43-4	20	5	1	1
10237	1,2-Dibromo-3-chloropropane	96-12-8	21	5	2	1
10237	Dibromochloromethane	124-48-1	22	5	1	1
10237	1,2-Dibromoethane	106-93-4	24	5	1	1
10237	Dibromomethane	74-95-3	23	5	1	1
10237	1,2-Dichlorobenzene	95-50-1	21	5	1	1
10237	1,3-Dichlorobenzene	541-73-1	20	5	1	1
10237	1,4-Dichlorobenzene	106-46-7	20	5	1	1
10237	Dichlorodifluoromethane	75-71-8	24	5	2	1
10237	1,1-Dichloroethane	75-34-3	24	5	1	1
10237	1,2-Dichloroethane	107-06-2	23	5	1	1
10237	1,1-Dichloroethene	75-35-4	25	5	1	1
10237	cis-1,2-Dichloroethene	156-59-2	24	5	1	1
10237	trans-1,2-Dichloroethene	156-60-5	25	5	1	1
10237	1,2-Dichloropropane	78-87-5	24	5	1	1
10237	1,3-Dichloropropane	142-28-9	23	5	1	1
10237	2,2-Dichloropropane	594-20-7	22	5	1	1
10237	1,1-Dichloropropene	563-58-6	24	5	1	1
10237	cis-1,3-Dichloropropene	10061-01-5	22	5	1	1
10237	trans-1,3-Dichloropropene	10061-02-6	22	5	1	1
10237	Ethyl t-butyl ether	637-92-3	22	5	1	1
10237	Ethylbenzene	100-41-4	21	5	1	1
10237	Freon 113	76-13-1	25	5	2	1
10237	Hexachlorobutadiene	87-68-3	15	5	2	1
10237	2-Hexanone	591-78-6	130	10	3	1
10237	di-Isopropyl ether	108-20-3	24	5	1	1
10237	Isopropylbenzene	98-82-8	20	5	1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129598
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	p-Isopropyltoluene	99-87-6	18		5	1	1
10237	Methyl Iodide	74-88-4	26		5	3	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	23		5	0.5	1
10237	4-Methyl-2-pentanone	108-10-1	130		10	3	1
10237	Methylene Chloride	75-09-2	24		5	2	1
10237	n-Propylbenzene	103-65-1	20		5	1	1
10237	Styrene	100-42-5	21		5	1	1
10237	1,1,1,2-Tetrachloroethane	630-20-6	22		5	1	1
10237	1,1,2,2-Tetrachloroethane	79-34-5	23		5	1	1
10237	Tetrachloroethene	127-18-4	23		5	1	1
10237	Toluene	108-88-3	23		5	1	1
10237	1,2,3-Trichlorobenzene	87-61-6	19		5	1	1
10237	1,2,4-Trichlorobenzene	120-82-1	18		5	1	1
10237	1,1,1-Trichloroethane	71-55-6	22		5	1	1
10237	1,1,2-Trichloroethane	79-00-5	24		5	1	1
10237	Trichloroethene	79-01-6	23		5	1	1
10237	Trichlorofluoromethane	75-69-4	24		5	2	1
10237	1,2,3-Trichloropropane	96-18-4	24		5	1	1
10237	1,2,4-Trimethylbenzene	95-63-6	19		5	1	1
10237	1,3,5-Trimethylbenzene	108-67-8	20		5	1	1
10237	Vinyl Chloride	75-01-4	25		5	1	1
10237	m+p-Xylene	179601-23-1	41		5	1	1
10237	o-Xylene	95-47-6	21		5	1	1
GC/MS Semivolatiles	**SW-846 8270D**		ug/kg		ug/kg	ug/kg	
10726	Acenaphthene	83-32-9	1,700		18	3	1
10726	Acenaphthylene	208-96-8	1,700		18	3	1
10726	Aniline	62-53-3	950		350	170	1
10726	Anthracene	120-12-7	1,700		18	3	1
10726	Benzidine	92-87-5	900	J	1,700	730	1
10726	Benzo(a)anthracene	56-55-3	1,600		18	3	1
10726	Benzo(a)pyrene	50-32-8	1,700		18	3	1
10726	Benzo(b)fluoranthene	205-99-2	1,600		18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	1,700		18	3	1
10726	Benzo(k)fluoranthene	207-08-9	1,700		18	3	1
10726	Benzoic acid	65-85-0	2,300		520	170	1
10726	Benzyl alcohol	100-51-6	1,400		350	170	1
10726	1,1'-Biphenyl	92-52-4	1,600		35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	1,900		35	17	1
10726	Butylbenzylphthalate	85-68-7	1,700		170	69	1
10726	Di-n-butylphthalate	84-74-2	1,700		170	69	1
10726	Carbazole	86-74-8	1,600		35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	1,600		35	17	1
10726	4-Chloroaniline	106-47-8	1,400		35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,600		35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,400		35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,400		35	17	1

Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129598
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	2-Chloronaphthalene	91-58-7	2,000		34	7	1
10726	2-Chlorophenol	95-57-8	1,600		35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,600		35	17	1
10726	Chrysene	218-01-9	1,500		18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	1,700		18	3	1
10726	Dibenzofuran	132-64-9	1,700		35	17	1
10726	1,2-Dichlorobenzene	95-50-1	1,600		35	17	1
10726	1,3-Dichlorobenzene	541-73-1	1,500		35	17	1
10726	1,4-Dichlorobenzene	106-46-7	1,500		35	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	1,200		350	100	1
10726	2,4-Dichlorophenol	120-83-2	1,700		35	17	1
10726	2,6-Dichlorophenol	87-65-0	1,700		35	17	1
10726	Diethylphthalate	84-66-2	1,600		170	69	1
10726	2,4-Dimethylphenol	105-67-9	1,300		35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	Dimethylphthalate	131-11-3	1,600		170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,500		520	170	1
10726	2,4-Dinitrophenol	51-28-5	2,500		680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	1,900		35	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,600		180	69	1
10726	Fluoranthene	206-44-0	1,500		18	3	1
10726	Fluorene	86-73-7	1,600		18	3	1
10726	Hexachlorobenzene	118-74-1	1,800		18	3	1
10726	Hexachlorobutadiene	87-68-3	1,700		35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	3,000		520	170	1
10726	Hexachloroethane	67-72-1	1,500		170	35	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,700		18	3	1
10726	Isophorone	78-59-1	1,600		35	17	1
10726	1-Methylnaphthalene	90-12-0	1,600		18	3	1
10726	2-Methylnaphthalene	91-57-6	1,500		18	3	1
10726	2-Methylphenol	95-48-7	1,400		35	17	1
10726	4-Methylphenol	106-44-5	1,500		35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	1,600		18	3	1
10726	NDPA as diphenylamine	n.a.	1,700		170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	1,600		35	17	1
10726	3-Nitroaniline	99-09-2	1,600		170	69	1
10726	4-Nitroaniline	100-01-6	1,400		170	69	1
10726	Nitrobenzene	98-95-3	1,600		35	17	1
10726	2-Nitrophenol	88-75-5	1,700		35	17	1
10726	4-Nitrophenol	100-02-7	1,400		520	170	1
10726	N-Nitrosodimethylamine	62-75-9	1,300		170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,400		35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	1,700		35	17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129598
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	Di-n-octylphthalate	117-84-0	1,800	170	69	1
10726	Pentachlorophenol	87-86-5	1,500	180	35	1
10726	Phenanthrene	85-01-8	1,600	18	3	1
10726	Phenol	108-95-2	1,500	35	17	1
10726	Pyrene	129-00-0	1,600	18	3	1
10726	Pyridine	110-86-1	980	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	1,700	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	1,800	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	1,700	35	17	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**	**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	33	1.7	0.69	1
12969	Acenaphthylene	208-96-8	31	1.7	0.35	1
12969	Anthracene	120-12-7	33	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	35	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	35	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	41	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	34	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	21	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	36	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	43	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	43	19	6.2	1
12969	Chrysene	218-01-9	34	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	27	1.7	0.69	1
12969	Diethylphthalate	84-66-2	42	19	6.2	1
12969	Dimethylphthalate	131-11-3	35	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	42	19	6.2	1
12969	Fluoranthene	206-44-0	35	1.7	0.69	1
12969	Fluorene	86-73-7	32	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	25	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	34	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	33	1.7	0.69	1
12969	Naphthalene	91-20-3	32	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	27	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	48	19	6.2	1
12969	Phenanthrene	85-01-8	33	1.7	0.69	1
12969	Pyrene	129-00-0	34	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.8	1	0.2	23.45
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	100	5.2	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**	**ug/kg**	**ug/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129598
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	170		18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	180		18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.9	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	6.2	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,000		40.4	7.28	1
06944	Antimony	7440-36-0	35.2		4.04	0.748	1
06935	Arsenic	7440-38-2	18.9		4.04	0.707	1
06946	Barium	7440-39-3	285		1.01	0.0333	1
06947	Beryllium	7440-41-7	5.50		1.01	0.0677	1
07914	Boron	7440-42-8	207		10.1	0.849	1
06949	Cadmium	7440-43-9	5.37		1.01	0.0768	1
01650	Calcium	7440-70-2	4,340		20.2	3.37	1
06951	Chromium	7440-47-3	43.1		3.03	0.162	1
06952	Cobalt	7440-48-4	52.7		1.01	0.100	1
06953	Copper	7440-50-8	38.7		2.02	0.293	1
01654	Iron	7439-89-6	23,100		40.4	3.66	1
06955	Lead	7439-92-1	19.2		3.03	0.505	1
01656	Lithium	7439-93-2	125		4.0	0.34	1
01657	Magnesium	7439-95-4	6,530		10.1	1.69	1
06958	Manganese	7439-96-5	468		1.01	0.0839	1
06960	Molybdenum	7439-98-7	195		2.02	0.172	1
06961	Nickel	7440-02-0	62.0		2.02	0.131	1
10145	Phosphorus	7723-14-0	514		10.1	2.92	1
01662	Potassium	7440-09-7	3,580		101	8.43	1
01667	Sodium	7440-23-5	1,200		101	16.9	1
06969	Tin	7440-31-5	368		10.1	0.222	1
06970	Titanium	7440-32-6	1,790		1.01	0.172	1
06971	Vanadium	7440-62-2	93.9		1.01	0.131	1
06972	Zinc	7440-66-6	106		4.04	0.202	1
10146	Zirconium	7440-67-7	103		5.05	0.849	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129598
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.34	0.404	0.101	2
06142	Silver	7440-22-4	10.1	0.202	0.0263	2
06144	Strontium	7440-24-6	23.1	0.404	0.0687	2
06145	Thallium	7440-28-0	0.641	0.202	0.0303	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.190	0.0167	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.9	0.10	0.10	1

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Sample Description: SL-504-SA8-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129598
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Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.9		1.02	0.0819	1
11031	12378-PeCDD	40321-76-4	99.1		5.10	0.0956	1
11031	123478-HxCDD	39227-28-6	101	B	5.10	0.0594	1
11031	123678-HxCDD	57653-85-7	97.7		5.10	0.0682	1
11031	123789-HxCDD	19408-74-3	97.4	B	5.10	0.0645	1
11031	1234678-HpCDD	35822-46-9	94.5	B	5.10	0.0881	1
11031	OCDD	3268-87-9	193	B	10.2	0.0536	1
11031	2378-TCDF	51207-31-9	19.9		1.02	0.0888	1
11031	12378-PeCDF	57117-41-6	94.2	B	5.10	0.0669	1
11031	23478-PeCDF	57117-31-4	97.9		5.10	0.0629	1
11031	123478-HxCDF	70648-26-9	98.1	B	5.10	0.0645	1
11031	123678-HxCDF	57117-44-9	97.4	B	5.10	0.0649	1
11031	123789-HxCDF	72918-21-9	93.9	B	5.10	0.0850	1
11031	234678-HxCDF	60851-34-5	96.2	B	5.10	0.0637	1
11031	1234678-HpCDF	67562-39-4	93.4	B	5.10	0.0554	1
11031	1234789-HpCDF	55673-89-7	94.2		5.10	0.0901	1
11031	OCDF	39001-02-0	188	B	10.2	0.0658	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129598
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B132052AA	07/24/2013 23:45	Andrea E Lando	1
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319831737	07/17/2013 19:12	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319831737	07/17/2013 19:12	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319831737	07/17/2013 18:51	Mitchell R Washel	n.a.
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13199SLE026	07/28/2013 20:09	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLF026	07/23/2013 15:02	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13199SLE026	07/19/2013 09:05	Katheryne V Sponheimer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLF026	07/19/2013 09:05	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 02:30	Laura M Krieger	23.45
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319831737	07/17/2013 18:48	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319831737	07/17/2013 18:48	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 18:52	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 04:34	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132030009A	07/23/2013 16:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132030009A	07/22/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 08:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129598
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06953	Copper	SW-846 6010C	1	131980637001	07/26/2013 18:15	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 15:33	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131980637001B	07/23/2013 13:24	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 22:56	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 22:56	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 22:56	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5SS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129599
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06SS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	42.6	2.1	0.72	5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.9	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13203243201A	07/23/2013 16:18	Clinton M Wilson	5
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5IS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129600
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06IS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	1,110	41.0	14.3	100
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.9	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13203243201A	07/23/2013 16:33	Clinton M Wilson	100
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5PDS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129601
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06PDS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		mg/kg	mg/kg	mg/kg	
05892	2a Chromium VI by EPA 7199	18540-29-9	47.1	4.1	1.5	10
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	3.9	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13203243201A	07/23/2013 16:40	Clinton M Wilson	10
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129602
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,700		40.8	7.36	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.755	1
06935	Arsenic	7440-38-2	3.42	J	4.08	0.714	1
06946	Barium	7440-39-3	83.8		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.398	J	1.02	0.0684	1
07914	Boron	7440-42-8	17.0		10.2	0.857	1
06949	Cadmium	7440-43-9	0.350	J	1.02	0.0775	1
01650	Calcium	7440-70-2	3,550		20.4	3.41	1
06951	Chromium	7440-47-3	21.4		3.06	0.163	1
06952	Cobalt	7440-48-4	4.63		1.02	0.101	1
06953	Copper	7440-50-8	10.8		2.04	0.296	1
01654	Iron	7439-89-6	22,900		40.8	3.69	1
06955	Lead	7439-92-1	4.04		3.06	0.510	1
01656	Lithium	7439-93-2	28.4		4.1	0.35	1
01657	Magnesium	7439-95-4	6,160		10.2	1.70	1
06958	Manganese	7439-96-5	423		1.02	0.0847	1
06960	Molybdenum	7439-98-7	0.243	J	2.04	0.173	1
06961	Nickel	7440-02-0	12.6		2.04	0.133	1
10145	Phosphorus	7723-14-0	420		10.2	2.95	1
01662	Potassium	7440-09-7	2,250		102	8.51	1
01667	Sodium	7440-23-5	175		102	17.0	1
06969	Tin	7440-31-5	2.69	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,410		1.02	0.173	1
06971	Vanadium	7440-62-2	42.5		1.02	0.133	1
06972	Zinc	7440-66-6	53.5		4.08	0.204	1
10146	Zirconium	7440-67-7	4.05	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.408	U	0.408	0.102	2
06142	Silver	7440-22-4	0.204	U	0.204	0.0265	2
06144	Strontium	7440-24-6	14.3		0.408	0.0694	2
06145	Thallium	7440-28-0	0.209		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.17	J	0.43	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.54		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.9		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	4.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129602
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131980637001	07/26/2013 18:07	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/25/2013 20:32	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 15:25	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131980637001B	07/18/2013 22:52	David K Beck	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 22:52	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 22:52	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 22:52	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-SA8-SB-2.5-3.5DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129602
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:00 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50425 SDG#: PH068-06DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13203243201A	07/23/2013 16:54	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13198039402A	07/17/2013 21:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129603
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80425 SDG#: PH068-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Acetone	67-64-1	21	U	21	7	1
10237	Acrolein	107-02-8	100	U	100	21	1
10237	Acrylonitrile	107-13-1	21	U	21	4	1
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	1
10237	Benzene	71-43-2	5	U	5	0.5	1
10237	Bromobenzene	108-86-1	5	U	5	1	1
10237	Bromochloromethane	74-97-5	5	U	5	1	1
10237	Bromodichloromethane	75-27-4	5	U	5	1	1
10237	Bromoform	75-25-2	5	U	5	1	1
10237	Bromomethane	74-83-9	5	U	5	2	1
10237	2-Butanone	78-93-3	10	U	10	4	1
10237	t-Butyl alcohol	75-65-0	52	U	52	21	1
10237	n-Butylbenzene	104-51-8	5	U	5	1	1
10237	sec-Butylbenzene	135-98-8	5	U	5	1	1
10237	tert-Butylbenzene	98-06-6	5	U	5	1	1
10237	Carbon Disulfide	75-15-0	5	U	5	1	1
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10237	Chlorobenzene	108-90-7	5	U	5	1	1
10237	Chloroethane	75-00-3	5	U	5	2	1
10237	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
10237	Chloroform	67-66-3	5	U	5	1	1
10237	1-Chlorohexane	544-10-5	5	U	5	1	1
10237	Chloromethane	74-87-3	5	U	5	2	1
10237	2-Chlorotoluene	95-49-8	5	U	5	1	1
10237	4-Chlorotoluene	106-43-4	5	U	5	1	1
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10237	Dibromochloromethane	124-48-1	5	U	5	1	1
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10237	Dibromomethane	74-95-3	5	U	5	1	1
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	1
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	1
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	1
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	1
10237	Ethylbenzene	100-41-4	5	U	5	1	1
10237	Freon 113	76-13-1	5	U	5	2	1
10237	Freon 133a	75-88-7	5	U	5	2	1
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10237	2-Hexanone	591-78-6	10	U	10	3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129603
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80425 SDG#: PH068-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	1
10237	Isopropylbenzene	98-82-8	5	U	5	1	1
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10237	Methyl Iodide	74-88-4	5	U	5	3	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10237	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10237	Methylene Chloride	75-09-2	5	U	5	2	1
10237	n-Propylbenzene	103-65-1	5	U	5	1	1
10237	Styrene	100-42-5	5	U	5	1	1
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10237	Tetrachloroethene	127-18-4	5	U	5	1	1
10237	Toluene	108-88-3	5	U	5	1	1
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	1
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	1
10237	Trichloroethene	79-01-6	5	U	5	1	1
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10237	Vinyl Acetate	108-05-4	10	U	10	2	1
10237	Vinyl Chloride	75-01-4	5	U	5	1	1
10237	m+p-Xylene	179601-23-1	5	U	5	1	1
10237	o-Xylene	95-47-6	5	U	5	1	1
GC/MS Semivolatiles	**SW-846 8270D**		ug/kg		ug/kg	ug/kg	
10726	Aniline	62-53-3	350	U	350	170	1
10726	Benzidine	92-87-5	1,700	U	1,700	730	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	350	U	350	170	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	17	1
10726	Carbazole	86-74-8	35	U	35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	17	1
10726	4-Chloroaniline	106-47-8	35	U	35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	17	1
10726	Dibenzofuran	132-64-9	35	U	35	17	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	17	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	17	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129603
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80425 SDG#: PH068-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	100	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	17	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	17	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	690	U	690	310	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	17	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1
10726	Hexachloroethane	67-72-1	170	U	170	35	1
10726	Isophorone	78-59-1	35	U	35	17	1
10726	2-Methylphenol	95-48-7	35	U	35	17	1
10726	4-Methylphenol	106-44-5	35	U	35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	35	U	35	17	1
10726	2-Nitrophenol	88-75-5	35	U	35	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenol	108-95-2	35	U	35	17	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	17	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129603
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80425 SDG#: PH068-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.46
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.2	U	5.2	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,100		40.5	7.29	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.748	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129603
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80425 SDG#: PH068-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	3.68	J	4.05	0.708	1
06946	Barium	7440-39-3	88.4		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.449	J	1.01	0.0678	1
07914	Boron	7440-42-8	16.0		10.1	0.850	1
06949	Cadmium	7440-43-9	0.330	J	1.01	0.0769	1
01650	Calcium	7440-70-2	3,610		20.2	3.38	1
06951	Chromium	7440-47-3	22.0		3.03	0.162	1
06952	Cobalt	7440-48-4	5.16		1.01	0.100	1
06953	Copper	7440-50-8	10.9		2.02	0.293	1
01654	Iron	7439-89-6	23,200		40.5	3.66	1
06955	Lead	7439-92-1	4.49		3.03	0.506	1
01656	Lithium	7439-93-2	29.5		4.0	0.34	1
01657	Magnesium	7439-95-4	6,410		10.1	1.69	1
06958	Manganese	7439-96-5	313		1.01	0.0839	1
06960	Molybdenum	7439-98-7	2.02	U	2.02	0.172	1
06961	Nickel	7440-02-0	13.0		2.02	0.131	1
10145	Phosphorus	7723-14-0	424		10.1	2.92	1
01662	Potassium	7440-09-7	2,240		101	8.43	1
01667	Sodium	7440-23-5	197		101	16.9	1
06969	Tin	7440-31-5	2.99	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,480		1.01	0.172	1
06971	Vanadium	7440-62-2	43.2		1.01	0.131	1
06972	Zinc	7440-66-6	58.6		4.05	0.202	1
10146	Zirconium	7440-67-7	2.85	J	5.06	0.850	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.405	U	0.405	0.101	2
06142	Silver	7440-22-4	0.202	U	0.202	0.0263	2
06144	Strontium	7440-24-6	14.9		0.405	0.0688	2
06145	Thallium	7440-28-0	0.212		0.202	0.0303	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0102	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.43	U	0.43	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.55		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129603
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80425 SDG#: PH068-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0815	1
11031	12378-PeCDD	40321-76-4	0.168	JQ	5.19	0.0781	1
11031	123478-HxCDD	39227-28-6	0.169	JB	5.19	0.0503	1
11031	123678-HxCDD	57653-85-7	0.253	JQ	5.19	0.0566	1
11031	123789-HxCDD	19408-74-3	0.181	JBQ	5.19	0.0575	1
11031	1234678-HpCDD	35822-46-9	2.15	JB	5.19	0.0848	1
11031	OCDD	3268-87-9	18.8	B	10.4	0.0517	1
11031	2378-TCDF	51207-31-9	1.04	U	1.04	0.0692	1
11031	12378-PeCDF	57117-41-6	1.07	JB	5.19	0.0424	1
11031	23478-PeCDF	57117-31-4	0.203	JQ	5.19	0.0432	1
11031	123478-HxCDF	70648-26-9	0.158	JB	5.19	0.0329	1
11031	123678-HxCDF	57117-44-9	0.197	JB	5.19	0.0302	1
11031	123789-HxCDF	72918-21-9	0.136	JBQ	5.19	0.0419	1
11031	234678-HxCDF	60851-34-5	0.0926	JBQ	5.19	0.0300	1
11031	1234678-HpCDF	67562-39-4	0.440	JB	5.19	0.0246	1
11031	1234789-HpCDF	55673-89-7	0.130	JQ	5.19	0.0458	1
11031	OCDF	39001-02-0	0.988	JBQ	10.4	0.0777	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.116				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129603
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80425 SDG#: PH068-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129603
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80425 SDG#: PH068-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B132052AA	07/25/2013 00:08	Andrea E Lando	1
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319831737	07/17/2013 19:12	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319831737	07/17/2013 19:12	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319831737	07/17/2013 18:55	Mitchell R Washel	n.a.
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13199SLE026	07/28/2013 20:56	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLF026	07/25/2013 07:01	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13199SLE026	07/19/2013 09:05	Katheryne V Sponheimer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLF026	07/19/2013 09:05	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/22/2013 20:48	Laura M Krieger	24.46
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319831737	07/17/2013 18:55	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319831737	07/17/2013 18:55	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 19:05	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 04:52	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132030009A	07/23/2013 16:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132030009A	07/22/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 09:08	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129603
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80425 SDG#: PH068-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06953	Copper	SW-846 6010C	1	131980637001	07/26/2013 18:48	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/25/2013 21:10	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 16:18	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131980637001B	07/18/2013 23:16	David K Beck	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 23:16	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 23:16	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 23:16	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13203243201A	07/23/2013 17:09	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13198039402A	07/17/2013 21:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129604
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50700 SDG#: PH068-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	340	U	340	170	1
10726	Benzidine	92-87-5	1,700	U	1,700	710	1
10726	Benzoic acid	65-85-0	510	U	510	170	1
10726	Benzyl alcohol	100-51-6	340	U	340	170	1
10726	1,1'-Biphenyl	92-52-4	34	U	34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	34	U	34	17	1
10726	Carbazole	86-74-8	34	U	34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	34	U	34	17	1
10726	4-Chloroaniline	106-47-8	34	U	34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	34	U	34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	34	U	34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	34	U	34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	33	U	33	7	1
10726	2-Chlorophenol	95-57-8	34	U	34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	17	1
10726	Dibenzofuran	132-64-9	34	U	34	17	1
10726	1,2-Dichlorobenzene	95-50-1	34	U	34	17	1
10726	1,3-Dichlorobenzene	541-73-1	34	U	34	17	1
10726	1,4-Dichlorobenzene	106-46-7	34	U	34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	340	U	340	100	1
10726	2,4-Dichlorophenol	120-83-2	34	U	34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	2,4-Dimethylphenol	105-67-9	34	U	34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	510	U	510	170	1
10726	2,4-Dinitrophenol	51-28-5	670	U	670	300	1
10726	1,2-Diphenylhydrazine	122-66-7	34	U	34	17	1
10726	Hexachlorobenzene	118-74-1	17	U	17	3	1
10726	Hexachlorobutadiene	87-68-3	34	U	34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	510	U	510	170	1
10726	Hexachloroethane	67-72-1	170	U	170	34	1
10726	Isophorone	78-59-1	34	U	34	17	1
10726	2-Methylphenol	95-48-7	34	U	34	17	1
10726	4-Methylphenol	106-44-5	34	U	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	34	U	34	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	68	1
10726	4-Nitroaniline	100-01-6	170	U	170	68	1
10726	Nitrobenzene	98-95-3	34	U	34	17	1
10726	2-Nitrophenol	88-75-5	34	U	34	17	1
10726	4-Nitrophenol	100-02-7	510	U	510	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129604
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50700 SDG#: PH068-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	N-Nitroso-di-n-propylamine	621-64-7	34	U	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	34	U	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	170	U	170	34	1
10726	Phenol	108-95-2	34	U	34	17	1
10726	Pyridine	110-86-1	170	U	170	68	1
10726	1,2,4-Trichlorobenzene	120-82-1	34	U	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	34	U	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	34	U	34	17	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.1	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	4.0		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.2	J	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.1	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.3	J	1.7	0.68	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.1	U	5.1	2.1	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129604
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50700 SDG#: PH068-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	25		17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	4.6	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	12		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,900		39.7	7.15	1
06944	Antimony	7440-36-0	3.97	U	3.97	0.734	1
06935	Arsenic	7440-38-2	3.27	J	3.97	0.694	1
06946	Barium	7440-39-3	97.4		0.992	0.0327	1
06947	Beryllium	7440-41-7	0.403	J	0.992	0.0664	1
07914	Boron	7440-42-8	15.3		9.92	0.833	1
06949	Cadmium	7440-43-9	0.322	J	0.992	0.0754	1
01650	Calcium	7440-70-2	8,080		19.8	3.31	1
06951	Chromium	7440-47-3	18.7		2.98	0.159	1
06952	Cobalt	7440-48-4	5.09		0.992	0.0982	1
06953	Copper	7440-50-8	9.92		1.98	0.288	1
01654	Iron	7439-89-6	19,300		39.7	3.59	1
06955	Lead	7439-92-1	5.41		2.98	0.496	1
01656	Lithium	7439-93-2	25.7		4.0	0.34	1
01657	Magnesium	7439-95-4	5,230		9.92	1.66	1
06958	Manganese	7439-96-5	309		0.992	0.0823	1
06960	Molybdenum	7439-98-7	0.343	J	1.98	0.169	1
06961	Nickel	7440-02-0	9.70		1.98	0.129	1
10145	Phosphorus	7723-14-0	401		9.92	2.87	1
01662	Potassium	7440-09-7	3,440		99.2	8.27	1
01667	Sodium	7440-23-5	129		99.2	16.6	1
06969	Tin	7440-31-5	2.89	J	9.92	0.218	1
06970	Titanium	7440-32-6	1,400		0.992	0.169	1
06971	Vanadium	7440-62-2	34.5		0.992	0.129	1
06972	Zinc	7440-66-6	58.9		3.97	0.198	1
10146	Zirconium	7440-67-7	2.37	J	4.96	0.833	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.186	J	0.397	0.0992	2
06142	Silver	7440-22-4	0.476		0.198	0.0258	2
06144	Strontium	7440-24-6	21.9		0.397	0.0674	2
06145	Thallium	7440-28-0	0.252		0.198	0.0298	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129604
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50700 SDG#: PH068-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.346	0.0160	0.0096	1
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.35 J	0.40	0.14	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.5 C.	n.a.	8.70	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.1	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129604
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50700 SDG#: PH068-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.132	J	0.986	0.0621	1
11031	12378-PeCDD	40321-76-4	0.493	J	4.93	0.0794	1
11031	123478-HxCDD	39227-28-6	0.603	JB	4.93	0.0838	1
11031	123678-HxCDD	57653-85-7	1.35	J	4.93	0.0902	1
11031	123789-HxCDD	19408-74-3	0.960	JB	4.93	0.0883	1
11031	1234678-HpCDD	35822-46-9	27.7	B	4.93	0.101	1
11031	OCDD	3268-87-9	244	B	9.86	0.0669	1
11031	2378-TCDF	51207-31-9	0.722	J	0.986	0.116	1
11031	12378-PeCDF	57117-41-6	7.38	B	4.93	0.0628	1
11031	23478-PeCDF	57117-31-4	1.05	J	4.93	0.0694	1
11031	123478-HxCDF	70648-26-9	0.702	JB	4.93	0.0554	1
11031	123678-HxCDF	57117-44-9	0.698	JB	4.93	0.0466	1
11031	123789-HxCDF	72918-21-9	0.408	JBQ	4.93	0.0802	1
11031	234678-HxCDF	60851-34-5	0.562	JB	4.93	0.0541	1
11031	1234678-HpCDF	67562-39-4	2.30	JB	4.93	0.0250	1
11031	1234789-HpCDF	55673-89-7	0.427	J	4.93	0.0470	1
11031	OCDF	39001-02-0	3.70	JB	9.86	0.0720	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.10				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	56	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	51	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129604
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50700 SDG#: PH068-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129604
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50700 SDG#: PH068-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13199SLE026	07/28/2013 21:21	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLF026	07/25/2013 07:33	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13199SLE026	07/19/2013 09:05	Katheryne V Sponheimer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLF026	07/19/2013 09:05	Katheryne V Sponheimer	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 19:18	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 05:11	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	2	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132030009A	07/23/2013 17:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132030009A	07/22/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 10:05	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131980637001	07/26/2013 18:52	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/25/2013 21:14	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129604
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 12:55 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50700 SDG#: PH068-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 16:22	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131980637001B	07/18/2013 23:18	David K Beck	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 23:18	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 23:18	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 23:18	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13203243201A	07/23/2013 17:37	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13198039402A	07/17/2013 21:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129605
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 13:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50730 SDG#: PH068-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	20	U	20	7	0.98
10237	Acrolein	107-02-8	100	U	100	20	0.98
10237	Acrylonitrile	107-13-1	20	U	20	4	0.98
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	0.98
10237	Benzene	71-43-2	5	U	5	0.5	0.98
10237	Bromobenzene	108-86-1	5	U	5	1	0.98
10237	Bromochloromethane	74-97-5	5	U	5	1	0.98
10237	Bromodichloromethane	75-27-4	5	U	5	1	0.98
10237	Bromoform	75-25-2	5	U	5	1	0.98
10237	Bromomethane	74-83-9	5	U	5	2	0.98
10237	2-Butanone	78-93-3	10	U	10	4	0.98
10237	t-Butyl alcohol	75-65-0	51	U	51	20	0.98
10237	n-Butylbenzene	104-51-8	5	U	5	1	0.98
10237	sec-Butylbenzene	135-98-8	5	U	5	1	0.98
10237	tert-Butylbenzene	98-06-6	5	U	5	1	0.98
10237	Carbon Disulfide	75-15-0	5	U	5	1	0.98
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	0.98
10237	Chlorobenzene	108-90-7	5	U	5	1	0.98
10237	Chloroethane	75-00-3	5	U	5	2	0.98
10237	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	0.98
10237	Chloroform	67-66-3	5	U	5	1	0.98
10237	1-Chlorohexane	544-10-5	5	U	5	1	0.98
10237	Chloromethane	74-87-3	5	U	5	2	0.98
10237	2-Chlorotoluene	95-49-8	5	U	5	1	0.98
10237	4-Chlorotoluene	106-43-4	5	U	5	1	0.98
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	0.98
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	0.98
10237	Dibromochloromethane	124-48-1	5	U	5	1	0.98
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	0.98
10237	Dibromomethane	74-95-3	5	U	5	1	0.98
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	0.98
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	0.98
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	0.98
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	0.98
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	0.98
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	0.98
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	0.98
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	0.98
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	0.98
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	0.98
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	0.98
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	0.98
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	0.98
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	0.98
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	0.98
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	0.98
10237	Ethylbenzene	100-41-4	5	U	5	1	0.98
10237	Freon 113	76-13-1	5	U	5	2	0.98
10237	Freon 133a	75-88-7	5	U	5	2	0.98
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	0.98
10237	2-Hexanone	591-78-6	10	U	10	3	0.98

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129605
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 13:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50730 SDG#: PH068-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	0.98
10237	Isopropylbenzene	98-82-8	5	U	5	1	0.98
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	0.98
10237	Methyl Iodide	74-88-4	5	U	5	3	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	0.98
10237	4-Methyl-2-pentanone	108-10-1	10	U	10	3	0.98
10237	Methylene Chloride	75-09-2	5	U	5	2	0.98
10237	n-Propylbenzene	103-65-1	5	U	5	1	0.98
10237	Styrene	100-42-5	5	U	5	1	0.98
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	0.98
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	0.98
10237	Tetrachloroethene	127-18-4	5	U	5	1	0.98
10237	Toluene	108-88-3	5	U	5	1	0.98
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	0.98
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	0.98
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	0.98
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	0.98
10237	Trichloroethene	79-01-6	5	U	5	1	0.98
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	0.98
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	0.98
10237	Vinyl Acetate	108-05-4	10	U	10	2	0.98
10237	Vinyl Chloride	75-01-4	5	U	5	1	0.98
10237	m+p-Xylene	179601-23-1	5	U	5	1	0.98
10237	o-Xylene	95-47-6	5	U	5	1	0.98
GC/MS Semivolatiles	**SW-846 8270D**		ug/kg		ug/kg	ug/kg	
10726	Aniline	62-53-3	350	U	350	170	1
10726	Benzidine	92-87-5	1,700	U	1,700	730	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	350	U	350	170	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	17	1
10726	Carbazole	86-74-8	35	U	35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	17	1
10726	4-Chloroaniline	106-47-8	35	U	35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	17	1
10726	Dibenzofuran	132-64-9	35	U	35	17	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	17	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	17	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129605
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 13:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50730 SDG#: PH068-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	100	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	17	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	17	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	680	U	680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	17	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1
10726	Hexachloroethane	67-72-1	170	U	170	35	1
10726	Isophorone	78-59-1	35	U	35	17	1
10726	2-Methylphenol	95-48-7	35	U	35	17	1
10726	4-Methylphenol	106-44-5	35	U	35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	35	U	35	17	1
10726	2-Nitrophenol	88-75-5	35	U	35	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenol	108-95-2	35	U	35	17	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	17	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129605
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 13:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50730 SDG#: PH068-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.99
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.2	U	5.2	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,700		41.0	7.40	1
06944	Antimony	7440-36-0	4.10	U	4.10	0.759	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129605
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 13:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50730 SDG#: PH068-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	4.29		4.10	0.718	1
06946	Barium	7440-39-3	72.3		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.381	J	1.03	0.0687	1
07914	Boron	7440-42-8	13.7		10.3	0.862	1
06949	Cadmium	7440-43-9	0.232	J	1.03	0.0780	1
01650	Calcium	7440-70-2	3,060		20.5	3.43	1
06951	Chromium	7440-47-3	13.6		3.08	0.164	1
06952	Cobalt	7440-48-4	4.61		1.03	0.102	1
06953	Copper	7440-50-8	6.82		2.05	0.298	1
01654	Iron	7439-89-6	18,900		41.0	3.71	1
06955	Lead	7439-92-1	4.03		3.08	0.513	1
01656	Lithium	7439-93-2	22.2		4.1	0.35	1
01657	Magnesium	7439-95-4	4,800		10.3	1.71	1
06958	Manganese	7439-96-5	289		1.03	0.0852	1
06960	Molybdenum	7439-98-7	2.05	U	2.05	0.174	1
06961	Nickel	7440-02-0	8.11		2.05	0.133	1
10145	Phosphorus	7723-14-0	341		10.3	2.97	1
01662	Potassium	7440-09-7	1,840		103	8.56	1
01667	Sodium	7440-23-5	157		103	17.1	1
06969	Tin	7440-31-5	2.96	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,280		1.03	0.174	1
06971	Vanadium	7440-62-2	30.3		1.03	0.133	1
06972	Zinc	7440-66-6	48.4		4.10	0.205	1
10146	Zirconium	7440-67-7	3.17	J	5.13	0.862	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.410	U	0.410	0.103	2
06142	Silver	7440-22-4	0.205	U	0.205	0.0267	2
06144	Strontium	7440-24-6	11.0		0.410	0.0698	2
06145	Thallium	7440-28-0	0.192	J	0.205	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0170	U	0.0170	0.0102	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.40	U	0.40	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.86		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129605
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 13:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50730 SDG#: PH068-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0702	JQ	1.02	0.0363	1
11031	12378-PeCDD	40321-76-4	0.322	J	5.10	0.0413	1
11031	123478-HxCDD	39227-28-6	0.165	JB	5.10	0.0258	1
11031	123678-HxCDD	57653-85-7	0.110	JQ	5.10	0.0275	1
11031	123789-HxCDD	19408-74-3	0.150	JBQ	5.10	0.0263	1
11031	1234678-HpCDD	35822-46-9	0.0934	JB	5.10	0.0325	1
11031	OCDD	3268-87-9	0.390	JB	10.2	0.0296	1
11031	2378-TCDF	51207-31-9	0.0858	J	1.02	0.0319	1
11031	12378-PeCDF	57117-41-6	0.402	JB	5.10	0.0216	1
11031	23478-PeCDF	57117-31-4	0.324	J	5.10	0.0231	1
11031	123478-HxCDF	70648-26-9	0.207	JB	5.10	0.0192	1
11031	123678-HxCDF	57117-44-9	0.152	JBQ	5.10	0.0172	1
11031	123789-HxCDF	72918-21-9	0.166	JBQ	5.10	0.0209	1
11031	234678-HxCDF	60851-34-5	0.111	JB	5.10	0.0175	1
11031	1234678-HpCDF	67562-39-4	0.109	JB	5.10	0.00953	1
11031	1234789-HpCDF	55673-89-7	0.0662	JQ	5.10	0.0210	1
11031	OCDF	39001-02-0	0.144	JB	10.2	0.0454	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.490				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	45	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129605
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 13:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50730 SDG#: PH068-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129605
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 13:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50730 SDG#: PH068-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B132052AA	07/25/2013 00:30	Andrea E Lando	0.98
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319831737	07/17/2013 19:12	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319831737	07/17/2013 19:12	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319831737	07/17/2013 18:59	Mitchell R Washel	n.a.
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13199SLE026	07/28/2013 21:44	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLF026	07/25/2013 08:05	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13199SLE026	07/19/2013 09:05	Katheryne V Sponheimer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLF026	07/19/2013 09:05	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/22/2013 21:26	Laura M Krieger	25.99
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319831737	07/17/2013 18:58	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319831737	07/17/2013 18:58	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 19:43	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 05:29	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132030009A	07/23/2013 17:37	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132030009A	07/22/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 11:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-507-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129605
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 13:10 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50730 SDG#: PH068-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06953	Copper	SW-846 6010C	1	131980637001	07/26/2013 18:56	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/25/2013 21:18	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 16:26	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131980637001B	07/18/2013 23:21	David K Beck	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 23:21	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 23:21	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 23:21	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13203243201A	07/23/2013 17:59	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13198039402A	07/17/2013 21:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129606
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 13:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50800 SDG#: PH068-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	520	U	520	170	1
10726	Benzidine	92-87-5	3,500	U	3,500	730	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	520	U	520	170	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	17	1
10726	Carbazole	86-74-8	35	U	35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	17	1
10726	4-Chloroaniline	106-47-8	35	U	35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	17	1
10726	Dibenzofuran	132-64-9	35	U	35	17	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	17	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	17	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	100	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	17	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	17	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	1,000	U	1,000	310	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	17	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1
10726	Hexachloroethane	67-72-1	170	U	170	35	1
10726	Isophorone	78-59-1	35	U	35	17	1
10726	2-Methylphenol	95-48-7	35	U	35	17	1
10726	4-Methylphenol	106-44-5	35	U	35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	70	1
10726	4-Nitroaniline	100-01-6	170	U	170	70	1
10726	Nitrobenzene	98-95-3	35	U	35	17	1
10726	2-Nitrophenol	88-75-5	35	U	35	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129606
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/16/2013 13:30 by VC

Submitted: 07/17/2013 09:20
Reported: 08/01/2013 09:00

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50800 SDG#: PH068-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenol	108-95-2	35	U	35	17	1
10726	Pyridine	110-86-1	170	U	170	70	1
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	17	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	J	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.82	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	0.86	J	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.3	U	5.3	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7129606
LL Group # 1404641
Account # 13013

Project Name: SSFL Phase 3 Sampling

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3201 Jermantown Road
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50800 SDG#: PH068-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	96		18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	4.7	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	12		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,700		41.1	7.40	1
06944	Antimony	7440-36-0	4.11	U	4.11	0.759	1
06935	Arsenic	7440-38-2	5.30		4.11	0.718	1
06946	Barium	7440-39-3	90.1		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.582	J	1.03	0.0688	1
07914	Boron	7440-42-8	10.3	U	10.3	0.862	1
06949	Cadmium	7440-43-9	0.251	J	1.03	0.0780	1
01650	Calcium	7440-70-2	41,800		20.5	3.43	1
06951	Chromium	7440-47-3	30.4		3.08	0.164	1
06952	Cobalt	7440-48-4	7.71		1.03	0.102	1
06953	Copper	7440-50-8	15.2		2.05	0.298	1
01654	Iron	7439-89-6	25,500		82.1	7.43	2
06955	Lead	7439-92-1	8.77		3.08	0.513	1
01656	Lithium	7439-93-2	27.2		4.1	0.35	1
01657	Magnesium	7439-95-4	7,420		10.3	1.71	1
06958	Manganese	7439-96-5	361		1.03	0.0852	1
06960	Molybdenum	7439-98-7	0.574	J	2.05	0.174	1
06961	Nickel	7440-02-0	15.5		2.05	0.133	1
10145	Phosphorus	7723-14-0	599		10.3	2.97	1
01662	Potassium	7440-09-7	5,690		103	8.56	1
01667	Sodium	7440-23-5	113		103	17.1	1
06969	Tin	7440-31-5	2.77	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,320		1.03	0.174	1
06971	Vanadium	7440-62-2	57.5		1.03	0.133	1
06972	Zinc	7440-66-6	83.7		4.11	0.205	1
10146	Zirconium	7440-67-7	2.38	J	5.13	0.862	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.286	J	0.411	0.103	2
06142	Silver	7440-22-4	0.0409	J	0.205	0.0267	2
06144	Strontium	7440-24-6	87.1		0.411	0.0698	2
06145	Thallium	7440-28-0	0.295		0.205	0.0308	2

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50800 SDG#: PH068-10*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0382	0.0170	0.0102	1
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.30 J	0.44	0.15	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.7 C.	n.a.	7.94	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	5.4	0.10	0.10	1

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50800 SDG#: PH068-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0654	JQ	1.05	0.0543	1
11031	12378-PeCDD	40321-76-4	0.216	JQ	5.23	0.0857	1
11031	123478-HxCDD	39227-28-6	0.0951	JBQ	5.23	0.0462	1
11031	123678-HxCDD	57653-85-7	0.179	J	5.23	0.0494	1
11031	123789-HxCDD	19408-74-3	0.231	JBQ	5.23	0.0505	1
11031	1234678-HpCDD	35822-46-9	1.98	JB	5.23	0.0772	1
11031	OCDD	3268-87-9	22.7	B	10.5	0.0421	1
11031	2378-TCDF	51207-31-9	0.370	JQ	1.05	0.101	1
11031	12378-PeCDF	57117-41-6	9.93	B	5.23	0.0547	1
11031	23478-PeCDF	57117-31-4	0.579	J	5.23	0.0636	1
11031	123478-HxCDF	70648-26-9	0.598	JB	5.23	0.0408	1
11031	123678-HxCDF	57117-44-9	0.746	JB	5.23	0.0352	1
11031	123789-HxCDF	72918-21-9	0.263	JB	5.23	0.0550	1
11031	234678-HxCDF	60851-34-5	0.205	JB	5.23	0.0386	1
11031	1234678-HpCDF	67562-39-4	2.91	JB	5.23	0.0252	1
11031	1234789-HpCDF	55673-89-7	0.192	JQ	5.23	0.0563	1
11031	OCDF	39001-02-0	7.54	JB	10.5	0.0869	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.729				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	51	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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50800 SDG#: PH068-10*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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50800 SDG#: PH068-10*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13199SLE026	07/29/2013 10:41	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLF026	07/25/2013 08:36	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13199SLE026	07/19/2013 09:05	Katheryne V Sponheimer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLF026	07/19/2013 09:05	Katheryne V Sponheimer	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 19:56	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 05:48	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132030009A	07/23/2013 17:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132030009A	07/22/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 11:58	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131980637001	07/25/2013 21:22	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131980637001	07/27/2013 18:49	John P Hook	1
01654	Iron	SW-846 6010C	1	131980637001	07/24/2013 16:41	Eric L Eby	2
06955	Lead	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131980637001	07/25/2013 21:22	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1

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50800 SDG#: PH068-10*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131980637001	07/24/2013 16:30	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131980637001B	07/18/2013 23:23	David K Beck	2
06142	Silver	SW-846 6020A	1	131980637001A	07/18/2013 23:23	David K Beck	2
06144	Strontium	SW-846 6020A	1	131980637001A	07/18/2013 23:23	David K Beck	2
06145	Thallium	SW-846 6020A	1	131980637001A	07/18/2013 23:23	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131980638001	07/18/2013 09:52	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131980637001	07/17/2013 23:22	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131980638001	07/18/2013 01:40	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13203243201A	07/23/2013 18:13	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13198039402A	07/17/2013 21:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13200162401B	07/19/2013 22:58	Scott W Freisher	1

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B132052AA	Sample number(s): 7129596-7129598,7129603,7129605									
Acetone	20	U	20.	7	ug/kg	151		18-197		
Acrolein	100 U		100.	20	ug/kg	81		50-137		
Acrylonitrile	20	U	20.	4	ug/kg	108		60-133		
t-Amyl methyl ether	5	U	5.	1	ug/kg	99		63-130		
Benzene	5	U	5.	0.5	ug/kg	98		80-120		
Bromobenzene	5	U	5.	1	ug/kg	95		79-120		
Bromochloromethane	5	U	5.	1	ug/kg	100		82-133		
Bromodichloromethane	5	U	5.	1	ug/kg	93		75-114		
Bromoform	5	U	5.	1	ug/kg	100		70-120		
Bromomethane	5	U	5.	2	ug/kg	93		32-162		
2-Butanone	10	U	10.	4	ug/kg	134		38-146		
t-Butyl alcohol	50	U	50.	20	ug/kg	92		60-149		
n-Butylbenzene	5	U	5.	1	ug/kg	92		72-120		
sec-Butylbenzene	5	U	5.	1	ug/kg	94		75-120		
tert-Butylbenzene	5	U	5.	1	ug/kg	93		75-120		
Carbon Disulfide	5	U	5.	1	ug/kg	98		59-129		
Carbon Tetrachloride	5	U	5.	1	ug/kg	97		69-122		
Chlorobenzene	5	U	5.	1	ug/kg	97		80-120		
Chloroethane	5	U	5.	2	ug/kg	86		37-154		
2-Chloroethyl Vinyl Ether	10	U	10.	2	ug/kg	95		44-137		
Chloroform	5	U	5.	1	ug/kg	98		80-120		
1-Chlorohexane	5	U	5.	1	ug/kg	100		70-130		
Chloromethane	5	U	5.	2	ug/kg	92		56-120		
2-Chlorotoluene	5	U	5.	1	ug/kg	93		78-120		
4-Chlorotoluene	5	U	5.	1	ug/kg	93		79-120		
Chlorotrifluoroethene	5	U	5.	2	ug/kg	53	43	22-131	21	30
1,2-Dibromo-3-chloropropane	5	U	5.	2	ug/kg	106		55-128		
Dibromochloromethane	5	U	5.	1	ug/kg	94		77-120		
1,2-Dibromoethane	5	U	5.	1	ug/kg	103		80-120		
Dibromomethane	5	U	5.	1	ug/kg	100		80-120		
1,2-Dichlorobenzene	5	U	5.	1	ug/kg	96		80-120		
1,3-Dichlorobenzene	5	U	5.	1	ug/kg	95		80-120		
1,4-Dichlorobenzene	5	U	5.	1	ug/kg	94		80-120		
Dichlorodifluoromethane	5	U	5.	2	ug/kg	95		32-120		
1,1-Dichloroethane	5	U	5.	1	ug/kg	98		80-120		
1,2-Dichloroethane	5	U	5.	1	ug/kg	101		72-126		
1,1-Dichloroethene	5	U	5.	1	ug/kg	99		73-129		
cis-1,2-Dichloroethene	5	U	5.	1	ug/kg	98		80-120		
trans-1,2-Dichloroethene	5	U	5.	1	ug/kg	101		79-120		
1,2-Dichloropropane	5	U	5.	1	ug/kg	100		77-120		
1,3-Dichloropropane	5	U	5.	1	ug/kg	100		80-120		
2,2-Dichloropropane	5	U	5.	1	ug/kg	92		72-123		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloropropene	5	U	5.	1	ug/kg	99		77-120		
cis-1,3-Dichloropropene	5	U	5.	1	ug/kg	96		74-120		
trans-1,3-Dichloropropene	5	U	5.	1	ug/kg	94		77-120		
Ethyl t-butyl ether	5	U	5.	1	ug/kg	98		64-124		
Ethylbenzene	5	U	5.	1	ug/kg	93		80-120		
Freon 113	5	U	5.	2	ug/kg	98		64-137		
Freon 133a	5	U	5.	2	ug/kg	93	78	78-120	18	30
Hexachlorobutadiene	5	U	5.	2	ug/kg	87		46-130		
2-Hexanone	10	U	10.	3	ug/kg	115		40-129		
di-Isopropyl ether	5	U	5.	1	ug/kg	101		68-128		
Isopropylbenzene	5	U	5.	1	ug/kg	94		76-120		
p-Isopropyltoluene	5	U	5.	1	ug/kg	91		75-120		
Methyl Iodide	5	U	5.	3	ug/kg	103		72-130		
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/kg	103		74-121		
4-Methyl-2-pentanone	10	U	10.	3	ug/kg	123		52-125		
Methylene Chloride	5	U	5.	2	ug/kg	97		76-124		
n-Propylbenzene	5	U	5.	1	ug/kg	94		77-120		
Styrene	5	U	5.	1	ug/kg	96		76-120		
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/kg	95		80-120		
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/kg	107		71-123		
Tetrachloroethene	5	U	5.	1	ug/kg	96		78-126		
Toluene	5	U	5.	1	ug/kg	97		80-120		
1,2,3-Trichlorobenzene	5	U	5.	1	ug/kg	88		64-120		
1,2,4-Trichlorobenzene	5	U	5.	1	ug/kg	88		68-113		
1,1,1-Trichloroethane	5	U	5.	1	ug/kg	92		71-125		
1,1,2-Trichloroethane	5	U	5.	1	ug/kg	106		80-120		
Trichloroethene	5	U	5.	1	ug/kg	99		80-120		
Trichlorofluoromethane	5	U	5.	2	ug/kg	96		58-133		
1,2,3-Trichloropropane	5	U	5.	1	ug/kg	110		71-123		
1,2,4-Trimethylbenzene	5	U	5.	1	ug/kg	93		79-120		
1,3,5-Trimethylbenzene	5	U	5.	1	ug/kg	94		78-120		
Vinyl Acetate	10	U	10.	2	ug/kg	135*	125*	29-111	7	30
Vinyl Chloride	5	U	5.	1	ug/kg	99		53-120		
m+p-Xylene	5	U	5.	1	ug/kg	94		80-120		
o-Xylene	5	U	5.	1	ug/kg	95		80-120		
Batch number: Y132041AA	Sample number(s): 7129592									
Acetone	20	U	20.	6	ug/l	99	98	35-181	1	30
Acrolein	100	U	100.	40	ug/l	85	88	46-146	3	30
Acrylonitrile	20	U	20.	4	ug/l	85	87	61-130	1	30
t-Amyl methyl ether	5	U	5.	0.8	ug/l	102	102	66-120	1	30
Benzene	5	U	5.	0.5	ug/l	100	101	77-121	1	30
Bromobenzene	5	U	5.	1	ug/l	100	101	80-120	1	30
Bromochloromethane	5	U	5.	1	ug/l	111	110	80-121	1	30
Bromodichloromethane	5	U	5.	1	ug/l	108	108	73-120	0	30
Bromoform	5	U	5.	1	ug/l	103	102	61-120	0	30
Bromomethane	5	U	5.	1	ug/l	89	92	51-120	3	30
2-Butanone	10	U	10.	3	ug/l	93	91	57-141	2	30
t-Butyl alcohol	50	U	50.	10	ug/l	107	106	75-120	1	30
n-Butylbenzene	5	U	5.	1	ug/l	103	104	73-130	1	30
sec-Butylbenzene	5	U	5.	1	ug/l	105	107	74-124	1	30
tert-Butylbenzene	5	U	5.	1	ug/l	99	101	80-120	2	30
Carbon Disulfide	5	U	5.	1	ug/l	82	81	68-121	1	30
Carbon Tetrachloride	5	U	5.	1	ug/l	115	114	65-137	1	30
Chlorobenzene	5	U	5.	0.8	ug/l	107	107	80-120	0	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chloroethane	5	U	5.	1	ug/l	80	79	60-120	1	30
2-Chloroethyl Vinyl Ether	10	U	10.	2	ug/l	92	93	52-127	1	30
Chloroform	5	U	5.	0.8	ug/l	113	111	77-122	2	30
1-Chlorohexane	5	U	5.	1	ug/l	104	105	70-130	1	30
Chloromethane	5	U	5.	1	ug/l	81	88	54-123	8	30
2-Chlorotoluene	5	U	5.	1	ug/l	101	104	80-120	2	30
4-Chlorotoluene	5	U	5.	1	ug/l	101	101	80-120	0	30
Chlorotrifluoroethene	5	U	5.	2	ug/l	44*	43*	47-120	4	30
1,2-Dibromo-3-chloropropane	5	U	5.	2	ug/l	105	107	56-120	1	30
Dibromochloromethane	5	U	5.	1	ug/l	101	101	72-120	0	30
1,2-Dibromoethane	5	U	5.	1	ug/l	108	108	76-120	1	30
Dibromomethane	5	U	5.	1	ug/l	109	108	80-120	2	30
1,2-Dichlorobenzene	5	U	5.	1	ug/l	111	111	80-120	0	30
1,3-Dichlorobenzene	5	U	5.	1	ug/l	106	106	80-120	0	30
1,4-Dichlorobenzene	5	U	5.	1	ug/l	107	106	80-120	1	30
Dichlorodifluoromethane	5	U	5.	2	ug/l	109	110	35-122	0	30
1,1-Dichloroethane	5	U	5.	1	ug/l	98	98	79-120	0	30
1,2-Dichloroethane	5	U	5.	1	ug/l	117	114	64-130	2	30
1,1-Dichloroethene	5	U	5.	0.8	ug/l	97	98	76-124	1	30
cis-1,2-Dichloroethene	5	U	5.	0.8	ug/l	106	104	80-120	2	30
trans-1,2-Dichloroethene	5	U	5.	0.8	ug/l	102	103	80-120	0	30
1,2-Dichloropropane	5	U	5.	1	ug/l	100	101	80-120	1	30
1,3-Dichloropropane	5	U	5.	1	ug/l	97	99	80-120	2	30
2,2-Dichloropropane	5	U	5.	1	ug/l	108	107	67-124	2	30
1,1-Dichloropropene	5	U	5.	1	ug/l	106	105	80-120	1	30
cis-1,3-Dichloropropene	5	U	5.	1	ug/l	105	105	78-120	0	30
trans-1,3-Dichloropropene	5	U	5.	1	ug/l	95	96	66-124	1	30
Ethyl t-butyl ether	5	U	5.	0.8	ug/l	97	97	66-120	0	30
Ethylbenzene	5	U	5.	0.8	ug/l	101	103	79-120	1	30
Freon 113	5	U	5.	2	ug/l	105	104	69-128	1	30
Freon 133a	5	U	5.	2	ug/l	86	85	64-120	1	30
Hexachlorobutadiene	5	U	5.	2	ug/l	106	110	58-120	3	30
2-Hexanone	10	U	10.	3	ug/l	88	88	59-125	1	30
di-Isopropyl ether	5	U	5.	0.8	ug/l	90	90	65-120	1	30
Isopropylbenzene	5	U	5.	1	ug/l	106	106	77-120	0	30
p-Isopropyltoluene	5	U	5.	1	ug/l	104	105	77-121	1	30
Methyl Iodide	5	U	5.	1	ug/l	102	103	71-122	1	30
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/l	103	103	68-121	1	30
4-Methyl-2-pentanone	10	U	10.	3	ug/l	91	93	65-122	1	30
Methylene Chloride	5	U	5.	2	ug/l	101	101	84-118	1	30
n-Propylbenzene	5	U	5.	1	ug/l	104	105	77-130	1	30
Styrene	5	U	5.	1	ug/l	104	104	77-120	0	30
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/l	109	109	79-120	0	30
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/l	99	102	70-129	3	30
Tetrachloroethene	5	U	5.	0.8	ug/l	106	105	79-120	0	30
Toluene	5	U	5.	0.7	ug/l	102	103	79-120	1	30
1,2,3-Trichlorobenzene	5	U	5.	1	ug/l	113	113	67-120	0	30
1,2,4-Trichlorobenzene	5	U	5.	1	ug/l	112	112	65-120	1	30
1,1,1-Trichloroethane	5	U	5.	0.8	ug/l	104	104	66-126	0	30
1,1,2-Trichloroethane	5	U	5.	0.8	ug/l	105	107	80-120	2	30
Trichloroethene	5	U	5.	1	ug/l	110	109	80-120	1	30
Trichlorofluoromethane	5	U	5.	2	ug/l	109	109	65-130	0	30
1,2,3-Trichloropropane	5	U	5.	1	ug/l	106	106	76-120	1	30
1,2,4-Trimethylbenzene	5	U	5.	1	ug/l	105	108	69-122	3	30
1,3,5-Trimethylbenzene	5	U	5.	1	ug/l	105	106	68-124	1	30
Vinyl Acetate	10	U	10.	2	ug/l	120	118	57-147	2	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Vinyl Chloride	5	U	5.	1	ug/l	88	90	63-120	3	30
m+p-Xylene	5	U	5.	0.8	ug/l	104	104	77-120	0	30
o-Xylene	5	U	5.	0.8	ug/l	103	103	77-120	0	30
Batch number: 13199SLE026	Sample number(s): 7129595-7129598,7129603-7129606									
Acenaphthene	17	U	17.	3	ug/kg	102		83-111		
Acenaphthylene	17	U	17.	3	ug/kg	109		83-127		
Aniline	330 U		330.	170	ug/kg	65		44-103		
Anthracene	17	U	17.	3	ug/kg	101		82-118		
Benzidine	1,700 U		1,700.	700	ug/kg	35		25-94		
Benzo(a)anthracene	17	U	17.	3	ug/kg	98		73-123		
Benzo(a)pyrene	17	U	17.	3	ug/kg	107		80-123		
Benzo(b)fluoranthene	17	U	17.	3	ug/kg	103		76-124		
Benzo(g,h,i)perylene	17	U	17.	3	ug/kg	103		77-122		
Benzo(k)fluoranthene	17	U	17.	3	ug/kg	105		75-123		
Benzoic acid	500 U		500.	170	ug/kg	83		41-122		
Benzyl alcohol	330 U		330.	170	ug/kg	99		78-115		
1,1'-Biphenyl	33	U	33.	17	ug/kg	100		77-111		
4-Bromophenyl-phenylether	33	U	33.	17	ug/kg	111		79-117		
Butylbenzylphthalate	170 U		170.	67	ug/kg	101		80-118		
Di-n-butylphthalate	170 U		170.	67	ug/kg	104		79-112		
Carbazole	33	U	33.	17	ug/kg	99		79-118		
4-Chloro-3-methylphenol	33	U	33.	17	ug/kg	104		80-124		
4-Chloroaniline	33	U	33.	17	ug/kg	55		10-97		
bis(2-Chloroethoxy)methane	33	U	33.	17	ug/kg	100		77-112		
bis(2-Chloroethyl)ether	33	U	33.	17	ug/kg	95		77-115		
bis(2-Chloroisopropyl)ether	33	U	33.	17	ug/kg	92		64-114		
2-Chloronaphthalene	33	U	33.	7	ug/kg	83		56-144		
2-Chlorophenol	33	U	33.	17	ug/kg	109		80-122		
4-Chlorophenyl-phenylether	33	U	33.	17	ug/kg	101		79-110		
Chrysene	17	U	17.	3	ug/kg	92		69-119		
Dibenz(a,h)anthracene	17	U	17.	3	ug/kg	105		77-125		
Dibenzofuran	33	U	33.	17	ug/kg	106		78-116		
1,2-Dichlorobenzene	33	U	33.	17	ug/kg	98		79-112		
1,3-Dichlorobenzene	33	U	33.	17	ug/kg	99		79-113		
1,4-Dichlorobenzene	33	U	33.	17	ug/kg	95		79-112		
3,3'-Dichlorobenzidine	330 U		330.	100	ug/kg	90		20-111		
2,4-Dichlorophenol	33	U	33.	17	ug/kg	110		81-123		
2,6-Dichlorophenol	33	U	33.	17	ug/kg	108		77-113		
Diethylphthalate	170 U		170.	67	ug/kg	102		82-113		
2,4-Dimethylphenol	33	U	33.	17	ug/kg	111		83-120		
3,5-Dimethylphenol	170 U		170.	33	ug/kg	98	94	70-130	4	30
Dimethylphthalate	170 U		170.	67	ug/kg	101		82-113		
4,6-Dinitro-2-methylphenol	500 U		500.	170	ug/kg	110		56-132		
2,4-Dinitrophenol	660		660.	300	ug/kg	82		26-145		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Diphenylhydrazine	33 U	U	33.	17	ug/kg	111		77-111		
bis(2-Ethylhexyl)phthalate	170 U		170.	67	ug/kg	101		75-124		
Fluoranthene	17	U	17.	3	ug/kg	93		79-123		
Fluorene	17	U	17.	3	ug/kg	101		81-117		
Hexachlorobenzene	17	U	17.	3	ug/kg	110		74-118		
Hexachlorobutadiene	33	U	33.	17	ug/kg	100		76-115		
Hexachlorocyclopentadiene	500 U		500.	170	ug/kg	128		66-135		
Hexachloroethane	170 U		170.	33	ug/kg	96		76-109		
Indeno(1,2,3-cd)pyrene	17	U	17.	3	ug/kg	106		77-122		
Isophorone	33	U	33.	17	ug/kg	97		76-112		
1-Methylnaphthalene	17	U	17.	3	ug/kg	100		77-115		
2-Methylnaphthalene	17	U	17.	3	ug/kg	92		82-120		
2-Methylphenol	33	U	33.	17	ug/kg	102		75-126		
4-Methylphenol	33	U	33.	17	ug/kg	102		73-124		
Naphthalene	17	U	17.	3	ug/kg	98		77-115		
NDPA as diphenylamine	170 U		170.	33	ug/kg	103		70-130		
2-Nitroaniline	33	U	33.	17	ug/kg	103		83-118		
3-Nitroaniline	170 U		170.	67	ug/kg	95		69-122		
4-Nitroaniline	170 U		170.	67	ug/kg	84		51-107		
Nitrobenzene	33	U	33.	17	ug/kg	98		73-118		
2-Nitrophenol	33	U	33.	17	ug/kg	102		81-114		
4-Nitrophenol	500 U		500.	170	ug/kg	96		49-136		
N-Nitroso-di-n-propylamine	33	U	33.	17	ug/kg	91		70-113		
N-Nitrosodimethylamine	170 U		170.	67	ug/kg	95		67-116		
N-Nitrosodiphenylamine	33	U	33.	17	ug/kg	104		83-118		
Di-n-octylphthalate	170 U		170.	67	ug/kg	110		75-136		
Pentachlorophenol	170 U		170.	33	ug/kg	105		56-132		
Phenanthrene	17	U	17.	3	ug/kg	99		77-119		
Phenol	33	U	33.	17	ug/kg	97		69-126		
Pyrene	17	U	17.	3	ug/kg	97		81-114		
Pyridine	170 U		170.	67	ug/kg	80		48-99		
1,2,4-Trichlorobenzene	33	U	33.	17	ug/kg	103		80-109		
2,4,5-Trichlorophenol	33	U	33.	17	ug/kg	112		80-117		
2,4,6-Trichlorophenol	33	U	33.	17	ug/kg	104		81-123		
Batch number: 13199SLF026	Sample number(s): 7129596-7129598,7129603-7129606									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	94		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	100		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	110		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	99		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	103		64-120		

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Reported: 08/01/13 at 09:00 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	125		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	125		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	104		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	105		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	123		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	123		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	104		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	101		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	106		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	81		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	125		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	98		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	103		71-120		
Batch number: 13201SLA026	Sample number(s): 7129591,7129593-7129594									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	92		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	97		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	101		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	96		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	100		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	120		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	120		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	124		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	117		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	101		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	99		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	97		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	93		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	74		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	120		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	95		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	98		71-120		
Batch number: 13207SLA026	Sample number(s): 7129595									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	106		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	95		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	95		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	99		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	98		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	113		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	98		64-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	95		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	122		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	123		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	98		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	101		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	125		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	121		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	100		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	96		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	79		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	119		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	93		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Batch number: 13198A20A	Sample number(s): 7129592									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	101	75-135	6	30
Batch number: 13203A16A	Sample number(s): 7129594,7129596-7129598,7129603,7129605									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	71		67-119		
Batch number: 132010014A	Sample number(s): 7129595-7129598,7129603-7129606									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	104		85-115		
Batch number: 132010012A	Sample number(s): 7129591,7129593-7129598,7129603-7129606									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	73	78	36-106	7	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	101		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132030009A	Sample number(s): 7129591,7129593-7129598,7129603-7129606									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	98		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	105		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	106		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	96		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	84		49-107		
Batch number: 131980637001	Sample number(s): 7129591,7129593-7129598,7129602-7129606									
Aluminum	40.0	U	40.0	7.21	mg/kg	102		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	108		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	102		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	96		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Cadmium	1.00	U	1.00	0.0760	mg/kg	105		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	105		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	104		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	105		80-120		
Copper	0.441	J	2.00	0.290	mg/kg	108		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	103		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	109		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	103		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	106		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	108		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	107		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	100		80-120		
Tin	1.34	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	103		80-120		
Zinc	0.343	J	4.00	0.200	mg/kg	106		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	103		80-120		
Batch number: 131980637001A	Sample number(s): 7129591,7129593-7129598,7129602-7129606									
Silver	0.200	U	0.200	0.0260	mg/kg	112		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	110		80-120		
Batch number: 131980637001B	Sample number(s): 7129591,7129593-7129598,7129602-7129606									
Selenium	0.400	U	0.400	0.100	mg/kg	114		80-120		
Batch number: 131980638001	Sample number(s): 7129591,7129593-7129598,7129602-7129606									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	112		85-120		
Batch number: 13203243201A	Sample number(s): 7129595-7129596,7129599-7129606									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	101		80-120		
Batch number: 13198039402A	Sample number(s): 7129591,7129593-7129596,7129602-7129606									
15a pH by 9045D						100		95-105		
Batch number: 13200162401B	Sample number(s): 7129591,7129593-7129606									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13206001	Sample number(s): 7129591,7129593-7129598,7129603-7129606									
2378-TCDD	1.00	U	1.00	0.0506	ng/kg	96		67-158		
12378-PeCDD	5.00	U	5.00	0.0504	ng/kg	101		70-142		
123478-HxCDD	0.0432	J	5.00	0.0277	ng/kg	98		70-164		
123678-HxCDD	5.00	U	5.00	0.0303	ng/kg	96		76-134		
123789-HxCDD	0.0358	J	5.00	0.0303	ng/kg	94		64-162		
1234678-HpCDD	0.0714	J	5.00	0.0483	ng/kg	92		70-140		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
OCDD	0.230	J	10.0	0.0327	ng/kg	94		78-144		
2378-TCDF	1.00	U	1.00	0.0511	ng/kg	97		75-158		
12378-PeCDF	0.0307	J	5.00	0.0297	ng/kg	94		80-134		
23478-PeCDF	5.00	U	5.00	0.0295	ng/kg	95		68-160		
123478-HxCDF	0.0229	J	5.00	0.0197	ng/kg	95		72-134		
123678-HxCDF	0.0231	J	5.00	0.0190	ng/kg	93		84-130		
123789-HxCDF	0.0413	J	5.00	0.0242	ng/kg	91		78-130		
234678-HxCDF	0.0401	J	5.00	0.0180	ng/kg	90		70-156		
1234678-HpCDF	0.0256	J	5.00	0.0122	ng/kg	90		82-122		
1234789-HpCDF	5.00	U	5.00	0.0238	ng/kg	93		78-138		
OCDF	0.159	J	10.0	0.0523	ng/kg	92		63-170		
TEQ WHO 2005 - EDLx0.0	0.00240				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B132052AA	Sample number(s): 7129596-7129598,7129603,7129605 UNSPK: 7129596								
Acetone	153	162	31-195	8	30				
Acrolein	169*	239*	10-165	36*	30				
Acrylonitrile	102	111	48-139	10	30				
t-Amyl methyl ether	98	108	39-147	12	30				
Benzene	101	113	55-143	14	30				
Bromobenzene	98	101	43-139	5	30				
Bromochloromethane	102	115	60-137	14	30				
Bromodichloromethane	93	103	53-136	12	30				
Bromoform	95	102	38-124	9	30				
Bromomethane	93	109	42-168	18	30				
2-Butanone	131	140	37-163	9	30				
t-Butyl alcohol	218*	294*	47-153	32*	30				
n-Butylbenzene	87	82	30-146	4	30				
sec-Butylbenzene	96	91	33-157	3	30				
tert-Butylbenzene	95	95	41-152	2	30				
Carbon Disulfide	101	115	48-146	16	30				
Carbon Tetrachloride	101	111	45-153	12	30				
Chlorobenzene	98	107	49-135	11	30				
Chloroethane	85	100	39-152	19	30				
2-Chloroethyl Vinyl Ether	93	100	32-139	9	30				
Chloroform	102	113	61-142	13	30				
1-Chlorohexane	104	102	70-130	0	30				
Chloromethane	97	114	36-143	18	30				
2-Chlorotoluene	95	95	42-146	2	30				
4-Chlorotoluene	93	95	39-145	4	30				
1,2-Dibromo-3-chloropropane	93	103	30-139	13	30				
Dibromochloromethane	97	108	51-128	13	30				
1,2-Dibromoethane	103	114	54-129	12	30				

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Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dibromomethane	99	109	57-130	12	30				
1,2-Dichlorobenzene	94	100	36-133	8	30				
1,3-Dichlorobenzene	93	97	34-134	6	30				
1,4-Dichlorobenzene	91	96	35-136	7	30				
Dichlorodifluoromethane	105	118	26-151	14	30				
1,1-Dichloroethane	101	115	63-142	15	30				
1,2-Dichloroethane	101	113	49-150	13	30				
1,1-Dichloroethene	106	119	61-149	14	30				
cis-1,2-Dichloroethene	101	115	49-153	15	30				
trans-1,2-Dichloroethene	105	120	51-153	15	30				
1,2-Dichloropropane	104	114	48-145	11	30				
1,3-Dichloropropane	100	111	45-150	13	30				
2,2-Dichloropropane	95	108	53-147	15	30				
1,1-Dichloropropene	104	116	54-145	12	30				
cis-1,3-Dichloropropene	98	108	35-151	12	30				
trans-1,3-Dichloropropene	95	105	30-149	12	30				
Ethyl t-butyl ether	96	107	58-124	13	30				
Ethylbenzene	95	100	44-141	7	30				
Freon 113	107	122	56-156	15	30				
Hexachlorobutadiene	77	74	10-155	2	30				
2-Hexanone	111	121	32-160	10	30				
di-Isopropyl ether	102	115	59-133	14	30				
Isopropylbenzene	94	96	38-144	4	30				
p-Isopropyltoluene	90	86	29-152	3	30				
Methyl Iodide	107	124	52-139	17	30				
Methyl Tertiary Butyl Ether	100	111	55-129	12	30				
4-Methyl-2-pentanone	112	121	46-139	10	30				
Methylene Chloride	98	114	49-160	17	30				
n-Propylbenzene	96	94	39-157	0	30				
Styrene	95	102	35-134	10	30				
1,1,1,2-Tetrachloroethane	95	105	39-150	13	30				
1,1,2,2-Tetrachloroethane	105	113	40-152	9	30				
Tetrachloroethene	103	109	42-149	8	30				
Toluene	103	113	50-146	12	30				
1,2,3-Trichlorobenzene	79	90	10-140	15	30				
1,2,4-Trichlorobenzene	79	85	10-136	10	30				
1,1,1-Trichloroethane	100	108	43-150	11	30				
1,1,2-Trichloroethane	107	116	47-161	10	30				
Trichloroethene	101	113	53-144	13	30				
Trichlorofluoromethane	104	118	47-163	15	30				
1,2,3-Trichloropropane	109	117	45-154	9	30				
1,2,4-Trimethylbenzene	93	93	37-149	2	30				
1,3,5-Trimethylbenzene	95	96	38-150	3	30				
Vinyl Chloride	104	119	50-154	15	30				
m+p-Xylene	95	99	44-137	7	30				
o-Xylene	93	99	42-137	9	30				
Batch number: 13199SLE026	Sample number(s): 7129595-7129598,7129603-7129606 UNSPK: 7129596								
Acenaphthene	102	99	60-120	3	30				
Acenaphthylene	107	100	47-137	7	30				
Aniline	50	55	10-131	9	30				
Anthracene	101	98	41-142	3	30				

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Reported: 08/01/13 at 09:00 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzidine	13*	10*	35-141	22	30				
Benzo(a)anthracene	93	90	32-150	3	30				
Benzo(a)pyrene	108	98	33-145	10	30				
Benzo(b)fluoranthene	111	92	29-150	19	30				
Benzo(g,h,i)perylene	105	100	48-134	5	30				
Benzo(k)fluoranthene	97	97	41-139	0	30				
Benzoic acid	70	66	23-170	5	30				
Benzyl alcohol	87	79	32-145	9	30				
1,1'-Biphenyl	100	93	36-138	7	30				
4-Bromophenyl-phenylether	111	108	66-122	3	30				
Butylbenzylphthalate	103	100	42-146	3	30				
Di-n-butylphthalate	105	99	49-134	5	30				
Carbazole	100	94	58-126	6	30				
4-Chloro-3-methylphenol	97	94	50-137	4	30				
4-Chloroaniline	52	83	11-114	47*	30				
bis(2-Chloroethoxy)methane	92	92	58-122	1	30				
bis(2-Chloroethyl)ether	89	83	54-128	7	30				
bis(2-Chloroisopropyl)ether	84	82	50-115	3	30				
2-Chloronaphthalene	121	115	50-140	5	30				
2-Chlorophenol	99	93	51-139	7	30				
4-Chlorophenyl-phenylether	102	94	65-117	8	30				
Chrysene	89	87	33-142	2	30				
Dibenz(a,h)anthracene	108	101	45-142	6	30				
Dibenzofuran	103	99	60-120	4	30				
1,2-Dichlorobenzene	92	91	45-127	2	30				
1,3-Dichlorobenzene	91	88	46-123	3	30				
1,4-Dichlorobenzene	85	84	40-132	1	30				
3,3'-Dichlorobenzidine	68	71	10-143	5	30				
2,4-Dichlorophenol	103	100	54-135	3	30				
2,6-Dichlorophenol	105	98	56-133	6	30				
Diethylphthalate	97	94	53-132	3	30				
2,4-Dimethylphenol	101	73	39-147	31*	30				
Dimethylphthalate	100	93	49-129	6	30				
4,6-Dinitro-2-methylphenol	81	88	10-148	8	30				
2,4-Dinitrophenol	57	73	20-143	25	30				
1,2-Diphenylhydrazine	115	109	51-145	5	30				
bis(2-Ethylhexyl)phthalate	100	95	38-151	4	30				
Fluoranthene	88	84	30-151	5	30				
Fluorene	100	95	55-128	5	30				
Hexachlorobenzene	111	106	46-132	4	30				
Hexachlorobutadiene	99	96	58-120	3	30				
Hexachlorocyclopentadiene	82	86	10-153	5	30				
Hexachloroethane	93	87	24-138	7	30				
Indeno(1,2,3-cd)pyrene	109	101	46-139	9	30				
Isophorone	95	90	59-122	5	30				
1-Methylnaphthalene	97	95	36-139	2	30				
2-Methylnaphthalene	90	87	45-134	3	30				
2-Methylphenol	92	82	32-146	11	30				
4-Methylphenol	87	84	31-150	3	30				
Naphthalene	97	93	35-141	4	30				
NDPA as diphenylamine	106	95	70-130	11	30				
2-Nitroaniline	102	95	63-137	7	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
3-Nitroaniline	91	92	31-145	1	30				
4-Nitroaniline	83	82	25-137	1	30				
Nitrobenzene	92	90	46-133	1	30				
2-Nitrophenol	100	96	52-137	4	30				
4-Nitrophenol	87	81	25-142	7	30				
N-Nitroso-di-n-propylamine	83	80	45-133	4	30				
N-Nitrosodimethylamine	77	74	69-111	4	30				
N-Nitrosodiphenylamine	107	96	59-135	11	30				
Di-n-octylphthalate	107	102	48-155	4	30				
Pentachlorophenol	94	89	23-145	6	30				
Phenanthrene	100	93	34-147	7	30				
Phenol	88	85	34-146	4	30				
Pyrene	96	95	29-148	1	30				
Pyridine	65	57	16-108	13	30				
1,2,4-Trichlorobenzene	101	100	66-116	1	30				
2,4,5-Trichlorophenol	107	105	41-141	1	30				
2,4,6-Trichlorophenol	104	97	41-142	7	30				
Batch number: 13199SLF026	Sample number(s): 7129596-7129598,7129603-7129606 UNSPK: 7129596								
Acenaphthene	94	95	48-127	1	30				
Acenaphthylene	92	91	49-121	1	30				
Anthracene	96	96	52-126	1	30				
Benzo(a)anthracene	100	100	32-135	1	30				
Benzo(a)pyrene	98	100	36-138	2	30				
Benzo(b)fluoranthene	115	117	26-142	2	30				
Benzo(e)pyrene	96	97	70-130	2	30				
Benzo(g,h,i)perylene	64	61	33-141	6	30				
Benzo(k)fluoranthene	100	105	47-129	6	30				
Butylbenzylphthalate	123	124	59-153	1	30				
Di-n-butylphthalate	122	126	62-154	3	30				
Chrysene	97	100	29-148	3	30				
Dibenz(a,h)anthracene	80	78	34-125	3	30				
Diethylphthalate	124	123	76-127	1	30				
Dimethylphthalate	101	102	62-136	1	30				
Bis(2-Ethylhexyl)phthalate	119	123	39-167	3	30				
Fluoranthene	100	100	47-135	0	30				
Fluorene	95	94	50-129	1	30				
Indeno(1,2,3-cd)pyrene	76	74	17-136	3	30				
1-Methylnaphthalene	98	98	50-131	1	30				
2-Methylnaphthalene	94	94	28-144	0	30				
Naphthalene	92	94	31-148	1	30				
N-Nitrosodimethylamine	79	77	48-113	3	30				
Di-n-octylphthalate	135	138	52-162	3	30				
Phenanthrene	93	95	29-142	2	30				
Pyrene	96	98	26-143	2	30				
Batch number: 13201SLA026	Sample number(s): 7129591,7129593-7129594 UNSPK: 7129593								
Acenaphthene	87	82	48-127	6	30				
Acenaphthylene	81	78	49-121	3	30				
Anthracene	85	84	52-126	2	30				
Benzo(a)anthracene	88	85	32-135	3	30				
Benzo(a)pyrene	85	83	36-138	2	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(b)fluoranthene	90	89	26-142	2	30				
Benzo(e)pyrene	83	81	70-130	2	30				
Benzo(g,h,i)perylene	85	83	33-141	3	30				
Benzo(k)fluoranthene	91	88	47-129	4	30				
Butylbenzylphthalate	110	107	59-153	3	30				
Di-n-butylphthalate	105	104	62-154	1	30				
Chrysene	86	83	29-148	3	30				
Dibenz(a,h)anthracene	92	89	34-125	3	30				
Diethylphthalate	109	107	76-127	1	30				
Dimethylphthalate	92	90	62-136	3	30				
Bis(2-Ethylhexyl)phthalate	111	110	39-167	1	30				
Fluoranthene	88	86	47-135	2	30				
Fluorene	86	83	50-129	3	30				
Indeno(1,2,3-cd)pyrene	93	90	17-136	3	30				
1-Methylnaphthalene	90	85	50-131	5	30				
2-Methylnaphthalene	88	82	28-144	7	30				
Naphthalene	85	79	31-148	8	30				
N-Nitrosodimethylamine	68	62	48-113	9	30				
Di-n-octylphthalate	107	105	52-162	2	30				
Phenanthrene	85	83	29-142	3	30				
Pyrene	86	83	26-143	3	30				
Batch number: 13207SLA026	Sample number(s): 7129595 UNSPK: P139498								
Acenaphthene	99	95	48-127	5	30				
Acenaphthylene	90	86	49-121	5	30				
Anthracene	92	86	52-126	7	30				
Benzo(a)anthracene	97	88	32-135	9	30				
Benzo(a)pyrene	96	89	36-138	7	30				
Benzo(b)fluoranthene	104	97	26-142	7	30				
Benzo(e)pyrene	93	86	70-130	7	30				
Benzo(g,h,i)perylene	95	79	33-141	18	30				
Benzo(k)fluoranthene	94	86	47-129	9	30				
Butylbenzylphthalate	121	111	59-153	8	30				
Di-n-butylphthalate	116	111	62-154	4	30				
Chrysene	97	86	29-148	11	30				
Dibenz(a,h)anthracene	101	89	34-125	13	30				
Diethylphthalate	121	115	76-127	6	30				
Dimethylphthalate	100	97	62-136	4	30				
Bis(2-Ethylhexyl)phthalate	130	128	39-167	2	30				
Fluoranthene	97	89	47-135	8	30				
Fluorene	94	88	50-129	6	30				
Indeno(1,2,3-cd)pyrene	101	88	17-136	14	30				
1-Methylnaphthalene	99	95	50-131	4	30				
2-Methylnaphthalene	95	91	28-144	4	30				
Naphthalene	93	90	31-148	3	30				
N-Nitrosodimethylamine	74	70	48-113	5	30				
Di-n-octylphthalate	112	104	52-162	8	30				
Phenanthrene	91	84	29-142	7	30				
Pyrene	96	86	26-143	11	30				
Batch number: 13203A16A	Sample number(s): 7129594,7129596-7129598,7129603,7129605 UNSPK: 7129596								
11a TPH by EPA 8015B GRO	83	82	39-118	5	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132010014A	Sample number(s): 7129595-7129598,7129603-7129606 UNSPK: 7129596								
6a Perchlorate (Method 6850)	102	99	80-120	2	20				
Batch number: 132010012A	Sample number(s): 7129591,7129593-7129598,7129603-7129606 UNSPK: 7129596								
PCB-1016	100	100	16-146	1	50				
PCB-1260	100	105	40-134	4	50				
Batch number: 132030009A	Sample number(s): 7129591,7129593-7129598,7129603-7129606 UNSPK: 7129596								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	108	112	49-123	4	20				
EFH (C21-C30)	111	117	49-123	5	20				
EFH (C30-C40)	102	118	49-123	15	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 131980637001	Sample number(s): 7129591,7129593-7129598,7129602-7129606 UNSPK: 7129596 BKG: 7129596								
Aluminum	1060 (2)	1082 (2)	75-125	0	20	11,300	11,200	1	20
Antimony	72*	70*	75-125	3	20	3.92 U	3.92 U	0 (1)	20
Arsenic	98	99	75-125	1	20	3.73 J	3.29 J	13 (1)	20
Barium	117	99	75-125	12	20	81.1	80.5	1	20
Beryllium	101	101	75-125	0	20	0.378 J	0.382 J	1 (1)	20
Boron	94	93	75-125	0	20	17.4	16.4	6 (1)	20
Cadmium	97	99	75-125	2	20	0.356 J	0.336 J	6 (1)	20
Calcium	202 (2)	167 (2)	75-125	3	20	3,520	3,410	3	20
Chromium	134*	106	75-125	13	20	20.9	20.6	2	20
Cobalt	94	95	75-125	1	20	4.62	4.45	4 (1)	20
Copper	111	111	75-125	0	20	10.2	10.4	2	20
Iron	358 (2)	211 (2)	75-125	1	20	22,000	22,000	0	20
Lead	95	98	75-125	2	20	4.26	3.88	9 (1)	20
Lithium	94	94	75-125	1	20	28.7	27.3	5	20
Magnesium	562 (2)	223 (2)	75-125	10	20	5,850	5,920	1	20
Manganese	133 (2)	92 (2)	75-125	4	20	405	406	0	20
Molybdenum	96	96	75-125	0	20	0.359 J	0.233 J	42* (1)	20
Nickel	109	98	75-125	8	20	12.1	12.1	0	20
Phosphorus	133 (2)	90 (2)	75-125	8	20	407	403	1	20
Potassium	128*	135*	75-125	2	20	2,130	2,170	2	20
Sodium	102	101	75-125	0	20	170	168	1 (1)	20
Tin	91	90	75-125	0	20	2.75 J	2.59 J	6 (1)	20
Titanium	342 (2)	330 (2)	75-125	1	20	1,400	1,360	3	20
Vanadium	103	99	75-125	2	20	42.1	40.9	3	20
Zinc	102	104	75-125	1	20	51.5	51.4	0	20
Zirconium	99	99	75-125	0	20	3.05 J	3.89 J	24* (1)	20
Batch number: 131980637001A	Sample number(s): 7129591,7129593-7129598,7129602-7129606 UNSPK: 7129596 BKG: 7129596								
Silver	104	100	75-125	4	20	0.196 U	0.196 U	0 (1)	20
Strontium	99	102	75-125	1	20	14.3	13.7	4	20
Thallium	101	100	75-125	1	20	0.229	0.201	13 (1)	20
Batch number: 131980637001B	Sample number(s): 7129591,7129593-7129598,7129602-7129606 UNSPK: 7129596 BKG:								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
	7129596								
Selenium	103	116	75-125	11	20	0.392 U	0.392 U	0 (1)	20
Batch number: 131980638001	Sample number(s): 7129591,7129593-7129598,7129602-7129606 UNSPK: 7129596 BKG: 7129596								
3a Mercury 7471A	118	114	65-135	3	20	0.0161 U	0.0161 U	0 (1)	20
Batch number: 13203243201A	Sample number(s): 7129595-7129596,7129599-7129606 UNSPK: 7129596 BKG: 7129596								
2a Chromium VI by EPA 7199	100		75-125			1.3	0.16 J	157* (1)	20
Batch number: 13198039402A	Sample number(s): 7129591,7129593-7129596,7129602-7129606 BKG: 7129596								
15a pH by 9045D						8.56	8.54	0	3
Batch number: 13200162401B	Sample number(s): 7129591,7129593-7129606 BKG: 7129596								
14a Moisture Content by 160.3						3.9	4.0	2	20
14a Moisture Content by 160.3						3.9	4.0	2	20
14a Moisture Content by 160.3						3.9	4.0	2	20
Batch number: 13206001	Sample number(s): 7129591,7129593-7129598,7129603-7129606 UNSPK: 7129596								
2378-TCDD	99	97	40-135	3	20				
12378-PeCDD	100	97	40-135	4	20				
123478-HxCDD	97	99	40-135	1	20				
123678-HxCDD	97	96	40-135	2	20				
123789-HxCDD	94	96	40-135	1	20				
1234678-HpCDD	92	92	40-135	1	20				
OCDD	95	94	40-135	2	20				
2378-TCDF	99	98	40-135	2	20				
12378-PeCDF	98	92	40-135	7	20				
23478-PeCDF	97	96	40-135	2	20				
123478-HxCDF	94	96	40-135	1	20				
123678-HxCDF	90	95	40-135	5	20				
123789-HxCDF	91	92	40-135	0	20				
234678-HxCDF	94	94	40-135	0	20				
1234678-HpCDF	90	92	40-135	0	20				
1234789-HpCDF	93	92	40-135	2	20				
OCDF	92	92	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 12a Volatile Organics EPA8260B
Batch number: B132052AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7129596	101	105	98	95
7129597	101	105	101	97
7129598	100	105	102	97

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Surrogate Quality Control

7129603	99	100	97	94
7129605	100	105	98	96
Blank	98	101	99	93
LCS	101	112	100	100
MS	101	105	101	97
MSD	100	105	102	97
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 12b Volatile Organics EPA8260B
Batch number: Y132041AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7129592	108	101	96	94
Blank	106	102	97	96
LCS	105	104	98	103
LCSD	105	104	100	103
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 8a SVOCs by EPA 8270D
Batch number: 13199SLE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7129595	48	54	58	55	63	70
7129596	78	87	78	88	97	100
7129597	88	96	96	95	103	107
7129598	84	92	90	92	96	105
7129603	84	96	87	93	97	109
7129604	62	70	74	70	76	84
7129605	75	86	86	85	93	100
7129606	68	75	77	71	80	85
Blank	82	94	107	92	98	110
LCS	99	107	104	96	104	110
LCSD	79	91	108			
MS	88	96	96	95	103	107
MSD	84	92	90	92	96	105
Limits:	25-120	25-130	35-130	40-130	45-130	45-130

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13199SLF026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7129596	85	94	96
7129597	85	94	97
7129598	87	95	98
7129603	75	80	88
7129604	75	76	85
7129605	80	86	94
7129606	65	67	76
Blank	79	85	93
LCS	88	97	101
MS	85	94	97
MSD	87	95	98

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Surrogate Quality Control

Limits:	54-129	61-134	55-129

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13201SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7129591	69	71	82
7129593	74	77	86
7129594	80	85	92
Blank	88	95	101
LCS	86	93	97
MS	74	81	88
MSD	74	78	83
Limits:	54-129	61-134	55-129

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13207SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7129595	78	80	93
Blank	88	93	104
LCS	83	90	101
MS	83	88	98
MSD	76	80	92
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13198A20A

	Trifluorotoluene-F
7129592	86
Blank	87
LCS	120
LCSD	121
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13203A16A

	Trifluorotoluene-F
7129594	70
7129596	71
7129597	70
7129598	70
7129603	75
7129605	63
Blank	77
LCS	76
MS	70
MSD	70

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Surrogate Quality Control

Limits: 61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132010012A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7129591	112	98
7129593	104	96
7129594	110	95
7129595	111	101
7129596	114	101
7129597	114	102
7129598	113	99
7129603	115	101
7129604	111	94
7129605	110	94
7129606	104	89
Blank	111	97
LCS	108	100
LCSD	115	111
MS	114	102
MSD	113	99
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132030009A

	Chlorobenzene	Orthoterphenyl
7129591	90	94
7129593	89	97
7129594	89	89
7129595	87	90
7129596	94	97
7129597	99	104
7129598	97	103
7129603	92	97
7129604	87	89
7129605	97	100
7129606	80	83
Blank	91	96
LCS	96	102
MS	99	104
MSD	97	103
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13206001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7129591	73	73	68	75	71	73
7129593	63	68	60	69	65	66
7129594	68	65	64	71	65	63
7129595	67	68	64	73	65	68

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1404641
Reported: 08/01/13 at 09:00 AM

Surrogate Quality Control

7129596	77	67	75	82	67	61
7129597	65	74	65	75	68	63
7129598	63	71	68	76	72	70
7129603	68	72	66	75	69	66
7129604	72	69	64	75	65	56
7129605	67	65	59	69	64	66
7129606	70	69	65	76	65	58
Blank	85	76	69	78	78	78
MS	65	74	65	75	68	63
MSD	63	71	68	76	72	70
OPR	70	69	62	72	69	71
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7129591	87	69	61	76	75	79
7129593	86	60	57	72	69	72
7129594	81	57	52	67	68	71
7129595	93	63	56	72	71	76
7129596	90	57	50	71	71	74
7129597	99	70	66	76	76	79
7129598	89	64	66	77	74	79
7129603	93	69	59	73	74	78
7129604	90	57	51	74	70	72
7129605	94	55	45	71	68	74
7129606	96	58	51	77	72	76
Blank	105	68	60	83	89	89
MS	99	70	66	76	76	79
MSD	89	64	66	77	74	79
OPR	95	61	56	74	76	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7129591	77	80	79	67	79
7129593	73	77	78	61	74
7129594	71	70	66	64	71
7129595	74	81	81	59	75
7129596	74	74	70	72	78
7129597	80	88	89	64	79
7129598	79	78	84	62	74
7129603	79	82	79	63	79
7129604	73	78	76	67	77
7129605	74	73	68	61	75
7129606	75	78	81	65	80
Blank	91	93	85	71	86
MS	80	88	89	64	79
MSD	79	78	84	62	74
OPR	80	83	78	60	76
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Cip#14041641 Sample#7129591-606

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/16/2013
CarrierName: FedEx
AirbillNo: 796244297112

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130716-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-510-SA8-SB-0.0-0.5	7/16/13 08:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-510-SA8-SB-0.0-0.5	7/16/13 08:30	SO	None	1 - 4 oz glass	10 day														X																	
TB-071613	7/16/13 08:00	WQ	HCl	6 - 40 mL Vial	10 day																	X		X												
SL-505-SA8-SB-0.0-0.5	7/16/13 08:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-505-SA8-SB-0.0-0.5	7/16/13 08:55	SO	None	1 - 4 oz glass	10 day														X																	
SL-505-SA8-SB-4.0-5.0	7/16/13 09:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X										
SL-505-SA8-SB-4.0-5.0	7/16/13 09:30	SO	None	2 - Encore	10 day																			X												
SL-504-SA8-SB-0.0-0.5	7/16/13 11:45	SO	None	2 - SS-Sleeve	10 day	X	X			X		X		X	X		X									X										
SL-504-SA8-SB-0.0-0.5	7/16/13 11:45	SO	None	2 - 4 oz glass	10 day														X	X																
SL-504-SA8-SB-2.5-3.5MS	7/16/13 12:00	SO	None	6 - 16 oz glass	10 day	X	X			X		X		X	X		X	X								X										MS/MSD
SL-504-SA8-SB-2.5-3.5MS	7/16/13 12:00	SO	None	1 - 8 oz glass	10 day															X																MS/MSD
SL-504-SA8-SB-2.5-3.5MS	7/16/13 12:00	SO	None	15 - Encore	10 day																	X		X												MS/MSD
SL-804-SA8-SB-2.5-3.5	7/16/13 12:10	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X		X	X								X										
SL-804-SA8-SB-2.5-3.5	7/16/13 12:10	SO	None	1 - 4 oz glass	10 day															X																
SL-804-SA8-SB-2.5-3.5	7/16/13 12:10	SO	None	5 - Encore	10 day																	X		X												
SL-507-SA8-SB-3.0-4.0	7/16/13 13:10	SO	None	5 - Encore	10 day																	X		X												

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	07/16/13	1600									
										7/17/13	0920

COC Rev 2

COC: 20130716-01, Page 1 of 1

acct#13013 Grp#1404641 Sample#7129591-606

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/16/2013
CarrierName: FedEx
AirbillNo: 796244297112

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130716-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-507-SA8-SB-0.0-0.5	7/16/13 12:55	SO	None	2 - SS-Sleeve	10 day	X	X			X		X		X	X	X	X			X						X										
SL-507-SA8-SB-0.0-0.5	7/16/13 12:55	SO	None	2 - 4 oz glass	10 day														X	X																
SL-507-SA8-SB-3.0-4.0	7/16/13 13:10	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X	X	X	X	X							X										
SL-507-SA8-SB-3.0-4.0	7/16/13 13:10	SO	None	1 - 4 oz glass	10 day															X																
SL-508-SA8-SB-0.0-0.5	7/16/13 13:30	SO	None	2 - SS-Sleeve	10 day	X	X			X		X		X	X	X	X			X						X										
SL-508-SA8-SB-0.0-0.5	7/16/13 13:30	SO	None	2 - 4 oz glass	10 day														X	X																

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	7/16	1600									
										7/17/13	0920

COC Rev 2

COC 20130716-02, Page 1 of 1

1 of 1

eurofins | Lancaster Laboratories

C# 1404641

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 7/17/13

Time of Receipt: 0920

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	2.6	TB	WI	Y	B	
2	↓	1.2	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 964 **Date/Time:** 7/17/13 1003

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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SAMPLE DELIVERY GROUP

PH069

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 01, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/18/2013
Group Number: 1405000
SDG: PH069
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB1-071713 Water	7130895
EB2-071713 Water	7130896
SL-512-SA8-SB-0.0-0.5 Soil	7130897
SL-514-SA8-SB-0.0-0.5 Soil	7130898
SL-514-SA8-SB-4.0-5.0 Soil	7130899
SL-514-SA8-SB-7.5-8.5 Soil	7130900
SL-515-SA8-SB-0.0-0.5 Soil	7130901
SL-515-SA8-SB-4.0-5.0 Soil	7130902
SL-515-SA8-SB-9.0-10.0 Soil	7130903
SL-515-SA8-SB-14.0-15.0 Soil	7130904
TB-071713 Water	7130905
SL-513-SA8-SB-0.0-0.5 Soil	7130906
SL-513-SA8-SB-4.0-5.0 Soil	7130907
SL-513-SA8-SB-8.0-9.0 Soil	7130908

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: EB1-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130895
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:00 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB117 SDG#: PH069-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	7	J	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130895
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:00 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB117 SDG#: PH069-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: chlorotrifluoroethane.						
GC/MS Semivolatiles	**SW-846 8270D**		ug/l		ug/l	ug/l	
10461	Aniline	62-53-3	1	U	1	0.6	1
10461	Benzidine	92-87-5	66	U	66	22	1
10461	Benzoic acid	65-85-0	17	U	17	7	1
10461	Benzyl alcohol	100-51-6	17	U	17	6	1
10461	1,1'-Biphenyl	92-52-4	1	U	1	0.6	1
10461	4-Bromophenyl-phenylether	101-55-3	1	U	1	0.6	1
10461	Carbazole	86-74-8	1	U	1	0.6	1
10461	4-Chloro-3-methylphenol	59-50-7	1	U	1	0.6	1
10461	4-Chloroaniline	106-47-8	1	U	1	0.6	1
10461	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	0.6	1
10461	bis(2-Chloroethyl)ether	111-44-4	1	U	1	0.6	1
10461	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	0.6	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10461	2-Chloronaphthalene	91-58-7	1	U	1	0.4	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130895
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:00 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB117 SDG#: PH069-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/l		ug/l	ug/l	
10461	2-Chlorophenol	95-57-8	1	U	1	0.6	1
10461	4-Chlorophenyl-phenylether	7005-72-3	1	U	1	0.6	1
10461	Dibenzofuran	132-64-9	1	U	1	0.6	1
10461	1,2-Dichlorobenzene	95-50-1	1	U	1	0.6	1
10461	1,3-Dichlorobenzene	541-73-1	1	U	1	0.6	1
10461	1,4-Dichlorobenzene	106-46-7	1	U	1	0.6	1
10461	3,3'-Dichlorobenzidine	91-94-1	6	U	6	2	1
10461	2,4-Dichlorophenol	120-83-2	1	U	1	0.6	1
10461	2,6-Dichlorophenol	87-65-0	1	U	1	0.6	1
10461	2,4-Dimethylphenol	105-67-9	1	U	1	0.6	1
10461	3,5-Dimethylphenol	108-68-9	11	U	11	3	1
10461	4,6-Dinitro-2-methylphenol	534-52-1	17	U	17	6	1
10461	2,4-Dinitrophenol	51-28-5	33	U	33	11	1
10461	1,2-Diphenylhydrazine	122-66-7	1	U	1	0.6	1
10461	Hexachlorobenzene	118-74-1	0.6	U	0.6	0.1	1
10461	Hexachlorobutadiene	87-68-3	1	U	1	0.6	1
10461	Hexachlorocyclopentadiene	77-47-4	17	U	17	6	1
10461	Hexachloroethane	67-72-1	6	U	6	1	1
10461	Isophorone	78-59-1	1	U	1	0.6	1
10461	2-Methylphenol	95-48-7	1	U	1	0.6	1
10461	4-Methylphenol	106-44-5	1	U	1	0.6	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10461	NDPA as diphenylamine	n.a.	6	U	6	2	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10461	2-Nitroaniline	88-74-4	1	U	1	0.6	1
10461	3-Nitroaniline	99-09-2	1	U	1	0.6	1
10461	4-Nitroaniline	100-01-6	1	U	1	0.6	1
10461	Nitrobenzene	98-95-3	1	U	1	0.6	1
10461	2-Nitrophenol	88-75-5	1	U	1	0.6	1
10461	4-Nitrophenol	100-02-7	33	U	33	11	1
10461	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	0.6	1
10461	N-Nitrosodiphenylamine	86-30-6	1	U	1	0.6	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10461	Pentachlorophenol	87-86-5	6	U	6	1	1
10461	Phenol	108-95-2	1	U	1	0.6	1
10461	Pyridine	110-86-1	6	U	6	2	1
10461	1,2,4-Trichlorobenzene	120-82-1	1	U	1	0.6	1
10461	2,4,5-Trichlorophenol	95-95-4	1	U	1	0.6	1
10461	2,4,6-Trichlorophenol	88-06-2	1	U	1	0.6	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.055	U	0.055	0.011	1
12971	Acenaphthylene	208-96-8	0.055	U	0.055	0.011	1
12971	Anthracene	120-12-7	0.055	U	0.055	0.011	1
12971	Benzo(a)anthracene	56-55-3	0.055	U	0.055	0.011	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130895
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:00 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB117 SDG#: PH069-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Benzo(a)pyrene	50-32-8	0.055	U	0.055	0.011	1
12971	Benzo(b)fluoranthene	205-99-2	0.055	U	0.055	0.011	1
12971	Benzo(e)pyrene	192-97-2	0.055	U	0.055	0.011	1
12971	Benzo(g,h,i)perylene	191-24-2	0.055	U	0.055	0.011	1
12971	Benzo(k)fluoranthene	207-08-9	0.055	U	0.055	0.011	1
12971	Butylbenzylphthalate	85-68-7	1.1	U	1.1	0.055	1
12971	Di-n-butylphthalate	84-74-2	0.24	J	1.1	0.055	1
12971	Chrysene	218-01-9	0.055	U	0.055	0.011	1
12971	Dibenz(a,h)anthracene	53-70-3	0.055	U	0.055	0.011	1
12971	Diethylphthalate	84-66-2	0.24	J	1.1	0.055	1
12971	Dimethylphthalate	131-11-3	1.1	U	1.1	0.055	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.19	J	1.1	0.055	1
12971	Fluoranthene	206-44-0	0.055	U	0.055	0.011	1
12971	Fluorene	86-73-7	0.055	U	0.055	0.011	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.055	U	0.055	0.011	1
12971	1-Methylnaphthalene	90-12-0	0.055	U	0.055	0.011	1
12971	2-Methylnaphthalene	91-57-6	0.014	J	0.055	0.011	1
12971	Naphthalene	91-20-3	0.046	J	0.055	0.033	1
12971	N-Nitrosodimethylamine	62-75-9	0.055	U	0.055	0.011	1
12971	Di-n-octylphthalate	117-84-0	1.1	U	1.1	0.055	1
12971	Phenanthrene	85-01-8	0.055	U	0.055	0.033	1
12971	Pyrene	129-00-0	0.055	U	0.055	0.011	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.48	U	0.48	0.15	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.97	U	0.97	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.077	1
10407	Dinoseb	88-85-7	0.48	U	0.48	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.48	U	0.48	0.15	1
10407	MCPA	94-74-6	190	U	190	48	1
10407	MCPP	93-65-2	190	U	190	48	1
10407	2,4,5-T	93-76-5	0.048	U	0.048	0.014	1
10407	2,4,5-TP	93-72-1	0.048	U	0.048	0.0097	1
Perchlorate	**SW-846 6850 1/2007**		**ug/l**		**ug/l**	**ug/l**	
06386	6b Perchlorate (Method 6850)	14797-73-0	1.0	U	1.0	0.20	1
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0083	U	0.0083	0.0017	1
10589	Alpha BHC	319-84-6	0.0083	U	0.0083	0.0025	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130895
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:00 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB117 SDG#: PH069-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Beta BHC	319-85-7	0.0083	U	0.0083	0.0028	1
10589	Gamma BHC - Lindane	58-89-9	0.0083	U	0.0083	0.0017	1
10589	Chlordane	57-74-9	0.42	U	0.42	0.13	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0042	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0042	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0043	1
10589	Delta BHC	319-86-8	0.0083	U	0.0083	0.0028	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0044	1
10589	Endosulfan I	959-98-8	0.0083	U	0.0083	0.0036	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0048	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0068	1
10589	Endrin Aldehyde	7421-93-4	0.083	U	0.083	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0042	1
10589	Heptachlor	76-44-8	0.0083	U	0.0083	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0083	U	0.0083	0.0019	1
10589	Methoxychlor	72-43-5	0.083	U	0.083	0.025	1
10589	Mirex	2385-85-5	0.21	U	0.21	0.071	1
10589	Toxaphene	8001-35-2	2.5	U	2.5	0.83	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.42	U	0.42	0.083	1
10591	Aroclor 5442	12642-23-8	0.42	U	0.42	0.083	1
10591	Aroclor 5460	11126-42-4	0.42	U	0.42	0.092	1
10591	PCB-1016	12674-11-2	0.42	U	0.42	0.083	1
10591	PCB-1221	11104-28-2	0.42	U	0.42	0.083	1
10591	PCB-1232	11141-16-5	0.42	U	0.42	0.17	1
10591	PCB-1242	53469-21-9	0.42	U	0.42	0.083	1
10591	PCB-1248	12672-29-6	0.42	U	0.42	0.083	1
10591	PCB-1254	11097-69-1	0.42	U	0.42	0.083	1
10591	PCB-1260	11096-82-5	0.42	U	0.42	0.13	1
10591	PCB-1262	37324-23-5	0.42	U	0.42	0.17	1
10591	PCB-1268	11100-14-4	0.42	U	0.42	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C15-C20)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C21-C30)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.099	1
10365	EFH (C8-C11)	n.a.	0.099	U	0.099	0.049	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0069	J	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130895
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:00 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB117 SDG#: PH069-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 7199**		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.3	0.010	0.010	1

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Sample Description: EB1-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130895
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:00 by PH

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB117 SDG#: PH069-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	2.00	U	2.00	0.236	1
10915	12378-PeCDD	40321-76-4	9.98	U	9.98	0.242	1
10915	123478-HxCDD	39227-28-6	0.161	JBQ	9.98	0.148	1
10915	123678-HxCDD	57653-85-7	9.98	U	9.98	0.159	1
10915	123789-HxCDD	19408-74-3	9.98	U	9.98	0.158	1
10915	1234678-HpCDD	35822-46-9	0.413	JBQ	9.98	0.170	1
10915	OCDD	3268-87-9	0.814	JBQ	20.0	0.169	1
10915	2378-TCDF	51207-31-9	2.00	U	2.00	0.188	1
10915	12378-PeCDF	57117-41-6	0.406	JB	9.98	0.142	1
10915	23478-PeCDF	57117-31-4	0.132	JBQ	9.98	0.131	1
10915	123478-HxCDF	70648-26-9	0.222	JBQ	9.98	0.0723	1
10915	123678-HxCDF	57117-44-9	0.191	JBQ	9.98	0.0753	1
10915	123789-HxCDF	72918-21-9	0.186	JB	9.98	0.0815	1
10915	234678-HxCDF	60851-34-5	0.224	JB	9.98	0.0716	1
10915	1234678-HpCDF	67562-39-4	0.238	JB	9.98	0.0620	1
10915	1234789-HpCDF	55673-89-7	0.191	JBQ	9.98	0.0696	1
10915	OCDF	39001-02-0	0.512	JBQ	20.0	0.212	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0556				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	79	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130895
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:00 by PH

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Fairfax VA 22030

EB117 SDG#: PH069-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130895
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:00 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB117 SDG#: PH069-01EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y132041AA	07/23/2013 12:54	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y132041AA	07/23/2013 12:54	Angela D Sneeringer	1
10461	8b SVOCs by EPA 8270D	SW-846 8270D	1	13205WAC026	07/26/2013 06:26	Brian K Graham	1
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205WAB026	07/29/2013 22:19	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13205WAB026	07/24/2013 17:05	JoElla L Rice	1
11010	8270D BNA Extraction	SW-846 3510C	1	13205WAC026	07/24/2013 17:05	JoElla L Rice	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13204A20A	07/23/2013 22:17	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13204A20A	07/23/2013 22:17	Catherine J Schwarz	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132030019A	07/24/2013 12:14	Matthew S Listner	1
06386	6b Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132030003A	07/22/2013 16:58	Richard A Shober	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132000014A	07/25/2013 19:46	Jamie L Brillhart	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	132000013A	07/22/2013 03:13	Monica M Souders	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	132000013A	07/20/2013 10:00	William H Saadeh	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132000014A	07/20/2013 10:00	William H Saadeh	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132030019A	07/23/2013 04:25	Roman Kuropatkin	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132010010A	07/22/2013 21:41	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132010010A	07/22/2013 03:00	Sherry L Morrow	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13200001	07/20/2013 03:50	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13200001	07/19/2013 08:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07044	Antimony	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07035	Arsenic	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07046	Barium	SW-846 6010C	1	132040635001	07/27/2013 17:43	John P Hook	1
07047	Beryllium	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
08014	Boron	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07049	Cadmium	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
01750	Calcium	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07051	Chromium	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07052	Cobalt	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130895
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:00 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB117 SDG#: PH069-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07053	Copper	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
01754	Iron	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07055	Lead	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
01757	Magnesium	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07058	Manganese	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07060	Molybdenum	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07061	Nickel	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
10143	Phosphorus	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
01762	Potassium	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
01767	Sodium	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07069	Tin	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07070	Titanium	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07071	Vanadium	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
07072	Zinc	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
10144	Zirconium	SW-846 6010C	1	132040635001	07/26/2013 03:12	Tara L Snyder	1
06041	Selenium	SW-846 6020A	1	132040639001B	07/29/2013 14:29	David K Beck	1
06042	Silver	SW-846 6020A	1	132040639001A	07/29/2013 14:29	David K Beck	1
06044	Strontium	SW-846 6020A	1	132040639001A	07/29/2013 14:29	David K Beck	1
06045	Thallium	SW-846 6020A	1	132040639001A	07/29/2013 14:29	David K Beck	1
00259	3b Mercury 7470A	SW-846 7470A	1	132045713007	07/25/2013 10:41	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132040635001	07/23/2013 10:08	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132040639001	07/23/2013 10:11	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713007	07/24/2013 12:30	Nelli S Markaryan	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13199373401A	07/18/2013 12:24	Joseph E McKenzie	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13199002101A	07/18/2013 20:14	Clayton C Litchmore	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130896
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:30 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB217 SDG#: PH069-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.14	J	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.22	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.14	J	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.014	J	0.051	0.010	1
12971	Naphthalene	91-20-3	0.045	J	0.051	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.031	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.48	U	0.48	0.15	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.97	U	0.97	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.077	1
10407	Dinoseb	88-85-7	0.48	U	0.48	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.48	U	0.48	0.15	1
10407	MCPA	94-74-6	190	U	190	48	1
10407	MCPP	93-65-2	190	U	190	48	1
10407	2,4,5-T	93-76-5	0.048	U	0.048	0.015	1
10407	2,4,5-TP	93-72-1	0.048	U	0.048	0.0097	1
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0083	U	0.0083	0.0017	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130896
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:30 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB217 SDG#: PH069-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Alpha BHC	319-84-6	0.0083	U	0.0083	0.0025	1
10589	Beta BHC	319-85-7	0.0083	U	0.0083	0.0028	1
10589	Gamma BHC - Lindane	58-89-9	0.0083	U	0.0083	0.0017	1
10589	Chlordane	57-74-9	0.41	U	0.41	0.13	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0041	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0041	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0043	1
10589	Delta BHC	319-86-8	0.0083	U	0.0083	0.0028	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0044	1
10589	Endosulfan I	959-98-8	0.0083	U	0.0083	0.0036	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.012	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0048	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0067	1
10589	Endrin Aldehyde	7421-93-4	0.083	U	0.083	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0041	1
10589	Heptachlor	76-44-8	0.0083	U	0.0083	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0083	U	0.0083	0.0019	1
10589	Methoxychlor	72-43-5	0.083	U	0.083	0.025	1
10589	Mirex	2385-85-5	0.21	U	0.21	0.070	1
10589	Toxaphene	8001-35-2	2.5	U	2.5	0.83	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.41	U	0.41	0.083	1
10591	Aroclor 5442	12642-23-8	0.41	U	0.41	0.083	1
10591	Aroclor 5460	11126-42-4	0.41	U	0.41	0.091	1
10591	PCB-1016	12674-11-2	0.41	U	0.41	0.083	1
10591	PCB-1221	11104-28-2	0.41	U	0.41	0.083	1
10591	PCB-1232	11141-16-5	0.41	U	0.41	0.17	1
10591	PCB-1242	53469-21-9	0.41	U	0.41	0.083	1
10591	PCB-1248	12672-29-6	0.41	U	0.41	0.083	1
10591	PCB-1254	11097-69-1	0.41	U	0.41	0.083	1
10591	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
10591	PCB-1262	37324-23-5	0.41	U	0.41	0.17	1
10591	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C15-C20)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C21-C30)	n.a.	0.096	U	0.096	0.048	1
10365	EFH (C30 - C40)	n.a.	0.48	U	0.48	0.096	1
10365	EFH (C8-C11)	n.a.	0.096	U	0.096	0.048	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0054	J	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130896
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:30 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB217 SDG#: PH069-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 7199**		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.0	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130896
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:30 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB217 SDG#: PH069-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.99	U	1.99	0.378	1
10915	12378-PeCDD	40321-76-4	0.542	JQ	9.97	0.387	1
10915	123478-HxCDD	39227-28-6	0.373	JBQ	9.97	0.221	1
10915	123678-HxCDD	57653-85-7	9.97	U	9.97	0.240	1
10915	123789-HxCDD	19408-74-3	9.97	U	9.97	0.237	1
10915	1234678-HpCDD	35822-46-9	0.352	JBQ	9.97	0.277	1
10915	OCDD	3268-87-9	0.797	JBQ	19.9	0.229	1
10915	2378-TCDF	51207-31-9	1.99	U	1.99	0.341	1
10915	12378-PeCDF	57117-41-6	0.532	JB	9.97	0.249	1
10915	23478-PeCDF	57117-31-4	0.245	JB	9.97	0.217	1
10915	123478-HxCDF	70648-26-9	9.97	U	9.97	0.148	1
10915	123678-HxCDF	57117-44-9	0.396	JBQ	9.97	0.146	1
10915	123789-HxCDF	72918-21-9	0.283	JBQ	9.97	0.170	1
10915	234678-HxCDF	60851-34-5	0.359	JBQ	9.97	0.140	1
10915	1234678-HpCDF	67562-39-4	0.174	JBQ	9.97	0.110	1
10915	1234789-HpCDF	55673-89-7	0.519	JBQ	9.97	0.127	1
10915	OCDF	39001-02-0	0.733	JBQ	19.9	0.346	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0896				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	60	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	66	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	56	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	80	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130896
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:30 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB217 SDG#: PH069-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130896
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:30 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB217 SDG#: PH069-02EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205WAB026	07/29/2013 22:46	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13205WAB026	07/24/2013 17:05	JoElla L Rice	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13204A20A	07/23/2013 22:39	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13204A20A	07/23/2013 22:39	Catherine J Schwarz	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132030019A	07/24/2013 12:41	Matthew S Listner	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132000014A	07/25/2013 20:01	Jamie L Brillhart	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	132000013A	07/22/2013 03:31	Monica M Souders	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	132000013A	07/20/2013 10:00	William H Saadeh	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132000014A	07/20/2013 10:00	William H Saadeh	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132030019A	07/23/2013 04:25	Roman Kuropatkin	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132010010A	07/22/2013 22:02	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132010010A	07/22/2013 03:00	Sherry L Morrow	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13200001	07/20/2013 04:47	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13200001	07/19/2013 08:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07044	Antimony	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07035	Arsenic	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07046	Barium	SW-846 6010C	1	132040635001	07/27/2013 17:47	John P Hook	1
07047	Beryllium	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
08014	Boron	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07049	Cadmium	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
01750	Calcium	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07051	Chromium	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07052	Cobalt	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07053	Copper	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
01754	Iron	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07055	Lead	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
01757	Magnesium	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07058	Manganese	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07060	Molybdenum	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07061	Nickel	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130896
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 15:30 by PH

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB217 SDG#: PH069-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10143	Phosphorus	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
01762	Potassium	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
01767	Sodium	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07069	Tin	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07070	Titanium	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07071	Vanadium	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
07072	Zinc	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
10144	Zirconium	SW-846 6010C	1	132040635001	07/26/2013 03:16	Tara L Snyder	1
06041	Selenium	SW-846 6020A	1	132040639001B	07/29/2013 14:32	David K Beck	1
06042	Silver	SW-846 6020A	1	132040639001A	07/29/2013 14:32	David K Beck	1
06044	Strontium	SW-846 6020A	1	132040639001A	07/29/2013 14:32	David K Beck	1
06045	Thallium	SW-846 6020A	1	132040639001A	07/29/2013 14:32	David K Beck	1
00259	3b Mercury 7470A	SW-846 7470A	1	132045713007	07/25/2013 10:43	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132040635001	07/23/2013 10:08	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132040639001	07/23/2013 10:11	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713007	07/24/2013 12:30	Nelli S Markaryan	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13199373401A	07/18/2013 12:38	Joseph E McKenzie	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13199002101A	07/18/2013 20:18	Clayton C Litchmore	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130897
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51200 SDG#: PH069-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.1	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	2.9		1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	6.9	J	18	6.0	1
12969	Chrysene	218-01-9	1.7		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	18	6.0	1
12969	Fluoranthene	206-44-0	1.4	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	0.78	J	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	0.82	J	1.7	0.67	1
12969	Pyrene	129-00-0	1.1	J	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	8.2	J	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	3.0	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	36		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	51		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130897
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51200 SDG#: PH069-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		39.0	7.04	1
06944	Antimony	7440-36-0	3.90	U	3.90	0.722	1
06935	Arsenic	7440-38-2	4.55		3.90	0.683	1
06946	Barium	7440-39-3	86.5		0.976	0.0322	1
06947	Beryllium	7440-41-7	0.593	J	0.976	0.0654	1
07914	Boron	7440-42-8	9.76	U	9.76	0.820	1
06949	Cadmium	7440-43-9	0.235	J	0.976	0.0742	1
01650	Calcium	7440-70-2	2,690		19.5	3.26	1
06951	Chromium	7440-47-3	19.5		2.93	0.156	1
06952	Cobalt	7440-48-4	5.34		0.976	0.0966	1
06953	Copper	7440-50-8	14.6		1.95	0.283	1
01654	Iron	7439-89-6	22,400		39.0	3.53	1
06955	Lead	7439-92-1	11.1		2.93	0.488	1
01656	Lithium	7439-93-2	22.8		3.9	0.33	1
01657	Magnesium	7439-95-4	4,590		9.76	1.63	1
06958	Manganese	7439-96-5	323		0.976	0.0810	1
06960	Molybdenum	7439-98-7	0.340	J	1.95	0.166	1
06961	Nickel	7440-02-0	11.1		1.95	0.127	1
10145	Phosphorus	7723-14-0	493		9.76	2.82	1
01662	Potassium	7440-09-7	3,090		97.6	8.14	1
01667	Sodium	7440-23-5	77.2	J	97.6	16.3	1
06969	Tin	7440-31-5	2.98	J	9.76	0.215	1
06970	Titanium	7440-32-6	1,230		0.976	0.166	1
06971	Vanadium	7440-62-2	37.8		0.976	0.127	1
06972	Zinc	7440-66-6	57.9		3.90	0.195	1
10146	Zirconium	7440-67-7	4.88	U	4.88	0.820	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.204	J	0.390	0.0976	2
06142	Silver	7440-22-4	0.0426	J	0.195	0.0254	2
06144	Strontium	7440-24-6	18.4		0.390	0.0664	2
06145	Thallium	7440-28-0	0.254		0.195	0.0293	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0213		0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	5.99		0.0100	0.0100	1
	The pH was measured in water at 23 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130897
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51200 SDG#: PH069-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.980	U	0.980	0.0423	1
11031	12378-PeCDD	40321-76-4	0.243	JQ	4.90	0.0480	1
11031	123478-HxCDD	39227-28-6	0.156	JBQ	4.90	0.0592	1
11031	123678-HxCDD	57653-85-7	0.473	J	4.90	0.0591	1
11031	123789-HxCDD	19408-74-3	0.587	JB	4.90	0.0595	1
11031	1234678-HpCDD	35822-46-9	4.39	JB	4.90	0.0564	1
11031	OCDD	3268-87-9	40.8	B	9.80	0.0380	1
11031	2378-TCDF	51207-31-9	1.34	C	0.980	0.0725	1
11031	12378-PeCDF	57117-41-6	0.930	JB	4.90	0.0348	1
11031	23478-PeCDF	57117-31-4	0.384	J	4.90	0.0392	1
11031	123478-HxCDF	70648-26-9	0.193	JBQ	4.90	0.0364	1
11031	123678-HxCDF	57117-44-9	0.235	JBQ	4.90	0.0305	1
11031	123789-HxCDF	72918-21-9	0.328	JBQ	4.90	0.0408	1
11031	234678-HxCDF	60851-34-5	0.184	JBQ	4.90	0.0327	1
11031	1234678-HpCDF	67562-39-4	0.827	JBQ	4.90	0.0208	1
11031	1234789-HpCDF	55673-89-7	0.111	J	4.90	0.0447	1
11031	OCDF	39001-02-0	1.57	JB	9.80	0.0641	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.441				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	55	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	58	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	48	26 - 138
13C12-OCDF	43	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130897
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51200 SDG#: PH069-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130897
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51200 SDG#: PH069-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13201SLA026	07/24/2013 08:57	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13201SLA026	07/22/2013 10:30	Olivia Arosemena	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 06:06	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132040015A	07/24/2013 19:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132040015A	07/24/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 15:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	132030637001	07/27/2013 17:28	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	132030637001	07/26/2013 09:17	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	132030637001B	07/25/2013 19:21	David K Beck	2
06142	Silver	SW-846 6020A	1	132030637001A	07/25/2013 19:21	David K Beck	2
06144	Strontium	SW-846 6020A	1	132030637001A	07/25/2013 19:21	David K Beck	2
06145	Thallium	SW-846 6020A	1	132030637001A	07/25/2013 19:21	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-512-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130897
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51200 SDG#: PH069-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132030638002	07/23/2013 09:11	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637001	07/22/2013 23:04	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638002	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13199039401A	07/18/2013 19:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401A	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130898
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51400 SDG#: PH069-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	0.90	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	0.92	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	2.2		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.92	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	2.9		1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	3.0		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	19	6.2	1
12969	Fluoranthene	206-44-0	3.5		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	0.72	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.5	J	1.7	0.69	1
12969	Pyrene	129-00-0	2.9		1.7	0.69	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	94	U	94	46	1
10401	2,4-DB	94-82-6	18	U	18	6.5	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.4	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.4	1
10401	MCPA	94-74-6	2,600	U	2,600	800	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	790	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.86	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.79	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0		2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.6	J	1.8	0.37	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130898
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51400 SDG#: PH069-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.41	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.1	U	7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Reporting limits were raised due to interference from the sample matrix.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	2.9	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	21		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	56		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,400		42.2	7.61	1
06944	Antimony	7440-36-0	4.22	U	4.22	0.781	1
06935	Arsenic	7440-38-2	5.79		4.22	0.739	1
06946	Barium	7440-39-3	167		1.06	0.0348	1
06947	Beryllium	7440-41-7	0.845	J	1.06	0.0707	1
07914	Boron	7440-42-8	10.6	U	10.6	0.887	1
06949	Cadmium	7440-43-9	1.06	U	1.06	0.0803	1
01650	Calcium	7440-70-2	9,780		21.1	3.53	1
06951	Chromium	7440-47-3	33.2		3.17	0.169	1
06952	Cobalt	7440-48-4	9.07		1.06	0.105	1
06953	Copper	7440-50-8	24.1		2.11	0.306	1
01654	Iron	7439-89-6	31,900		211	19.1	5
06955	Lead	7439-92-1	10.5		3.17	0.528	1
01656	Lithium	7439-93-2	23.2		4.2	0.36	1
01657	Magnesium	7439-95-4	6,730		10.6	1.76	1
06958	Manganese	7439-96-5	419		1.06	0.0876	1
06960	Molybdenum	7439-98-7	2.11	U	2.11	0.180	1
06961	Nickel	7440-02-0	18.1		2.11	0.137	1
10145	Phosphorus	7723-14-0	1,350		10.6	3.05	1
01662	Potassium	7440-09-7	5,440		106	8.81	1
01667	Sodium	7440-23-5	196		106	17.6	1
06969	Tin	7440-31-5	3.33	J	10.6	0.232	1
06970	Titanium	7440-32-6	1,570		1.06	0.180	1
06971	Vanadium	7440-62-2	63.2		1.06	0.137	1
06972	Zinc	7440-66-6	88.4		4.22	0.211	1
10146	Zirconium	7440-67-7	3.38	J	5.28	0.887	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130898
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51400 SDG#: PH069-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.256 J	0.422	0.106	2
06142	Silver	7440-22-4	0.0469 J	0.211	0.0275	2
06144	Strontium	7440-24-6	41.3	0.422	0.0718	2
06145	Thallium	7440-28-0	0.327	0.211	0.0317	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0296	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.63	0.0100	0.0100	1
	The pH was measured in water at 23.2 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.3	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130898
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51400 SDG#: PH069-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0488	JQ	1.04	0.0420	1
11031	12378-PeCDD	40321-76-4	0.0902	JQ	5.21	0.0547	1
11031	123478-HxCDD	39227-28-6	0.164	JB	5.21	0.0494	1
11031	123678-HxCDD	57653-85-7	0.515	JQ	5.21	0.0523	1
11031	123789-HxCDD	19408-74-3	0.557	JB	5.21	0.0505	1
11031	1234678-HpCDD	35822-46-9	8.00	B	5.21	0.0663	1
11031	OCDD	3268-87-9	114	B	10.4	0.0561	1
11031	2378-TCDF	51207-31-9	0.678	J	1.04	0.0684	1
11031	12378-PeCDF	57117-41-6	1.28	JB	5.21	0.0415	1
11031	23478-PeCDF	57117-31-4	0.171	JQ	5.21	0.0450	1
11031	123478-HxCDF	70648-26-9	0.198	JB	5.21	0.0286	1
11031	123678-HxCDF	57117-44-9	0.159	JB	5.21	0.0273	1
11031	123789-HxCDF	72918-21-9	0.272	JB	5.21	0.0362	1
11031	234678-HxCDF	60851-34-5	0.141	JB	5.21	0.0291	1
11031	1234678-HpCDF	67562-39-4	2.65	JB	5.21	0.0224	1
11031	1234789-HpCDF	55673-89-7	0.196	JQ	5.21	0.0437	1
11031	OCDF	39001-02-0	9.21	JB	10.4	0.0668	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.399				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130898
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51400 SDG#: PH069-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130898
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51400 SDG#: PH069-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13201SLA026	07/24/2013 09:29	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13201SLA026	07/22/2013 10:30	Olivia Arosemena	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132050025A	07/26/2013 03:24	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132010011A	07/23/2013 16:19	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132010011A	07/21/2013 08:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132050025A	07/25/2013 08:20	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132040015A	07/24/2013 20:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132040015A	07/24/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 16:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	132030637001	07/27/2013 17:36	John P Hook	5
06955	Lead	SW-846 6010C	1	132030637001	07/27/2013 17:32	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130898
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51400 SDG#: PH069-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06972	Zinc	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	132030637001	07/26/2013 09:20	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	132030637001B	07/25/2013 19:23	David K Beck	2
06142	Silver	SW-846 6020A	1	132030637001A	07/25/2013 19:23	David K Beck	2
06144	Strontium	SW-846 6020A	1	132030637001A	07/25/2013 19:23	David K Beck	2
06145	Thallium	SW-846 6020A	1	132030637001A	07/25/2013 19:23	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638002	07/23/2013 09:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637001	07/22/2013 23:04	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638002	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13199039401A	07/18/2013 19:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401A	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130899
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 09:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51440 SDG#: PH069-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.78	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.78	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.78	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.78	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.78	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.78	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	24.32
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	43	U	43	14	1
10401	Dalapon	75-99-0	110	U	110	52	1
10401	2,4-DB	94-82-6	20	U	20	7.3	1
10401	Dicamba	1918-00-9	14	U	14	4.7	1
10401	Dinoseb	88-85-7	28	U	28	11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	20	U	20	11	1
10401	MCPA	94-74-6	3,000	U	3,000	900	1
10401	MCPP (Mecoprop)	93-65-2	3,000	U	3,000	890	1
10401	2,4,5-T	93-76-5	2.0	U	2.0	0.97	1
10401	2,4,5-TP	93-72-1	2.0	U	2.0	0.89	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.98	U	0.98	0.20	1
10590	Alpha BHC	319-84-6	0.98	U	0.98	0.20	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.98	U	0.98	0.20	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130899
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 09:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51440 SDG#: PH069-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	20	U	20	4.7	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1
10590	p,p-DDT	50-29-3	0.76	J	2.0	0.41	1
10590	Delta BHC	319-86-8	0.98	U	0.98	0.53	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.98	U	0.98	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.71	1
10590	Heptachlor	76-44-8	0.98	U	0.98	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.98	U	0.98	0.20	1
10590	Methoxychlor	72-43-5	7.9	U	7.9	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.41	1
10590	Toxaphene	8001-35-2	39	U	39	17	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C15-C20)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C21-C30)	n.a.	5.0	J	5.9	2.4	1
12952	EFH (C30-C40)	n.a.	21		12	4.7	1
12952	EFH (C8-C11)	n.a.	5.9	U	5.9	2.4	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,100		46.9	8.46	1
06944	Antimony	7440-36-0	7.33		4.69	0.868	1
06935	Arsenic	7440-38-2	6.30		4.69	0.821	1
06946	Barium	7440-39-3	91.1		1.17	0.0387	1
06947	Beryllium	7440-41-7	0.378	J	1.17	0.0786	1
07914	Boron	7440-42-8	2.51	J	11.7	0.985	1
06949	Cadmium	7440-43-9	0.223	J	1.17	0.0892	1
01650	Calcium	7440-70-2	113,000		117	19.6	5
06951	Chromium	7440-47-3	30.5		3.52	0.188	1
06952	Cobalt	7440-48-4	7.67		1.17	0.116	1
06953	Copper	7440-50-8	19.7		2.35	0.340	1
01654	Iron	7439-89-6	28,700		46.9	4.25	1
06955	Lead	7439-92-1	8.38		3.52	0.587	1
01656	Lithium	7439-93-2	21.4		4.7	0.40	1
01657	Magnesium	7439-95-4	6,650		11.7	1.96	1
06958	Manganese	7439-96-5	323		1.17	0.0974	1
06960	Molybdenum	7439-98-7	2.47		2.35	0.199	1
06961	Nickel	7440-02-0	15.7		2.35	0.153	1
10145	Phosphorus	7723-14-0	423		11.7	3.39	1
01662	Potassium	7440-09-7	2,590		117	9.78	1
01667	Sodium	7440-23-5	173		117	19.6	1
06969	Tin	7440-31-5	3.05	J	11.7	0.258	1
06970	Titanium	7440-32-6	1,280		1.17	0.199	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130899
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 09:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51440 SDG#: PH069-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06971	Vanadium	7440-62-2	62.5	1.17	0.153	1
06972	Zinc	7440-66-6	55.6	4.69	0.235	1
10146	Zirconium	7440-67-7	3.34 J	5.87	0.985	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.469 U	0.469	0.117	2
06142	Silver	7440-22-4	0.0467 J	0.235	0.0305	2
06144	Strontium	7440-24-6	147	1.17	0.199	5
06145	Thallium	7440-28-0	0.242	0.235	0.0352	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0194 U	0.0194	0.0117	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.32	0.0100	0.0100	1
	The pH was measured in water at 22.9 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	15.6	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130899
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 09:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51440 SDG#: PH069-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.13	U	1.13	0.0517	1
11031	12378-PeCDD	40321-76-4	0.0833	JQ	5.67	0.0572	1
11031	123478-HxCDD	39227-28-6	5.67	U	5.67	0.0346	1
11031	123678-HxCDD	57653-85-7	0.0534	JQ	5.67	0.0368	1
11031	123789-HxCDD	19408-74-3	0.0729	JB	5.67	0.0353	1
11031	1234678-HpCDD	35822-46-9	0.133	JBQ	5.67	0.0391	1
11031	OCDD	3268-87-9	0.864	JB	11.3	0.0364	1
11031	2378-TCDF	51207-31-9	1.13	U	1.13	0.0500	1
11031	12378-PeCDF	57117-41-6	5.67	U	5.67	0.0297	1
11031	23478-PeCDF	57117-31-4	0.0591	JQ	5.67	0.0313	1
11031	123478-HxCDF	70648-26-9	0.0270	JBQ	5.67	0.0204	1
11031	123678-HxCDF	57117-44-9	5.67	U	5.67	0.0201	1
11031	123789-HxCDF	72918-21-9	0.0427	JBQ	5.67	0.0282	1
11031	234678-HxCDF	60851-34-5	0.0234	JB	5.67	0.0200	1
11031	1234678-HpCDF	67562-39-4	0.0499	JBQ	5.67	0.0147	1
11031	1234789-HpCDF	55673-89-7	5.67	U	5.67	0.0262	1
11031	OCDF	39001-02-0	0.0864	JBQ	11.3	0.0566	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00995				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	55	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130899
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 09:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51440 SDG#: PH069-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130899
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 09:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51440 SDG#: PH069-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13201SLA026	07/24/2013 10:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13201SLA026	07/22/2013 10:30	Olivia Arosemena	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/22/2013 22:04	Laura M Krieger	24.32
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319931750	07/18/2013 17:14	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319931750	07/18/2013 17:13	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132050025A	07/26/2013 04:45	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132010011A	07/23/2013 16:35	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132010011A	07/21/2013 08:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132050025A	07/25/2013 08:20	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132040015A	07/24/2013 18:28	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132040015A	07/24/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 17:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	132030637001	07/27/2013 17:43	John P Hook	5
06951	Chromium	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	132030637001	07/27/2013 17:39	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130899
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 09:55 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51440 SDG#: PH069-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	132030637001	07/26/2013 09:32	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	132030637001B	07/25/2013 19:30	David K Beck	2
06142	Silver	SW-846 6020A	1	132030637001A	07/25/2013 19:30	David K Beck	2
06144	Strontium	SW-846 6020A	1	132030637001A	07/29/2013 18:11	David K Beck	5
06145	Thallium	SW-846 6020A	1	132030637001A	07/25/2013 19:30	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638002	07/23/2013 09:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637001	07/22/2013 23:04	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638002	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13199039401A	07/18/2013 19:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401A	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130900
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 10:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51475 SDG#: PH069-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.78	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.78	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.78	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.78	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.78	1
12969	Naphthalene	91-20-3	0.91	J	1.9	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.78	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	22.48
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	43	U	43	14	1
10401	Dalapon	75-99-0	110	U	110	52	1
10401	2,4-DB	94-82-6	20	U	20	7.3	1
10401	Dicamba	1918-00-9	14	U	14	4.7	1
10401	Dinoseb	88-85-7	28	U	28	11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	20	U	20	11	1
10401	MCPA	94-74-6	3,000	U	3,000	900	1
10401	MCPP (Mecoprop)	93-65-2	3,000	U	3,000	890	1
10401	2,4,5-T	93-76-5	2.0	U	2.0	0.97	1
10401	2,4,5-TP	93-72-1	2.0	U	2.0	0.89	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.99	U	0.99	0.20	1
10590	Alpha BHC	319-84-6	0.99	U	0.99	0.20	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130900
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 10:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51475 SDG#: PH069-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Beta BHC	319-85-7	2.3	U	2.3	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.99	U	0.99	0.20	1
10590	Chlordane	57-74-9	20	U	20	4.8	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.42	1
10590	Delta BHC	319-86-8	0.99	U	0.99	0.54	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.99	U	0.99	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.71	1
10590	Heptachlor	76-44-8	0.99	U	0.99	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.99	U	0.99	0.20	1
10590	Methoxychlor	72-43-5	8.0	U	8.0	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.42	1
10590	Toxaphene	8001-35-2	39	U	39	17	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C15-C20)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C21-C30)	n.a.	3.6	J	5.9	2.4	1
12952	EFH (C30-C40)	n.a.	12		12	4.8	1
12952	EFH (C8-C11)	n.a.	5.9	U	5.9	2.4	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,100		46.6	8.41	1
06944	Antimony	7440-36-0	5.55		4.66	0.863	1
06935	Arsenic	7440-38-2	7.03		4.66	0.816	1
06946	Barium	7440-39-3	81.0		1.17	0.0385	1
06947	Beryllium	7440-41-7	0.409	J	1.17	0.0781	1
07914	Boron	7440-42-8	1.24	J	11.7	0.979	1
06949	Cadmium	7440-43-9	0.117	J	1.17	0.0886	1
01650	Calcium	7440-70-2	104,000		117	19.5	5
06951	Chromium	7440-47-3	29.6		3.50	0.187	1
06952	Cobalt	7440-48-4	9.37		1.17	0.115	1
06953	Copper	7440-50-8	19.5		2.33	0.338	1
01654	Iron	7439-89-6	28,700		46.6	4.22	1
06955	Lead	7439-92-1	9.43		3.50	0.583	1
01656	Lithium	7439-93-2	21.0		4.7	0.40	1
01657	Magnesium	7439-95-4	6,630		11.7	1.95	1
06958	Manganese	7439-96-5	455		1.17	0.0968	1
06960	Molybdenum	7439-98-7	2.30	J	2.33	0.198	1
06961	Nickel	7440-02-0	17.3		2.33	0.152	1
10145	Phosphorus	7723-14-0	483		11.7	3.37	1
01662	Potassium	7440-09-7	2,690		117	9.72	1
01667	Sodium	7440-23-5	181		117	19.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130900
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 10:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51475 SDG#: PH069-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06969	Tin	7440-31-5	3.00	J	11.7	0.256	1
06970	Titanium	7440-32-6	1,170		1.17	0.198	1
06971	Vanadium	7440-62-2	60.1		1.17	0.152	1
06972	Zinc	7440-66-6	60.7		4.66	0.233	1
10146	Zirconium	7440-67-7	3.38	J	5.83	0.979	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.171	J	0.466	0.117	2
06142	Silver	7440-22-4	0.233	U	0.233	0.0303	2
06144	Strontium	7440-24-6	189		1.17	0.198	5
06145	Thallium	7440-28-0	0.266		0.233	0.0350	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0191	U	0.0191	0.0114	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.9 C.	n.a.	8.45		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	15.9		0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13201SLA026	07/24/2013 10:33	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13201SLA026	07/22/2013 10:30	Olivia Arosemena	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/22/2013 22:42	Laura M Krieger	22.48
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319931750	07/18/2013 17:15	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319931750	07/18/2013 17:15	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132050025A	07/26/2013 05:12	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132010011A	07/23/2013 16:50	Jamie L Brillhart	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-514-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130900
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 10:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51475 SDG#: PH069-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132010011A	07/21/2013 08:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132050025A	07/25/2013 08:20	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132040015A	07/24/2013 18:49	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132040015A	07/24/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	132030637001	07/27/2013 17:01	John P Hook	5
06951	Chromium	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	132030637001	07/27/2013 16:37	John P Hook	1
06955	Lead	SW-846 6010C	1	132030637001	07/27/2013 16:37	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	132030637001	07/26/2013 08:53	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	132030637001B	07/25/2013 19:07	David K Beck	2
06142	Silver	SW-846 6020A	1	132030637001A	07/25/2013 19:07	David K Beck	2
06144	Strontium	SW-846 6020A	1	132030637001A	07/29/2013 18:01	David K Beck	5
06145	Thallium	SW-846 6020A	1	132030637001A	07/25/2013 19:07	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638002	07/23/2013 09:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637001	07/22/2013 23:04	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638002	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13199039401A	07/18/2013 19:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401A	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130901
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 10:50 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH069-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.5	10
12969	Acenaphthylene	208-96-8	19	U	19	3.7	10
12969	Anthracene	120-12-7	19	U	19	3.7	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.5	10
12969	Benzo(a)pyrene	50-32-8	19	U	19	7.5	10
12969	Benzo(b)fluoranthene	205-99-2	19	U	19	7.5	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	37	10
12969	Benzo(g,h,i)perylene	191-24-2	19	U	19	7.5	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.5	10
12969	Butylbenzylphthalate	85-68-7	200	U	200	67	10
12969	Di-n-butylphthalate	84-74-2	200	U	200	67	10
12969	Chrysene	218-01-9	5.1	J	19	3.7	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.5	10
12969	Diethylphthalate	84-66-2	200	U	200	67	10
12969	Dimethylphthalate	131-11-3	200	U	200	67	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	200	U	200	67	10
12969	Fluoranthene	206-44-0	19	U	19	7.5	10
12969	Fluorene	86-73-7	19	U	19	7.5	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.5	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.5	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.5	10
12969	Naphthalene	91-20-3	19	U	19	7.5	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.5	10
12969	Di-n-octylphthalate	117-84-0	200	U	200	67	10
12969	Phenanthrene	85-01-8	19	U	19	7.5	10
12969	Pyrene	129-00-0	19	U	19	7.5	10
	Reporting limits were raised due to interference from the sample matrix.						
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.7	U	5.7	2.4	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	20		19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	140	U	140	57	25
12952	EFH (C15-C20)	n.a.	140	U	140	57	25
12952	EFH (C21-C30)	n.a.	320		140	57	25

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130901
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 10:50 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH069-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C30-C40)	n.a.	1,100		280	110	25
12952	EFH (C8-C11)	n.a.	140	U	140	57	25
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,700		44.2	7.96	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.817	1
06935	Arsenic	7440-38-2	6.26		4.42	0.773	1
06946	Barium	7440-39-3	126		1.10	0.0364	1
06947	Beryllium	7440-41-7	0.890	J	1.10	0.0740	1
07914	Boron	7440-42-8	11.0	U	11.0	0.928	1
06949	Cadmium	7440-43-9	0.116	J	1.10	0.0839	1
01650	Calcium	7440-70-2	6,110		22.1	3.69	1
06951	Chromium	7440-47-3	35.5		3.31	0.177	1
06952	Cobalt	7440-48-4	9.35		1.10	0.109	1
06953	Copper	7440-50-8	24.0		2.21	0.320	1
01654	Iron	7439-89-6	30,300		88.4	8.00	2
06955	Lead	7439-92-1	11.1		3.31	0.552	1
01656	Lithium	7439-93-2	23.0		4.4	0.38	1
01657	Magnesium	7439-95-4	6,950		11.0	1.84	1
06958	Manganese	7439-96-5	500		1.10	0.0917	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	19.6		2.21	0.144	1
10145	Phosphorus	7723-14-0	479		11.0	3.19	1
01662	Potassium	7440-09-7	6,010		110	9.21	1
01667	Sodium	7440-23-5	150		110	18.4	1
06969	Tin	7440-31-5	3.43	J	11.0	0.243	1
06970	Titanium	7440-32-6	1,570		1.10	0.188	1
06971	Vanadium	7440-62-2	64.1		1.10	0.144	1
06972	Zinc	7440-66-6	72.4		4.42	0.221	1
10146	Zirconium	7440-67-7	3.76	J	5.52	0.928	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.258	J	0.442	0.110	2
06142	Silver	7440-22-4	0.0440	J	0.221	0.0287	2
06144	Strontium	7440-24-6	28.6		0.442	0.0751	2
06145	Thallium	7440-28-0	0.346		0.221	0.0331	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0136	J	0.0184	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.23		0.0100	0.0100	1
	The pH was measured in water at 22.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130901
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 10:50 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH069-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130901
LL Group # 1405000
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH069-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0615	JQ	1.11	0.0512	1
11031	12378-PeCDD	40321-76-4	0.191	JQ	5.54	0.0702	1
11031	123478-HxCDD	39227-28-6	0.142	JB	5.54	0.0620	1
11031	123678-HxCDD	57653-85-7	0.698	J	5.54	0.0651	1
11031	123789-HxCDD	19408-74-3	0.637	JB	5.54	0.0606	1
11031	1234678-HpCDD	35822-46-9	12.6	B	5.54	0.0679	1
11031	OCDD	3268-87-9	134	B	11.1	0.0451	1
11031	2378-TCDF	51207-31-9	0.0827	JQ	1.11	0.0711	1
11031	12378-PeCDF	57117-41-6	0.476	JB	5.54	0.0464	1
11031	23478-PeCDF	57117-31-4	5.54	U	5.54	0.0411	1
11031	123478-HxCDF	70648-26-9	0.0707	JB	5.54	0.0314	1
11031	123678-HxCDF	57117-44-9	0.143	JBQ	5.54	0.0303	1
11031	123789-HxCDF	72918-21-9	0.724	JB	5.54	0.0322	1
11031	234678-HxCDF	60851-34-5	0.169	JBQ	5.54	0.0324	1
11031	1234678-HpCDF	67562-39-4	1.64	JB	5.54	0.0271	1
11031	1234789-HpCDF	55673-89-7	0.185	J	5.54	0.0307	1
11031	OCDF	39001-02-0	3.24	JB	11.1	0.0346	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.427				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	109	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	94	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130901
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 10:50 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH069-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130901
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 10:50 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH069-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13201SLA026	07/24/2013 11:04	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13201SLA026	07/22/2013 10:30	Olivia Arosemena	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 20:08	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 06:25	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132040015A	07/24/2013 21:57	Heather E Williams	25
12959	EFH soil ext.(microwave)	SW-846 3546	1	132040015A	07/24/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 18:43	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	132030637001	07/27/2013 17:47	John P Hook	2
06955	Lead	SW-846 6010C	1	132030637001	07/27/2013 17:57	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	132030637001	07/26/2013 09:36	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130901
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 10:50 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51500 SDG#: PH069-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132030637001B	07/25/2013 19:33	David K Beck	2
06142	Silver	SW-846 6020A	1	132030637001A	07/25/2013 19:33	David K Beck	2
06144	Strontium	SW-846 6020A	1	132030637001A	07/25/2013 19:33	David K Beck	2
06145	Thallium	SW-846 6020A	1	132030637001A	07/25/2013 19:33	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638002	07/23/2013 09:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637001	07/22/2013 23:04	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638002	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13199039401A	07/18/2013 19:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401A	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130902
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:05 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH069-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.33
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.7	U	5.7	2.4	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130902
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:05 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH069-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,500		44.2	7.96	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.817	1
06935	Arsenic	7440-38-2	6.45		4.42	0.773	1
06946	Barium	7440-39-3	139		1.10	0.0364	1
06947	Beryllium	7440-41-7	0.984	J	1.10	0.0740	1
07914	Boron	7440-42-8	11.0	U	11.0	0.928	1
06949	Cadmium	7440-43-9	1.10	U	1.10	0.0839	1
01650	Calcium	7440-70-2	6,750		22.1	3.69	1
06951	Chromium	7440-47-3	32.7		3.31	0.177	1
06952	Cobalt	7440-48-4	11.2		1.10	0.109	1
06953	Copper	7440-50-8	18.2		2.21	0.320	1
01654	Iron	7439-89-6	30,600		88.4	8.00	2
06955	Lead	7439-92-1	10.0		3.31	0.552	1
01656	Lithium	7439-93-2	26.5		4.4	0.38	1
01657	Magnesium	7439-95-4	5,840		11.0	1.84	1
06958	Manganese	7439-96-5	498		1.10	0.0917	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	19.3		2.21	0.144	1
10145	Phosphorus	7723-14-0	287		11.0	3.19	1
01662	Potassium	7440-09-7	3,110		110	9.21	1
01667	Sodium	7440-23-5	118		110	18.4	1
06969	Tin	7440-31-5	3.38	J	11.0	0.243	1
06970	Titanium	7440-32-6	1,420		1.10	0.188	1
06971	Vanadium	7440-62-2	62.8		1.10	0.144	1
06972	Zinc	7440-66-6	60.1		4.42	0.221	1
10146	Zirconium	7440-67-7	3.04	J	5.52	0.928	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.442	U	0.442	0.110	2
06142	Silver	7440-22-4	0.0353	J	0.221	0.0287	2
06144	Strontium	7440-24-6	27.8		0.442	0.0751	2
06145	Thallium	7440-28-0	0.334		0.221	0.0331	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.81		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130902
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:05 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH069-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	12.1	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130902
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:05 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH069-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.12 U	1.12	0.0385	1
11031	12378-PeCDD	40321-76-4	5.59 U	5.59	0.0415	1
11031	123478-HxCDD	39227-28-6	0.0544 JBQ	5.59	0.0280	1
11031	123678-HxCDD	57653-85-7	0.0382 J	5.59	0.0279	1
11031	123789-HxCDD	19408-74-3	0.115 JBQ	5.59	0.0279	1
11031	1234678-HpCDD	35822-46-9	0.0770 JBQ	5.59	0.0402	1
11031	OCDD	3268-87-9	0.658 JB	11.2	0.0392	1
11031	2378-TCDF	51207-31-9	1.12 U	1.12	0.0308	1
11031	12378-PeCDF	57117-41-6	0.125 JBQ	5.59	0.0225	1
11031	23478-PeCDF	57117-31-4	0.0722 JQ	5.59	0.0246	1
11031	123478-HxCDF	70648-26-9	0.0599 JBQ	5.59	0.0167	1
11031	123678-HxCDF	57117-44-9	0.0461 JB	5.59	0.0151	1
11031	123789-HxCDF	72918-21-9	0.0755 JBQ	5.59	0.0207	1
11031	234678-HxCDF	60851-34-5	0.0345 JBQ	5.59	0.0164	1
11031	1234678-HpCDF	67562-39-4	0.0819 JBQ	5.59	0.0117	1
11031	1234789-HpCDF	55673-89-7	0.0563 JQ	5.59	0.0225	1
11031	OCDF	39001-02-0	0.135 JBQ	11.2	0.0563	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00865			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130902
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:05 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH069-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130902
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:05 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH069-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13201SLA026	07/24/2013 11:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13201SLA026	07/22/2013 10:30	Olivia Arosemena	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/22/2013 23:20	Laura M Krieger	21.33
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319931750	07/18/2013 18:08	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319931750	07/18/2013 18:09	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 20:01	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 06:43	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132040015A	07/24/2013 17:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132040015A	07/24/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 19:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	132030637001	07/27/2013 18:05	John P Hook	2
06955	Lead	SW-846 6010C	1	132030637001	07/27/2013 18:01	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130902
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:05 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51540 SDG#: PH069-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	132030637001	07/26/2013 09:40	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	132030637001B	07/25/2013 19:35	David K Beck	2
06142	Silver	SW-846 6020A	1	132030637001A	07/25/2013 19:35	David K Beck	2
06144	Strontium	SW-846 6020A	1	132030637001A	07/25/2013 19:35	David K Beck	2
06145	Thallium	SW-846 6020A	1	132030637001A	07/25/2013 19:35	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638002	07/23/2013 10:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637001	07/22/2013 23:04	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638002	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13199039401A	07/18/2013 19:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401A	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130903
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:20 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH069-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.79	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.79	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.79	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.79	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.79	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.79	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.1	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.1	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.79	1
12969	Diethylphthalate	84-66-2	21	U	21	7.1	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.1	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.79	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.79	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.79	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.79	1
12969	2-Methylnaphthalene	91-57-6	2.0	U	2.0	0.79	1
12969	Naphthalene	91-20-3	2.0	U	2.0	0.79	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.79	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.1	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.79	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.79	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	22.98
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	6.0	U	6.0	2.5	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	40	U	40	12	1
10592	Aroclor 5442	12642-23-8	40	U	40	12	1
10592	Aroclor 5460	11126-42-4	40	U	40	12	1
10592	PCB-1016	12674-11-2	20	U	20	4.0	1
10592	PCB-1221	11104-28-2	20	U	20	6.1	1
10592	PCB-1232	11141-16-5	20	U	20	4.9	1
10592	PCB-1242	53469-21-9	20	U	20	4.9	1
10592	PCB-1248	12672-29-6	20	U	20	4.0	1
10592	PCB-1254	11097-69-1	20	U	20	5.3	1
10592	PCB-1260	11096-82-5	20	U	20	4.7	1
10592	PCB-1262	37324-23-5	20	U	20	4.0	1
10592	PCB-1268	11100-14-4	20	U	20	4.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130903
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:20 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH069-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	6.0	U	6.0	2.4	1
12952	EFH (C15-C20)	n.a.	6.0	U	6.0	2.4	1
12952	EFH (C21-C30)	n.a.	6.0	U	6.0	2.4	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.8	1
12952	EFH (C8-C11)	n.a.	6.0	U	6.0	2.4	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	36,200		47.1	8.50	1
06944	Antimony	7440-36-0	4.71	U	4.71	0.872	1
06935	Arsenic	7440-38-2	7.13		4.71	0.825	1
06946	Barium	7440-39-3	120		1.18	0.0389	1
06947	Beryllium	7440-41-7	1.13	J	1.18	0.0789	1
07914	Boron	7440-42-8	11.8	U	11.8	0.990	1
06949	Cadmium	7440-43-9	1.18	U	1.18	0.0896	1
01650	Calcium	7440-70-2	10,100		23.6	3.94	1
06951	Chromium	7440-47-3	43.3		3.54	0.189	1
06952	Cobalt	7440-48-4	11.2		1.18	0.117	1
06953	Copper	7440-50-8	26.7		2.36	0.342	1
01654	Iron	7439-89-6	38,700		236	21.3	5
06955	Lead	7439-92-1	12.0		3.54	0.589	1
01656	Lithium	7439-93-2	27.4		4.7	0.40	1
01657	Magnesium	7439-95-4	9,000		11.8	1.97	1
06958	Manganese	7439-96-5	373		1.18	0.0978	1
06960	Molybdenum	7439-98-7	2.36	U	2.36	0.200	1
06961	Nickel	7440-02-0	22.3		2.36	0.153	1
10145	Phosphorus	7723-14-0	372		11.8	3.41	1
01662	Potassium	7440-09-7	2,930		118	9.83	1
01667	Sodium	7440-23-5	141		118	19.7	1
06969	Tin	7440-31-5	3.76	J	11.8	0.259	1
06970	Titanium	7440-32-6	1,570		1.18	0.200	1
06971	Vanadium	7440-62-2	83.6		1.18	0.153	1
06972	Zinc	7440-66-6	75.1		4.71	0.236	1
10146	Zirconium	7440-67-7	4.44	J	5.89	0.990	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.137	J	0.471	0.118	2
06142	Silver	7440-22-4	0.0431	J	0.236	0.0306	2
06144	Strontium	7440-24-6	47.1		0.471	0.0801	2
06145	Thallium	7440-28-0	0.344		0.236	0.0354	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0195	U	0.0195	0.0117	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.73		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130903
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:20 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH069-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	16.8	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130903
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:20 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH069-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0765 JQ	1.16	0.0536	1
11031	12378-PeCDD	40321-76-4	0.101 JQ	5.82	0.0674	1
11031	123478-HxCDD	39227-28-6	0.0603 JBQ	5.82	0.0369	1
11031	123678-HxCDD	57653-85-7	0.105 JQ	5.82	0.0373	1
11031	123789-HxCDD	19408-74-3	0.120 JB	5.82	0.0400	1
11031	1234678-HpCDD	35822-46-9	0.121 JBQ	5.82	0.0522	1
11031	OCDD	3268-87-9	0.562 JBQ	11.6	0.0464	1
11031	2378-TCDF	51207-31-9	0.0766 JQ	1.16	0.0567	1
11031	12378-PeCDF	57117-41-6	0.152 JB	5.82	0.0418	1
11031	23478-PeCDF	57117-31-4	0.146 J	5.82	0.0389	1
11031	123478-HxCDF	70648-26-9	0.118 JB	5.82	0.0224	1
11031	123678-HxCDF	57117-44-9	0.118 JBQ	5.82	0.0198	1
11031	123789-HxCDF	72918-21-9	0.145 JBQ	5.82	0.0308	1
11031	234678-HxCDF	60851-34-5	0.0653 JBQ	5.82	0.0204	1
11031	1234678-HpCDF	67562-39-4	0.0679 JB	5.82	0.0183	1
11031	1234789-HpCDF	55673-89-7	0.0377 JQ	5.82	0.0306	1
11031	OCDF	39001-02-0	0.129 JBQ	11.6	0.0603	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0728			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	61	26 - 123
13C12-234678-HxCDF	56	28 - 136
13C12-123789-HxCDF	51	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	56	26 - 138
13C12-OCDF	52	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130903
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:20 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH069-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130903
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:20 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH069-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13201SLA026	07/24/2013 12:08	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13201SLA026	07/22/2013 10:30	Olivia Arosemena	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/22/2013 23:58	Laura M Krieger	22.98
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319931750	07/18/2013 18:10	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319931750	07/18/2013 18:10	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 20:34	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 07:01	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132040015A	07/24/2013 17:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132040015A	07/24/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 20:36	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	132030637001	07/27/2013 18:12	John P Hook	5
06955	Lead	SW-846 6010C	1	132030637001	07/27/2013 18:08	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130903
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:20 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51590 SDG#: PH069-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	132030637001	07/26/2013 09:43	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	132030637001B	07/25/2013 19:37	David K Beck	2
06142	Silver	SW-846 6020A	1	132030637001A	07/25/2013 19:37	David K Beck	2
06144	Strontium	SW-846 6020A	1	132030637001A	07/25/2013 19:37	David K Beck	2
06145	Thallium	SW-846 6020A	1	132030637001A	07/25/2013 19:37	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638002	07/23/2013 10:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637001	07/22/2013 23:04	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638002	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13199039401A	07/18/2013 19:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401A	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130904
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:35 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51514 SDG#: PH069-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.73
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.8	U	5.8	2.4	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130904
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:35 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51514 SDG#: PH069-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	2.7	J	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	10	J	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,900		44.8	8.08	1
06944	Antimony	7440-36-0	4.48	U	4.48	0.830	1
06935	Arsenic	7440-38-2	7.22		4.48	0.785	1
06946	Barium	7440-39-3	99.0		1.12	0.0370	1
06947	Beryllium	7440-41-7	0.869	J	1.12	0.0751	1
07914	Boron	7440-42-8	11.2	U	11.2	0.942	1
06949	Cadmium	7440-43-9	1.12	U	1.12	0.0852	1
01650	Calcium	7440-70-2	5,130		22.4	3.74	1
06951	Chromium	7440-47-3	23.8		3.36	0.179	1
06952	Cobalt	7440-48-4	10.2		1.12	0.111	1
06953	Copper	7440-50-8	19.4		2.24	0.325	1
01654	Iron	7439-89-6	28,100		44.8	4.06	1
06955	Lead	7439-92-1	8.30		3.36	0.561	1
01656	Lithium	7439-93-2	19.0		4.5	0.38	1
01657	Magnesium	7439-95-4	5,180		11.2	1.87	1
06958	Manganese	7439-96-5	468		1.12	0.0931	1
06960	Molybdenum	7439-98-7	2.24	U	2.24	0.191	1
06961	Nickel	7440-02-0	13.9		2.24	0.146	1
10145	Phosphorus	7723-14-0	368		11.2	3.24	1
01662	Potassium	7440-09-7	2,480		112	9.35	1
01667	Sodium	7440-23-5	122		112	18.7	1
06969	Tin	7440-31-5	3.34	J	11.2	0.247	1
06970	Titanium	7440-32-6	1,260		1.12	0.191	1
06971	Vanadium	7440-62-2	56.7		1.12	0.146	1
06972	Zinc	7440-66-6	55.1		4.48	0.224	1
10146	Zirconium	7440-67-7	2.60	J	5.61	0.942	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.448	U	0.448	0.112	2
06142	Silver	7440-22-4	0.224	U	0.224	0.0291	2
06144	Strontium	7440-24-6	26.1		0.448	0.0762	2
06145	Thallium	7440-28-0	0.305		0.224	0.0336	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0187	U	0.0187	0.0112	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.47		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130904
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:35 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51514 SDG#: PH069-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	13.4	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130904
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:35 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51514 SDG#: PH069-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0811	JQ	1.14	0.0546	1
11031	12378-PeCDD	40321-76-4	5.71	U	5.71	0.0680	1
11031	123478-HxCDD	39227-28-6	0.194	JBQ	5.71	0.0409	1
11031	123678-HxCDD	57653-85-7	0.121	JQ	5.71	0.0448	1
11031	123789-HxCDD	19408-74-3	0.121	JB	5.71	0.0442	1
11031	1234678-HpCDD	35822-46-9	0.106	JBQ	5.71	0.0470	1
11031	OCDD	3268-87-9	0.675	JB	11.4	0.0417	1
11031	2378-TCDF	51207-31-9	0.0687	JQ	1.14	0.0505	1
11031	12378-PeCDF	57117-41-6	0.333	JBQ	5.71	0.0375	1
11031	23478-PeCDF	57117-31-4	0.151	JQ	5.71	0.0353	1
11031	123478-HxCDF	70648-26-9	0.165	JBQ	5.71	0.0236	1
11031	123678-HxCDF	57117-44-9	0.164	JB	5.71	0.0245	1
11031	123789-HxCDF	72918-21-9	0.134	JBQ	5.71	0.0353	1
11031	234678-HxCDF	60851-34-5	5.71	U	5.71	0.0263	1
11031	1234678-HpCDF	67562-39-4	0.0865	JB	5.71	0.0177	1
11031	1234789-HpCDF	55673-89-7	0.136	JQ	5.71	0.0286	1
11031	OCDF	39001-02-0	0.116	JBQ	11.4	0.0535	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0296				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130904
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:35 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51514 SDG#: PH069-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130904
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:35 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51514 SDG#: PH069-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13201SLA026	07/24/2013 12:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13201SLA026	07/22/2013 10:30	Olivia Arosemena	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 00:36	Laura M Krieger	22.73
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319931750	07/18/2013 18:11	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319931750	07/18/2013 18:11	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 20:47	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 07:20	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132040015A	07/25/2013 14:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132040015A	07/24/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 21:33	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	132030637001	07/27/2013 18:16	John P Hook	1
06955	Lead	SW-846 6010C	1	132030637001	07/27/2013 18:16	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-515-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130904
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 11:35 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51514 SDG#: PH069-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	132030637001	07/26/2013 09:47	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	132030637001B	07/25/2013 19:40	David K Beck	2
06142	Silver	SW-846 6020A	1	132030637001A	07/25/2013 19:40	David K Beck	2
06144	Strontium	SW-846 6020A	1	132030637001A	07/25/2013 19:40	David K Beck	2
06145	Thallium	SW-846 6020A	1	132030637001A	07/25/2013 19:40	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638002	07/23/2013 10:09	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637001	07/22/2013 23:04	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638002	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13199039401A	07/18/2013 19:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401A	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130905
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:00

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB117 SDG#: PH069-11TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	20	U	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130905
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:00

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB117 SDG#: PH069-11TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: chlorotrifluoroethane.

GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y132041AA	07/23/2013 13:15	Angela D Sneeringer	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7130905
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 08:00

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB117 SDG#: PH069-11TB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y132041AA	07/23/2013 13:15	Angela D Sneeringer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13204A20A	07/23/2013 20:50	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13204A20A	07/23/2013 20:50	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130906
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 13:45 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51300 SDG#: PH069-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	540	U	540	180	1
10726	Benzidine	92-87-5	3,600	U	3,600	760	1
10726	Benzo(a)anthracene	56-55-3	5	J	18	4	1
10726	Benzo(a)pyrene	50-32-8	9	J	18	4	1
10726	Benzo(g,h,i)perylene	191-24-2	8	J	18	4	1
10726	Benzo(k)fluoranthene	207-08-9	5	J	18	4	1
10726	Benzoic acid	65-85-0	540	U	540	180	1
10726	Benzyl alcohol	100-51-6	540	U	540	180	1
10726	1,1'-Biphenyl	92-52-4	25	J	36	18	1
10726	4-Bromophenyl-phenylether	101-55-3	36	U	36	18	1
10726	Butylbenzylphthalate	85-68-7	180	U	180	72	1
10726	Di-n-butylphthalate	84-74-2	180	U	180	72	1
10726	Carbazole	86-74-8	36	U	36	18	1
10726	4-Chloro-3-methylphenol	59-50-7	36	U	36	18	1
10726	4-Chloroaniline	106-47-8	36	U	36	18	1
10726	bis(2-Chloroethoxy)methane	111-91-1	36	U	36	18	1
10726	bis(2-Chloroethyl)ether	111-44-4	36	U	36	18	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	36	U	36	18	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	36	U	36	8	1
10726	2-Chlorophenol	95-57-8	36	U	36	18	1
10726	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	18	1
10726	Dibenzofuran	132-64-9	36	U	36	18	1
10726	1,2-Dichlorobenzene	95-50-1	36	U	36	18	1
10726	1,3-Dichlorobenzene	541-73-1	36	U	36	18	1
10726	1,4-Dichlorobenzene	106-46-7	36	U	36	18	1
10726	3,3'-Dichlorobenzidine	91-94-1	360	U	360	110	1
10726	2,4-Dichlorophenol	120-83-2	36	U	36	18	1
10726	2,6-Dichlorophenol	87-65-0	36	U	36	18	1
10726	Diethylphthalate	84-66-2	180	U	180	72	1
10726	2,4-Dimethylphenol	105-67-9	36	U	36	18	1
10726	3,5-Dimethylphenol	108-68-9	180	U	180	36	1
10726	Dimethylphthalate	131-11-3	180	U	180	72	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	540	U	540	180	1
10726	2,4-Dinitrophenol	51-28-5	1,100	U	1,100	320	1
10726	1,2-Diphenylhydrazine	122-66-7	36	U	36	18	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	72	1
10726	Hexachlorobenzene	118-74-1	18	U	18	4	1
10726	Hexachlorobutadiene	87-68-3	36	U	36	18	1
10726	Hexachlorocyclopentadiene	77-47-4	540	U	540	180	1
10726	Hexachloroethane	67-72-1	180	U	180	36	1
10726	Isophorone	78-59-1	36	U	36	18	1
10726	2-Methylphenol	95-48-7	36	U	36	18	1
10726	4-Methylphenol	106-44-5	36	U	36	18	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	4	J	18	4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130906
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 13:45 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51300 SDG#: PH069-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	NDPA as diphenylamine	n.a.	180	U	180	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	36	U	36	18	1
10726	3-Nitroaniline	99-09-2	180	U	180	72	1
10726	4-Nitroaniline	100-01-6	180	U	180	72	1
10726	Nitrobenzene	98-95-3	36	U	36	18	1
10726	2-Nitrophenol	88-75-5	36	U	36	18	1
10726	4-Nitrophenol	100-02-7	540	U	540	180	1
10726	N-Nitroso-di-n-propylamine	621-64-7	36	U	36	18	1
10726	N-Nitrosodiphenylamine	86-30-6	36	U	36	18	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	180	U	180	72	1
10726	Pentachlorophenol	87-86-5	180	U	180	36	1
10726	Phenanthrene	85-01-8	15	J	18	4	1
10726	Phenol	108-95-2	36	U	36	18	1
10726	Pyridine	110-86-1	180	U	180	72	1
10726	1,2,4-Trichlorobenzene	120-82-1	36	U	36	18	1
10726	2,4,5-Trichlorophenol	95-95-4	36	U	36	18	1
10726	2,4,6-Trichlorophenol	88-06-2	36	U	36	18	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	18	U	18	7.2	10
12969	Acenaphthylene	208-96-8	18	U	18	3.6	10
12969	Anthracene	120-12-7	18	U	18	3.6	10
12969	Benzo(b)fluoranthene	205-99-2	13	J	18	7.2	10
12969	Benzo(e)pyrene	192-97-2	180	U	180	36	10
12969	Chrysene	218-01-9	29		18	3.6	10
12969	Dibenz(a,h)anthracene	53-70-3	18	U	18	7.2	10
12969	Fluoranthene	206-44-0	21		18	7.2	10
12969	Fluorene	86-73-7	18	U	18	7.2	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	7.2	10
12969	1-Methylnaphthalene	90-12-0	18	U	18	7.2	10
12969	2-Methylnaphthalene	91-57-6	18	U	18	7.2	10
12969	N-Nitrosodimethylamine	62-75-9	18	U	18	7.2	10
12969	Pyrene	129-00-0	23		18	7.2	10
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	3.2	J	5.5	2.3	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130906
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 13:45 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51300 SDG#: PH069-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	38		19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	11	U	11	4.4	2
12952	EFH (C15-C20)	n.a.	11	U	11	4.4	2
12952	EFH (C21-C30)	n.a.	16		11	4.4	2
12952	EFH (C30-C40)	n.a.	120		22	8.7	2
12952	EFH (C8-C11)	n.a.	11	U	11	4.4	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,500		42.8	7.72	1
06944	Antimony	7440-36-0	1.20	J	4.28	0.792	1
06935	Arsenic	7440-38-2	6.46		4.28	0.749	1
06946	Barium	7440-39-3	117		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.659	J	1.07	0.0717	1
07914	Boron	7440-42-8	2.19	J	10.7	0.899	1
06949	Cadmium	7440-43-9	0.104	J	1.07	0.0813	1
01650	Calcium	7440-70-2	54,400		21.4	3.57	1
06951	Chromium	7440-47-3	35.7		3.21	0.171	1
06952	Cobalt	7440-48-4	9.93		1.07	0.106	1
06953	Copper	7440-50-8	25.9		2.14	0.310	1
01654	Iron	7439-89-6	30,200		85.6	7.75	2
06955	Lead	7439-92-1	10.6		3.21	0.535	1
01656	Lithium	7439-93-2	25.9		4.3	0.36	1
01657	Magnesium	7439-95-4	7,610		10.7	1.79	1
06958	Manganese	7439-96-5	399		1.07	0.0888	1
06960	Molybdenum	7439-98-7	0.861	J	2.14	0.182	1
06961	Nickel	7440-02-0	18.5		2.14	0.139	1
10145	Phosphorus	7723-14-0	556		10.7	3.09	1
01662	Potassium	7440-09-7	5,480		107	8.93	1
01667	Sodium	7440-23-5	134		107	17.9	1
06969	Tin	7440-31-5	3.28	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,520		1.07	0.182	1
06971	Vanadium	7440-62-2	66.9		1.07	0.139	1
06972	Zinc	7440-66-6	83.8		4.28	0.214	1
10146	Zirconium	7440-67-7	2.54	J	5.35	0.899	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.270	J	0.428	0.107	2
06142	Silver	7440-22-4	0.0396	J	0.214	0.0278	2
06144	Strontium	7440-24-6	109		1.07	0.182	5
06145	Thallium	7440-28-0	0.319		0.214	0.0321	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130906
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 13:45 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51300 SDG#: PH069-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	1.03	0.0448	0.0269	2.5
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.49	0.42	0.15	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.7 C.	n.a.	7.79	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	8.4	0.10	0.10	1

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Sample Description: SL-513-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130906
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51300 SDG#: PH069-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0438	1
11031	12378-PeCDD	40321-76-4	0.296	J	5.36	0.0762	1
11031	123478-HxCDD	39227-28-6	0.714	JBQ	5.36	0.0920	1
11031	123678-HxCDD	57653-85-7	1.57	J	5.36	0.104	1
11031	123789-HxCDD	19408-74-3	1.06	JBQ	5.36	0.0986	1
11031	1234678-HpCDD	35822-46-9	43.1	B	5.36	0.106	1
11031	OCDD	3268-87-9	348	B	10.7	0.0516	1
11031	2378-TCDF	51207-31-9	0.365	J	1.07	0.0936	1
11031	12378-PeCDF	57117-41-6	3.88	JB	5.36	0.0559	1
11031	23478-PeCDF	57117-31-4	0.599	J	5.36	0.0488	1
11031	123478-HxCDF	70648-26-9	0.658	JBQ	5.36	0.0386	1
11031	123678-HxCDF	57117-44-9	0.443	JBQ	5.36	0.0442	1
11031	123789-HxCDF	72918-21-9	0.423	JB	5.36	0.0459	1
11031	234678-HxCDF	60851-34-5	0.318	JB	5.36	0.0439	1
11031	1234678-HpCDF	67562-39-4	3.96	JB	5.36	0.0318	1
11031	1234789-HpCDF	55673-89-7	0.472	J	5.36	0.0367	1
11031	OCDF	39001-02-0	6.36	JB	10.7	0.0322	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.44				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	109	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	88	26 - 138
13C12-OCDF	97	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130906
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 13:45 by VC

Submitted: 07/18/2013 09:25
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51300 SDG#: PH069-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130906
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 13:45 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51300 SDG#: PH069-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13199SLE026	07/29/2013 11:05	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLF026	07/25/2013 09:08	Mark A Clark	10
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13199SLE026	07/19/2013 09:05	Katheryne V Sponheimer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLF026	07/19/2013 09:05	Katheryne V Sponheimer	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 20:59	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 08:52	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132040015A	07/24/2013 21:15	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	132040015A	07/24/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013 22:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	132030637001	07/27/2013 18:23	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	132030637001	07/27/2013 18:27	John P Hook	2
06955	Lead	SW-846 6010C	1	132030637001	07/27/2013 18:23	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130906
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 13:45 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51300 SDG#: PH069-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	132030637001	07/26/2013 09:51	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	132030637001B	07/25/2013 19:42	David K Beck	2
06142	Silver	SW-846 6020A	1	132030637001A	07/25/2013 19:42	David K Beck	2
06144	Strontium	SW-846 6020A	1	132030637001A	07/29/2013 18:13	David K Beck	5
06145	Thallium	SW-846 6020A	1	132030637001A	07/25/2013 19:42	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638002	07/23/2013 10:23	Damary Valentin	2.5
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637001	07/22/2013 23:04	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638002	07/23/2013 04:20	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13203243201A	07/23/2013 18:21	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13199039401A	07/18/2013 19:55	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401A	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130907
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51340 SDG#: PH069-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	550	U	550	180	1
10726	Benzidine	92-87-5	3,700	U	3,700	780	1
10726	Benzo(b)fluoranthene	205-99-2	7	J	19	4	1
10726	Benzoic acid	65-85-0	550	U	550	180	1
10726	Benzyl alcohol	100-51-6	550	U	550	180	1
10726	1,1'-Biphenyl	92-52-4	37	U	37	18	1
10726	4-Bromophenyl-phenylether	101-55-3	37	U	37	18	1
10726	Butylbenzylphthalate	85-68-7	180	U	180	74	1
10726	Di-n-butylphthalate	84-74-2	180	U	180	74	1
10726	Carbazole	86-74-8	37	U	37	18	1
10726	4-Chloro-3-methylphenol	59-50-7	37	U	37	18	1
10726	4-Chloroaniline	106-47-8	37	U	37	18	1
10726	bis(2-Chloroethoxy)methane	111-91-1	37	U	37	18	1
10726	bis(2-Chloroethyl)ether	111-44-4	37	U	37	18	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	37	U	37	18	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	37	U	37	8	1
10726	2-Chlorophenol	95-57-8	37	U	37	18	1
10726	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	18	1
10726	Dibenzofuran	132-64-9	37	U	37	18	1
10726	1,2-Dichlorobenzene	95-50-1	37	U	37	18	1
10726	1,3-Dichlorobenzene	541-73-1	37	U	37	18	1
10726	1,4-Dichlorobenzene	106-46-7	37	U	37	18	1
10726	3,3'-Dichlorobenzidine	91-94-1	370	U	370	110	1
10726	2,4-Dichlorophenol	120-83-2	37	U	37	18	1
10726	2,6-Dichlorophenol	87-65-0	37	U	37	18	1
10726	Diethylphthalate	84-66-2	180	U	180	74	1
10726	2,4-Dimethylphenol	105-67-9	37	U	37	18	1
10726	3,5-Dimethylphenol	108-68-9	180	U	180	37	1
10726	Dimethylphthalate	131-11-3	180	U	180	74	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	550	U	550	180	1
10726	2,4-Dinitrophenol	51-28-5	1,100	U	1,100	330	1
10726	1,2-Diphenylhydrazine	122-66-7	37	U	37	18	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	74	1
10726	Hexachlorobenzene	118-74-1	19	U	19	4	1
10726	Hexachlorobutadiene	87-68-3	37	U	37	18	1
10726	Hexachlorocyclopentadiene	77-47-4	550	U	550	180	1
10726	Hexachloroethane	67-72-1	180	U	180	37	1
10726	Isophorone	78-59-1	37	U	37	18	1
10726	2-Methylphenol	95-48-7	37	U	37	18	1
10726	4-Methylphenol	106-44-5	37	U	37	18	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	180	U	180	37	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130907
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51340 SDG#: PH069-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	2-Nitroaniline	88-74-4	37	U	37	18	1
10726	3-Nitroaniline	99-09-2	180	U	180	74	1
10726	4-Nitroaniline	100-01-6	180	U	180	74	1
10726	Nitrobenzene	98-95-3	37	U	37	18	1
10726	2-Nitrophenol	88-75-5	37	U	37	18	1
10726	4-Nitrophenol	100-02-7	550	U	550	180	1
10726	N-Nitroso-di-n-propylamine	621-64-7	37	U	37	18	1
10726	N-Nitrosodiphenylamine	86-30-6	37	U	37	18	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	180	U	180	74	1
10726	Pentachlorophenol	87-86-5	190	U	190	37	1
10726	Phenol	108-95-2	37	U	37	18	1
10726	Pyrene	129-00-0	4	J	19	4	1
10726	Pyridine	110-86-1	180	U	180	74	1
10726	1,2,4-Trichlorobenzene	120-82-1	37	U	37	18	1
10726	2,4,5-Trichlorophenol	95-95-4	37	U	37	18	1
10726	2,4,6-Trichlorophenol	88-06-2	37	U	37	18	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	18	U	18	7.4	10
12969	Acenaphthylene	208-96-8	18	U	18	3.7	10
12969	Anthracene	120-12-7	18	U	18	3.7	10
12969	Benzo(a)anthracene	56-55-3	18	U	18	7.4	10
12969	Benzo(a)pyrene	50-32-8	18	U	18	7.4	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	37	10
12969	Benzo(g,h,i)perylene	191-24-2	18	U	18	7.4	10
12969	Benzo(k)fluoranthene	207-08-9	18	U	18	7.4	10
12969	Chrysene	218-01-9	11	J	18	3.7	10
12969	Dibenz(a,h)anthracene	53-70-3	18	U	18	7.4	10
12969	Fluoranthene	206-44-0	18	U	18	7.4	10
12969	Fluorene	86-73-7	18	U	18	7.4	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	7.4	10
12969	1-Methylnaphthalene	90-12-0	18	U	18	7.4	10
12969	2-Methylnaphthalene	91-57-6	18	U	18	7.4	10
12969	Naphthalene	91-20-3	18	U	18	7.4	10
12969	N-Nitrosodimethylamine	62-75-9	18	U	18	7.4	10
12969	Phenanthrene	85-01-8	18	U	18	7.4	10
	Reporting limits were raised due to interference from the sample matrix.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.54
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	3.6	J	5.6	2.3	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130907
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51340 SDG#: PH069-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,500		44.0	7.93	1
06944	Antimony	7440-36-0	4.40	U	4.40	0.814	1
06935	Arsenic	7440-38-2	6.06		4.40	0.770	1
06946	Barium	7440-39-3	112		1.10	0.0363	1
06947	Beryllium	7440-41-7	0.202	J	1.10	0.0737	1
07914	Boron	7440-42-8	10.2	J	11.0	0.924	1
06949	Cadmium	7440-43-9	0.178	J	1.10	0.0836	1
01650	Calcium	7440-70-2	149,000		110	18.4	5
06951	Chromium	7440-47-3	27.4		3.30	0.176	1
06952	Cobalt	7440-48-4	6.54		1.10	0.109	1
06953	Copper	7440-50-8	9.58		2.20	0.319	1
01654	Iron	7439-89-6	24,900		44.0	3.98	1
06955	Lead	7439-92-1	7.45		3.30	0.550	1
01656	Lithium	7439-93-2	22.3		4.4	0.37	1
01657	Magnesium	7439-95-4	6,180		11.0	1.84	1
06958	Manganese	7439-96-5	250		1.10	0.0913	1
06960	Molybdenum	7439-98-7	2.20	U	2.20	0.187	1
06961	Nickel	7440-02-0	14.8		2.20	0.143	1
10145	Phosphorus	7723-14-0	376		11.0	3.18	1
01662	Potassium	7440-09-7	2,320		110	9.17	1
01667	Sodium	7440-23-5	204		110	18.4	1
06969	Tin	7440-31-5	2.78	J	11.0	0.242	1
06970	Titanium	7440-32-6	1,100		1.10	0.187	1
06971	Vanadium	7440-62-2	50.6		1.10	0.143	1
06972	Zinc	7440-66-6	49.2		4.40	0.220	1
10146	Zirconium	7440-67-7	2.87	J	5.50	0.924	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130907
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51340 SDG#: PH069-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.119 J	0.440	0.110	2
06142	Silver	7440-22-4	0.0473 J	0.220	0.0286	2
06144	Strontium	7440-24-6	114	1.10	0.187	5
06145	Thallium	7440-28-0	0.215 J	0.220	0.0330	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0266	0.0185	0.0111	1
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.18 J	0.44	0.16	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.40	0.0100	0.0100	1
	The pH was measured in water at 22.9 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130907
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51340 SDG#: PH069-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0431	JQ	1.08	0.0388	1
11031	12378-PeCDD	40321-76-4	0.0586	JQ	5.38	0.0383	1
11031	123478-HxCDD	39227-28-6	0.0567	JBQ	5.38	0.0289	1
11031	123678-HxCDD	57653-85-7	0.0702	JQ	5.38	0.0311	1
11031	123789-HxCDD	19408-74-3	0.0790	JB	5.38	0.0304	1
11031	1234678-HpCDD	35822-46-9	0.995	JB	5.38	0.0432	1
11031	OCDD	3268-87-9	10.8	JB	10.8	0.0280	1
11031	2378-TCDF	51207-31-9	1.08	U	1.08	0.0328	1
11031	12378-PeCDF	57117-41-6	0.151	JB	5.38	0.0273	1
11031	23478-PeCDF	57117-31-4	5.38	U	5.38	0.0249	1
11031	123478-HxCDF	70648-26-9	0.0433	JBQ	5.38	0.0139	1
11031	123678-HxCDF	57117-44-9	0.0453	JBQ	5.38	0.0150	1
11031	123789-HxCDF	72918-21-9	0.0828	JB	5.38	0.0163	1
11031	234678-HxCDF	60851-34-5	0.0507	JBQ	5.38	0.0164	1
11031	1234678-HpCDF	67562-39-4	0.539	JB	5.38	0.0197	1
11031	1234789-HpCDF	55673-89-7	0.0465	J	5.38	0.0201	1
11031	OCDF	39001-02-0	3.42	JB	10.8	0.0364	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0408				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	87	26 - 138
13C12-OCDF	81	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130907
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51340 SDG#: PH069-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130907
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:00 by VC

Submitted: 07/18/2013 09:25
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51340 SDG#: PH069-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13199SLE026	07/29/2013	11:29	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13199SLF026	07/25/2013	09:40	Mark A Clark	10
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13199SLE026	07/19/2013	09:05	Katheryne V Sponheimer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13199SLF026	07/19/2013	09:05	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013	04:24	Laura M Krieger	23.54
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319931750	07/18/2013	18:13	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319931750	07/18/2013	18:13	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013	21:12	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013	09:11	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013	05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013	06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132040015A	07/24/2013	18:07	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132040015A	07/24/2013	02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/27/2013	23:26	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013	13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637001	07/26/2013	09:55	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	132030637001	07/27/2013	18:41	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637001	07/27/2013	18:41	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637001	07/26/2013	09:55	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	132030637001	07/26/2013	09:55	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	132030637001	07/27/2013	18:41	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637001	07/27/2013	18:41	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637001	07/27/2013	18:30	John P Hook	5
06951	Chromium	SW-846 6010C	1	132030637001	07/26/2013	09:55	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	132030637001	07/27/2013	18:41	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637001	07/27/2013	18:41	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637001	07/26/2013	09:55	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	132030637001	07/27/2013	18:41	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637001	07/27/2013	18:41	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637001	07/26/2013	09:55	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	132030637001	07/26/2013	09:55	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	132030637001	07/27/2013	18:41	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130907
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:00 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51340 SDG#: PH069-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132030637001	07/27/2013 18:41	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637001	07/27/2013 18:41	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637001	07/26/2013 09:55	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	132030637001	07/26/2013 09:55	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	132030637001	07/26/2013 09:55	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	132030637001	07/26/2013 09:55	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	132030637001	07/27/2013 18:41	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637001	07/27/2013 18:41	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637001	07/26/2013 09:55	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	132030637001B	07/25/2013 19:44	David K Beck	2
06142	Silver	SW-846 6020A	1	132030637001A	07/25/2013 19:44	David K Beck	2
06144	Strontium	SW-846 6020A	1	132030637001A	07/29/2013 18:14	David K Beck	5
06145	Thallium	SW-846 6020A	1	132030637001A	07/25/2013 19:44	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638002	07/23/2013 10:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637001	07/22/2013 23:04	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638002	07/23/2013 04:20	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13203243201A	07/23/2013 18:35	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13199039401B	07/18/2013 19:55	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401A	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130908
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51380 SDG#: PH069-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	20	U	20	7	0.97
10237	Acrolein	107-02-8	99	U	99	20	0.97
10237	Acrylonitrile	107-13-1	20	U	20	4	0.97
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	0.97
10237	Benzene	71-43-2	5	U	5	0.5	0.97
10237	Bromobenzene	108-86-1	5	U	5	1	0.97
10237	Bromochloromethane	74-97-5	5	U	5	1	0.97
10237	Bromodichloromethane	75-27-4	5	U	5	1	0.97
10237	Bromoform	75-25-2	5	U	5	1	0.97
10237	Bromomethane	74-83-9	5	U	5	2	0.97
10237	2-Butanone	78-93-3	10	U	10	4	0.97
10237	t-Butyl alcohol	75-65-0	50	U	50	20	0.97
10237	n-Butylbenzene	104-51-8	5	U	5	1	0.97
10237	sec-Butylbenzene	135-98-8	5	U	5	1	0.97
10237	tert-Butylbenzene	98-06-6	5	U	5	1	0.97
10237	Carbon Disulfide	75-15-0	5	U	5	1	0.97
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	0.97
10237	Chlorobenzene	108-90-7	5	U	5	1	0.97
10237	Chloroethane	75-00-3	5	U	5	2	0.97
10237	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	0.97
10237	Chloroform	67-66-3	5	U	5	1	0.97
10237	1-Chlorohexane	544-10-5	5	U	5	1	0.97
10237	Chloromethane	74-87-3	5	U	5	2	0.97
10237	2-Chlorotoluene	95-49-8	5	U	5	1	0.97
10237	4-Chlorotoluene	106-43-4	5	U	5	1	0.97
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	0.97
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	0.97
10237	Dibromochloromethane	124-48-1	5	U	5	1	0.97
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	0.97
10237	Dibromomethane	74-95-3	5	U	5	1	0.97
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	0.97
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	0.97
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	0.97
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	0.97
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	0.97
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	0.97
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	0.97
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	0.97
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	0.97
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	0.97
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	0.97
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	0.97
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	0.97
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	0.97
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	0.97
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	0.97
10237	Ethylbenzene	100-41-4	5	U	5	1	0.97
10237	Freon 113	76-13-1	5	U	5	2	0.97
10237	Freon 133a	75-88-7	5	U	5	2	0.97
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	0.97
10237	2-Hexanone	591-78-6	10	U	10	3	0.97

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130908
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51380 SDG#: PH069-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	0.97
10237	Isopropylbenzene	98-82-8	5	U	5	1	0.97
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	0.97
10237	Methyl Iodide	74-88-4	5	U	5	3	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	0.97
10237	4-Methyl-2-pentanone	108-10-1	10	U	10	3	0.97
10237	Methylene Chloride	75-09-2	5	U	5	2	0.97
10237	n-Propylbenzene	103-65-1	5	U	5	1	0.97
10237	Styrene	100-42-5	5	U	5	1	0.97
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	0.97
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	0.97
10237	Tetrachloroethene	127-18-4	5	U	5	1	0.97
10237	Toluene	108-88-3	5	U	5	1	0.97
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	0.97
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	0.97
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	0.97
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	0.97
10237	Trichloroethene	79-01-6	5	U	5	1	0.97
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	0.97
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	0.97
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	0.97
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	0.97
10237	Vinyl Acetate	108-05-4	10	U	10	2	0.97
10237	Vinyl Chloride	75-01-4	5	U	5	1	0.97
10237	m+p-Xylene	179601-23-1	5	U	5	1	0.97
10237	o-Xylene	95-47-6	5	U	5	1	0.97
GC/MS Semivolatiles	**SW-846 8270D**		ug/kg		ug/kg	ug/kg	
10726	Aniline	62-53-3	510	U	510	170	1
10726	Benzidine	92-87-5	3,400	U	3,400	720	1
10726	Benzoic acid	65-85-0	510	U	510	170	1
10726	Benzyl alcohol	100-51-6	510	U	510	170	1
10726	1,1'-Biphenyl	92-52-4	34	U	34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	34	U	34	17	1
10726	Carbazole	86-74-8	34	U	34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	34	U	34	17	1
10726	4-Chloroaniline	106-47-8	34	U	34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	34	U	34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	34	U	34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	34	U	34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	34	U	34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	17	1
10726	Dibenzofuran	132-64-9	34	U	34	17	1
10726	1,2-Dichlorobenzene	95-50-1	34	U	34	17	1
10726	1,3-Dichlorobenzene	541-73-1	34	U	34	17	1
10726	1,4-Dichlorobenzene	106-46-7	34	U	34	17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130908
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51380 SDG#: PH069-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	3,3'-Dichlorobenzidine	91-94-1	340	U	340	100	1
10726	2,4-Dichlorophenol	120-83-2	34	U	34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	2,4-Dimethylphenol	105-67-9	34	U	34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	510	U	510	170	1
10726	2,4-Dinitrophenol	51-28-5	1,000	U	1,000	310	1
10726	1,2-Diphenylhydrazine	122-66-7	34	U	34	17	1
10726	Hexachlorobenzene	118-74-1	17	U	17	3	1
10726	Hexachlorobutadiene	87-68-3	34	U	34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	510	U	510	170	1
10726	Hexachloroethane	67-72-1	170	U	170	34	1
10726	Isophorone	78-59-1	34	U	34	17	1
10726	2-Methylphenol	95-48-7	34	U	34	17	1
10726	4-Methylphenol	106-44-5	34	U	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	34	U	34	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	68	1
10726	4-Nitroaniline	100-01-6	170	U	170	68	1
10726	Nitrobenzene	98-95-3	34	U	34	17	1
10726	2-Nitrophenol	88-75-5	34	U	34	17	1
10726	4-Nitrophenol	100-02-7	510	U	510	170	1
10726	N-Nitroso-di-n-propylamine	621-64-7	34	U	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	34	U	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	170	U	170	34	1
10726	Phenol	108-95-2	34	U	34	17	1
10726	Pyridine	110-86-1	170	U	170	68	1
10726	1,2,4-Trichlorobenzene	120-82-1	34	U	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	34	U	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	34	U	34	17	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130908
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51380 SDG#: PH069-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.2	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.32
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.1	U	5.1	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,100		39.4	7.11	1
06944	Antimony	7440-36-0	3.94	U	3.94	0.730	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130908
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51380 SDG#: PH069-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	4.15		3.94	0.690	1
06946	Barium	7440-39-3	61.8		0.986	0.0325	1
06947	Beryllium	7440-41-7	0.408	J	0.986	0.0661	1
07914	Boron	7440-42-8	9.86	U	9.86	0.828	1
06949	Cadmium	7440-43-9	0.218	J	0.986	0.0750	1
01650	Calcium	7440-70-2	3,410		19.7	3.29	1
06951	Chromium	7440-47-3	14.8		2.96	0.158	1
06952	Cobalt	7440-48-4	5.04		0.986	0.0976	1
06953	Copper	7440-50-8	12.5		1.97	0.286	1
01654	Iron	7439-89-6	21,300		39.4	3.57	1
06955	Lead	7439-92-1	3.44		2.96	0.493	1
01656	Lithium	7439-93-2	21.9		3.9	0.34	1
01657	Magnesium	7439-95-4	4,800		9.86	1.65	1
06958	Manganese	7439-96-5	463		0.986	0.0819	1
06960	Molybdenum	7439-98-7	1.97	U	1.97	0.168	1
06961	Nickel	7440-02-0	10.6		1.97	0.128	1
10145	Phosphorus	7723-14-0	394		9.86	2.85	1
01662	Potassium	7440-09-7	1,830		98.6	8.22	1
01667	Sodium	7440-23-5	125		98.6	16.5	1
06969	Tin	7440-31-5	3.13	J	9.86	0.217	1
06970	Titanium	7440-32-6	1,320		0.986	0.168	1
06971	Vanadium	7440-62-2	34.9		0.986	0.128	1
06972	Zinc	7440-66-6	49.8		3.94	0.197	1
10146	Zirconium	7440-67-7	1.91	J	4.93	0.828	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.394	U	0.394	0.0986	2
06142	Silver	7440-22-4	0.197	U	0.197	0.0256	2
06144	Strontium	7440-24-6	12.5		0.394	0.0671	2
06145	Thallium	7440-28-0	0.250		0.197	0.0296	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0102	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.42	U	0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.33		0.0100	0.0100	1
	The pH was measured in water at 23.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130908
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51380 SDG#: PH069-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.987	U	0.987	0.0493	1
11031	12378-PeCDD	40321-76-4	4.94	U	4.94	0.0464	1
11031	123478-HxCDD	39227-28-6	4.94	U	4.94	0.0243	1
11031	123678-HxCDD	57653-85-7	4.94	U	4.94	0.0264	1
11031	123789-HxCDD	19408-74-3	0.0460	JB	4.94	0.0256	1
11031	1234678-HpCDD	35822-46-9	0.0671	JBQ	4.94	0.0363	1
11031	OCDD	3268-87-9	0.192	JBQ	9.87	0.0331	1
11031	2378-TCDF	51207-31-9	0.987	U	0.987	0.0386	1
11031	12378-PeCDF	57117-41-6	4.94	U	4.94	0.0277	1
11031	23478-PeCDF	57117-31-4	4.94	U	4.94	0.0278	1
11031	123478-HxCDF	70648-26-9	0.0311	JBQ	4.94	0.0124	1
11031	123678-HxCDF	57117-44-9	0.0177	JBQ	4.94	0.0130	1
11031	123789-HxCDF	72918-21-9	0.0393	JBQ	4.94	0.0207	1
11031	234678-HxCDF	60851-34-5	0.0189	JBQ	4.94	0.0149	1
11031	1234678-HpCDF	67562-39-4	0.0293	JBQ	4.94	0.0122	1
11031	1234789-HpCDF	55673-89-7	0.0564	J	4.94	0.0201	1
11031	OCDF	39001-02-0	0.126	JB	9.87	0.0419	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00523				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130908
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51380 SDG#: PH069-14*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130908
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51380 SDG#: PH069-14*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B132052AA	07/25/2013 00:52	Andrea E Lando	0.97
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201319931750	07/18/2013 18:20	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201319931750	07/18/2013 18:19	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201319931750	07/18/2013 18:18	Mitchell R Washel	n.a.
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13199SLE026	07/29/2013 11:53	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13207SLA026	07/27/2013 06:58	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13199SLE026	07/19/2013 09:05	Katheryne V Sponheimer	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13207SLA026	07/26/2013 18:45	Sally L Appleyard	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 05:03	Laura M Krieger	26.32
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201319931750	07/18/2013 18:16	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201319931750	07/18/2013 18:17	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 21:25	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132010012A	07/25/2013 09:29	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132010012A	07/22/2013 05:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132040015A	07/24/2013 17:04	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132040015A	07/24/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13206001	07/28/2013 00:23	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13206001	07/26/2013 13:45	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-513-SA8-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7130908
LL Group # 1405000
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/17/2013 14:15 by VC

Submitted: 07/18/2013 09:25
Reported: 08/01/2013 09:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51380 SDG#: PH069-14*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	132030637001	07/27/2013 18:45	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	132030637001	07/26/2013 09:59	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	132030637001B	07/25/2013 19:47	David K Beck	2
06142	Silver	SW-846 6020A	1	132030637001A	07/25/2013 19:47	David K Beck	2
06144	Strontium	SW-846 6020A	1	132030637001A	07/25/2013 19:47	David K Beck	2
06145	Thallium	SW-846 6020A	1	132030637001A	07/25/2013 19:47	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638002	07/23/2013 10:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637001	07/22/2013 23:04	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638002	07/23/2013 04:20	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13203243201A	07/23/2013 19:11	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13199039401B	07/18/2013 19:55	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401A	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B132052AA	Sample number(s): 7130908								
Acetone	20 U	20.	7	ug/kg	151		18-197		
Acrolein	100 U	100.	20	ug/kg	81		50-137		
Acrylonitrile	20 U	20.	4	ug/kg	108		60-133		
t-Amyl methyl ether	5 U	5.	1	ug/kg	99		63-130		
Benzene	5 U	5.	0.5	ug/kg	98		80-120		
Bromobenzene	5 U	5.	1	ug/kg	95		79-120		
Bromochloromethane	5 U	5.	1	ug/kg	100		82-133		
Bromodichloromethane	5 U	5.	1	ug/kg	93		75-114		
Bromoform	5 U	5.	1	ug/kg	100		70-120		
Bromomethane	5 U	5.	2	ug/kg	93		32-162		
2-Butanone	10 U	10.	4	ug/kg	134		38-146		
t-Butyl alcohol	50 U	50.	20	ug/kg	92		60-149		
n-Butylbenzene	5 U	5.	1	ug/kg	92		72-120		
sec-Butylbenzene	5 U	5.	1	ug/kg	94		75-120		
tert-Butylbenzene	5 U	5.	1	ug/kg	93		75-120		
Carbon Disulfide	5 U	5.	1	ug/kg	98		59-129		
Carbon Tetrachloride	5 U	5.	1	ug/kg	97		69-122		
Chlorobenzene	5 U	5.	1	ug/kg	97		80-120		
Chloroethane	5 U	5.	2	ug/kg	86		37-154		
2-Chloroethyl Vinyl Ether	10 U	10.	2	ug/kg	95		44-137		
Chloroform	5 U	5.	1	ug/kg	98		80-120		
1-Chlorohexane	5 U	5.	1	ug/kg	100		70-130		
Chloromethane	5 U	5.	2	ug/kg	92		56-120		
2-Chlorotoluene	5 U	5.	1	ug/kg	93		78-120		
4-Chlorotoluene	5 U	5.	1	ug/kg	93		79-120		
Chlorotrifluoroethene	5 U	5.	2	ug/kg	53	43	22-131	21	30
1,2-Dibromo-3-chloropropane	5 U	5.	2	ug/kg	106		55-128		
Dibromochloromethane	5 U	5.	1	ug/kg	94		77-120		
1,2-Dibromoethane	5 U	5.	1	ug/kg	103		80-120		
Dibromomethane	5 U	5.	1	ug/kg	100		80-120		
1,2-Dichlorobenzene	5 U	5.	1	ug/kg	96		80-120		
1,3-Dichlorobenzene	5 U	5.	1	ug/kg	95		80-120		
1,4-Dichlorobenzene	5 U	5.	1	ug/kg	94		80-120		
Dichlorodifluoromethane	5 U	5.	2	ug/kg	95		32-120		
1,1-Dichloroethane	5 U	5.	1	ug/kg	98		80-120		
1,2-Dichloroethane	5 U	5.	1	ug/kg	101		72-126		
1,1-Dichloroethene	5 U	5.	1	ug/kg	99		73-129		
cis-1,2-Dichloroethene	5 U	5.	1	ug/kg	98		80-120		
trans-1,2-Dichloroethene	5 U	5.	1	ug/kg	101		79-120		
1,2-Dichloropropane	5 U	5.	1	ug/kg	100		77-120		
1,3-Dichloropropane	5 U	5.	1	ug/kg	100		80-120		
2,2-Dichloropropane	5 U	5.	1	ug/kg	92		72-123		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloropropene	5	U	5.	1	ug/kg	99		77-120		
cis-1,3-Dichloropropene	5	U	5.	1	ug/kg	96		74-120		
trans-1,3-Dichloropropene	5	U	5.	1	ug/kg	94		77-120		
Ethyl t-butyl ether	5	U	5.	1	ug/kg	98		64-124		
Ethylbenzene	5	U	5.	1	ug/kg	93		80-120		
Freon 113	5	U	5.	2	ug/kg	98		64-137		
Freon 133a	5	U	5.	2	ug/kg	93	78	78-120	18	30
Hexachlorobutadiene	5	U	5.	2	ug/kg	87		46-130		
2-Hexanone	10	U	10.	3	ug/kg	115		40-129		
di-Isopropyl ether	5	U	5.	1	ug/kg	101		68-128		
Isopropylbenzene	5	U	5.	1	ug/kg	94		76-120		
p-Isopropyltoluene	5	U	5.	1	ug/kg	91		75-120		
Methyl Iodide	5	U	5.	3	ug/kg	103		72-130		
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/kg	103		74-121		
4-Methyl-2-pentanone	10	U	10.	3	ug/kg	123		52-125		
Methylene Chloride	5	U	5.	2	ug/kg	97		76-124		
n-Propylbenzene	5	U	5.	1	ug/kg	94		77-120		
Styrene	5	U	5.	1	ug/kg	96		76-120		
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/kg	95		80-120		
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/kg	107		71-123		
Tetrachloroethene	5	U	5.	1	ug/kg	96		78-126		
Toluene	5	U	5.	1	ug/kg	97		80-120		
1,2,3-Trichlorobenzene	5	U	5.	1	ug/kg	88		64-120		
1,2,4-Trichlorobenzene	5	U	5.	1	ug/kg	88		68-113		
1,1,1-Trichloroethane	5	U	5.	1	ug/kg	92		71-125		
1,1,2-Trichloroethane	5	U	5.	1	ug/kg	106		80-120		
Trichloroethene	5	U	5.	1	ug/kg	99		80-120		
Trichlorofluoromethane	5	U	5.	2	ug/kg	96		58-133		
1,2,3-Trichloropropane	5	U	5.	1	ug/kg	110		71-123		
1,2,4-Trimethylbenzene	5	U	5.	1	ug/kg	93		79-120		
1,3,5-Trimethylbenzene	5	U	5.	1	ug/kg	94		78-120		
Vinyl Acetate	10	U	10.	2	ug/kg	135*	125*	29-111	7	30
Vinyl Chloride	5	U	5.	1	ug/kg	99		53-120		
m+p-Xylene	5	U	5.	1	ug/kg	94		80-120		
o-Xylene	5	U	5.	1	ug/kg	95		80-120		
Batch number: Y132041AA	Sample number(s): 7130895,7130905									
Acetone	20	U	20.	6	ug/l	99	98	35-181	1	30
Acrolein	100 U		100.	40	ug/l	85	88	46-146	3	30
Acrylonitrile	20	U	20.	4	ug/l	85	87	61-130	1	30
t-Amyl methyl ether	5	U	5.	0.8	ug/l	102	102	66-120	1	30
Benzene	5	U	5.	0.5	ug/l	100	101	77-121	1	30
Bromobenzene	5	U	5.	1	ug/l	100	101	80-120	1	30
Bromochloromethane	5	U	5.	1	ug/l	111	110	80-121	1	30
Bromodichloromethane	5	U	5.	1	ug/l	108	108	73-120	0	30
Bromoform	5	U	5.	1	ug/l	103	102	61-120	0	30
Bromomethane	5	U	5.	1	ug/l	89	92	51-120	3	30
2-Butanone	10	U	10.	3	ug/l	93	91	57-141	2	30
t-Butyl alcohol	50	U	50.	10	ug/l	107	106	75-120	1	30
n-Butylbenzene	5	U	5.	1	ug/l	103	104	73-130	1	30
sec-Butylbenzene	5	U	5.	1	ug/l	105	107	74-124	1	30
tert-Butylbenzene	5	U	5.	1	ug/l	99	101	80-120	2	30
Carbon Disulfide	5	U	5.	1	ug/l	82	81	68-121	1	30
Carbon Tetrachloride	5	U	5.	1	ug/l	115	114	65-137	1	30
Chlorobenzene	5	U	5.	0.8	ug/l	107	107	80-120	0	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chloroethane	5	U	5.	1	ug/l	80	79	60-120	1	30
2-Chloroethyl Vinyl Ether	10	U	10.	2	ug/l	92	93	52-127	1	30
Chloroform	5	U	5.	0.8	ug/l	113	111	77-122	2	30
1-Chlorohexane	5	U	5.	1	ug/l	104	105	70-130	1	30
Chloromethane	5	U	5.	1	ug/l	81	88	54-123	8	30
2-Chlorotoluene	5	U	5.	1	ug/l	101	104	80-120	2	30
4-Chlorotoluene	5	U	5.	1	ug/l	101	101	80-120	0	30
Chlorotrifluoroethene	5	U	5.	2	ug/l	44*	43*	47-120	4	30
1,2-Dibromo-3-chloropropane	5	U	5.	2	ug/l	105	107	56-120	1	30
Dibromochloromethane	5	U	5.	1	ug/l	101	101	72-120	0	30
1,2-Dibromoethane	5	U	5.	1	ug/l	108	108	76-120	1	30
Dibromomethane	5	U	5.	1	ug/l	109	108	80-120	2	30
1,2-Dichlorobenzene	5	U	5.	1	ug/l	111	111	80-120	0	30
1,3-Dichlorobenzene	5	U	5.	1	ug/l	106	106	80-120	0	30
1,4-Dichlorobenzene	5	U	5.	1	ug/l	107	106	80-120	1	30
Dichlorodifluoromethane	5	U	5.	2	ug/l	109	110	35-122	0	30
1,1-Dichloroethane	5	U	5.	1	ug/l	98	98	79-120	0	30
1,2-Dichloroethane	5	U	5.	1	ug/l	117	114	64-130	2	30
1,1-Dichloroethene	5	U	5.	0.8	ug/l	97	98	76-124	1	30
cis-1,2-Dichloroethene	5	U	5.	0.8	ug/l	106	104	80-120	2	30
trans-1,2-Dichloroethene	5	U	5.	0.8	ug/l	102	103	80-120	0	30
1,2-Dichloropropane	5	U	5.	1	ug/l	100	101	80-120	1	30
1,3-Dichloropropane	5	U	5.	1	ug/l	97	99	80-120	2	30
2,2-Dichloropropane	5	U	5.	1	ug/l	108	107	67-124	2	30
1,1-Dichloropropene	5	U	5.	1	ug/l	106	105	80-120	1	30
cis-1,3-Dichloropropene	5	U	5.	1	ug/l	105	105	78-120	0	30
trans-1,3-Dichloropropene	5	U	5.	1	ug/l	95	96	66-124	1	30
Ethyl t-butyl ether	5	U	5.	0.8	ug/l	97	97	66-120	0	30
Ethylbenzene	5	U	5.	0.8	ug/l	101	103	79-120	1	30
Freon 113	5	U	5.	2	ug/l	105	104	69-128	1	30
Freon 133a	5	U	5.	2	ug/l	86	85	64-120	1	30
Hexachlorobutadiene	5	U	5.	2	ug/l	106	110	58-120	3	30
2-Hexanone	10	U	10.	3	ug/l	88	88	59-125	1	30
di-Isopropyl ether	5	U	5.	0.8	ug/l	90	90	65-120	1	30
Isopropylbenzene	5	U	5.	1	ug/l	106	106	77-120	0	30
p-Isopropyltoluene	5	U	5.	1	ug/l	104	105	77-121	1	30
Methyl Iodide	5	U	5.	1	ug/l	102	103	71-122	1	30
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/l	103	103	68-121	1	30
4-Methyl-2-pentanone	10	U	10.	3	ug/l	91	93	65-122	1	30
Methylene Chloride	5	U	5.	2	ug/l	101	101	84-118	1	30
n-Propylbenzene	5	U	5.	1	ug/l	104	105	77-130	1	30
Styrene	5	U	5.	1	ug/l	104	104	77-120	0	30
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/l	109	109	79-120	0	30
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/l	99	102	70-129	3	30
Tetrachloroethene	5	U	5.	0.8	ug/l	106	105	79-120	0	30
Toluene	5	U	5.	0.7	ug/l	102	103	79-120	1	30
1,2,3-Trichlorobenzene	5	U	5.	1	ug/l	113	113	67-120	0	30
1,2,4-Trichlorobenzene	5	U	5.	1	ug/l	112	112	65-120	1	30
1,1,1-Trichloroethane	5	U	5.	0.8	ug/l	104	104	66-126	0	30
1,1,2-Trichloroethane	5	U	5.	0.8	ug/l	105	107	80-120	2	30
Trichloroethene	5	U	5.	1	ug/l	110	109	80-120	1	30
Trichlorofluoromethane	5	U	5.	2	ug/l	109	109	65-130	0	30
1,2,3-Trichloropropane	5	U	5.	1	ug/l	106	106	76-120	1	30
1,2,4-Trimethylbenzene	5	U	5.	1	ug/l	105	108	69-122	3	30
1,3,5-Trimethylbenzene	5	U	5.	1	ug/l	105	106	68-124	1	30
Vinyl Acetate	10	U	10.	2	ug/l	120	118	57-147	2	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Vinyl Chloride	5	U	5.	1	ug/l	88	90	63-120	3	30
m+p-Xylene	5	U	5.	0.8	ug/l	104	104	77-120	0	30
o-Xylene	5	U	5.	0.8	ug/l	103	103	77-120	0	30
Batch number: 13199SLE026	Sample number(s): 7130906-7130908									
Aniline	330 U		330.	170	ug/kg	65		44-103		
Benzidine	1,700 U		1,700.	700	ug/kg	35		25-94		
Benzo(a)anthracene	17	U	17.	3	ug/kg	98		73-123		
Benzo(a)pyrene	17	U	17.	3	ug/kg	107		80-123		
Benzo(b)fluoranthene	17	U	17.	3	ug/kg	103		76-124		
Benzo(g,h,i)perylene	17	U	17.	3	ug/kg	103		77-122		
Benzo(k)fluoranthene	17	U	17.	3	ug/kg	105		75-123		
Benzoic acid	500 U		500.	170	ug/kg	83		41-122		
Benzyl alcohol	330 U		330.	170	ug/kg	99		78-115		
1,1'-Biphenyl	33	U	33.	17	ug/kg	100		77-111		
4-Bromophenyl-phenylether	33	U	33.	17	ug/kg	111		79-117		
Butylbenzylphthalate	170 U		170.	67	ug/kg	101		80-118		
Di-n-butylphthalate	170 U		170.	67	ug/kg	104		79-112		
Carbazole	33	U	33.	17	ug/kg	99		79-118		
4-Chloro-3-methylphenol	33	U	33.	17	ug/kg	104		80-124		
4-Chloroaniline	33	U	33.	17	ug/kg	55		10-97		
bis(2-Chloroethoxy)methane	33	U	33.	17	ug/kg	100		77-112		
bis(2-Chloroethyl)ether	33	U	33.	17	ug/kg	95		77-115		
bis(2-Chloroisopropyl)ether	33	U	33.	17	ug/kg	92		64-114		
2-Chloronaphthalene	33	U	33.	7	ug/kg	83		56-144		
2-Chlorophenol	33	U	33.	17	ug/kg	109		80-122		
4-Chlorophenyl-phenylether	33	U	33.	17	ug/kg	101		79-110		
Dibenzofuran	33	U	33.	17	ug/kg	106		78-116		
1,2-Dichlorobenzene	33	U	33.	17	ug/kg	98		79-112		
1,3-Dichlorobenzene	33	U	33.	17	ug/kg	99		79-113		
1,4-Dichlorobenzene	33	U	33.	17	ug/kg	95		79-112		
3,3'-Dichlorobenzidine	330 U		330.	100	ug/kg	90		20-111		
2,4-Dichlorophenol	33	U	33.	17	ug/kg	110		81-123		
2,6-Dichlorophenol	33	U	33.	17	ug/kg	108		77-113		
Diethylphthalate	170 U		170.	67	ug/kg	102		82-113		
2,4-Dimethylphenol	33	U	33.	17	ug/kg	111		83-120		
3,5-Dimethylphenol	170 U		170.	33	ug/kg	98	94	70-130	4	30
Dimethylphthalate	170 U		170.	67	ug/kg	101		82-113		
4,6-Dinitro-2-methylphenol	500 U		500.	170	ug/kg	110		56-132		
2,4-Dinitrophenol	660 U		660.	300	ug/kg	82		26-145		
1,2-Diphenylhydrazine	33	U	33.	17	ug/kg	111		77-111		
bis(2-Ethylhexyl)phthalate	170 U		170.	67	ug/kg	101		75-124		
Hexachlorobenzene	17	U	17.	3	ug/kg	110		74-118		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Hexachlorobutadiene	33	U	33.	17	ug/kg	100		76-115		
Hexachlorocyclopentadiene	500 U		500.	170	ug/kg	128		66-135		
Hexachloroethane	170 U		170.	33	ug/kg	96		76-109		
Isophorone	33	U	33.	17	ug/kg	97		76-112		
2-Methylphenol	33	U	33.	17	ug/kg	102		75-126		
4-Methylphenol	33	U	33.	17	ug/kg	102		73-124		
Naphthalene	17	U	17.	3	ug/kg	98		77-115		
NDPA as diphenylamine	170 U		170.	33	ug/kg	103		70-130		
2-Nitroaniline	33	U	33.	17	ug/kg	103		83-118		
3-Nitroaniline	170 U		170.	67	ug/kg	95		69-122		
4-Nitroaniline	170 U		170.	67	ug/kg	84		51-107		
Nitrobenzene	33	U	33.	17	ug/kg	98		73-118		
2-Nitrophenol	33	U	33.	17	ug/kg	102		81-114		
4-Nitrophenol	500 U		500.	170	ug/kg	96		49-136		
N-Nitroso-di-n-propylamine	33	U	33.	17	ug/kg	91		70-113		
N-Nitrosodiphenylamine	33	U	33.	17	ug/kg	104		83-118		
Di-n-octylphthalate	170 U		170.	67	ug/kg	110		75-136		
Pentachlorophenol	170 U		170.	33	ug/kg	105		56-132		
Phenanthrene	17	U	17.	3	ug/kg	99		77-119		
Phenol	33	U	33.	17	ug/kg	97		69-126		
Pyrene	17	U	17.	3	ug/kg	97		81-114		
Pyridine	170 U		170.	67	ug/kg	80		48-99		
1,2,4-Trichlorobenzene	33	U	33.	17	ug/kg	103		80-109		
2,4,5-Trichlorophenol	33	U	33.	17	ug/kg	112		80-117		
2,4,6-Trichlorophenol	33	U	33.	17	ug/kg	104		81-123		
Batch number: 13199SLF026	Sample number(s): 7130906-7130907									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	94		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	100		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	110		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	99		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	103		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		71-120		
Chrysene	1.7	U	1.7	0.33	ug/kg	104		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	105		65-124		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	104		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	101		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	106		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	81		30-125		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	98		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	103		71-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13201SLA026	Sample number(s): 7130897-7130904									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	92		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	97		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	101		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	96		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	100		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	120		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	120		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	124		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	117		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	101		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	99		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	97		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	93		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	74		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	120		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	95		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	98		71-120		
Batch number: 13205WAB026	Sample number(s): 7130895-7130896									
Acenaphthene	0.050	U	0.050	0.010	ug/l	100	101	65-124	0	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	103	103	72-113	0	30
Anthracene	0.050	U	0.050	0.010	ug/l	102	103	70-117	1	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	97	97	75-115	1	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	102	102	72-120	0	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	110	110	74-130	0	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	98	98	70-130	0	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	106	104	63-121	2	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	107	107	74-118	0	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	56	57	40-138	1	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	93	94	70-145	1	30
Chrysene	0.050	U	0.050	0.010	ug/l	103	101	75-112	1	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	104	101	66-122	3	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	86	85	74-129	1	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	53	55	40-119	3	30
Bis(2-Ethylhexyl)phthalate	0.051	J	1.0	0.050	ug/l	81	74	70-143	10	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	103	102	73-116	0	30
Fluorene	0.050	U	0.050	0.010	ug/l	100	99	74-115	1	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	104	98	66-122	6	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	105	106	71-120	1	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	101	101	74-119	1	30
Naphthalene	0.050	U	0.050	0.030	ug/l	100	101	67-118	1	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	72	73	36-120	2	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	75	67	57-145	12	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	101	101	72-109	0	30
Pyrene	0.050	U	0.050	0.010	ug/l	101	101	71-116	1	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13205WAC026	Sample number(s): 7130895								
Aniline	1 U	1.	0.5	ug/l	66	73	50-107	11	30
Benzidine	60 U	60.	20	ug/l	38	41	28-80	7	30
Benzoic acid	15 U	15.	6	ug/l	35	61	10-69	54*	30
Benzyl alcohol	15 U	15.	5	ug/l	84	86	60-106	3	30
1,1'-Biphenyl	1 U	1.	0.5	ug/l	91	91	75-107	0	30
4-Bromophenyl-phenylether	1 U	1.	0.5	ug/l	95	96	75-115	1	30
Carbazole	1 U	1.	0.5	ug/l	101	101	81-114	1	30
4-Chloro-3-methylphenol	1 U	1.	0.5	ug/l	99	105	77-119	5	30
4-Chloroaniline	1 U	1.	0.5	ug/l	75	85	43-110	12	30
bis(2-Chloroethoxy)methane	1 U	1.	0.5	ug/l	95	95	76-112	0	30
bis(2-Chloroethyl)ether	1 U	1.	0.5	ug/l	92	91	73-112	1	30
bis(2-Chloroisopropyl)ether	1 U	1.	0.5	ug/l	88	84	60-115	5	30
2-Chloronaphthalene	1 U	1.	0.4	ug/l	99	98	56-135	0	30
2-Chlorophenol	1 U	1.	0.5	ug/l	94	94	76-111	0	30
4-Chlorophenyl-phenylether	1 U	1.	0.5	ug/l	96	97	77-114	2	30
Dibenzofuran	1 U	1.	0.5	ug/l	97	97	81-110	1	30
1,2-Dichlorobenzene	1 U	1.	0.5	ug/l	88	86	65-107	2	30
1,3-Dichlorobenzene	1 U	1.	0.5	ug/l	84	83	61-111	2	30
1,4-Dichlorobenzene	1 U	1.	0.5	ug/l	85	84	61-109	0	30
3,3'-Dichlorobenzidine	5 U	5.	2	ug/l	77	88	47-108	13	30
2,4-Dichlorophenol	1 U	1.	0.5	ug/l	97	101	84-114	4	30
2,6-Dichlorophenol	1 U	1.	0.5	ug/l	100	103	80-116	3	30
2,4-Dimethylphenol	1 U	1.	0.5	ug/l	94	96	78-117	2	30
3,5-Dimethylphenol	10 U	10.	3	ug/l	109	113	70-130	3	30
4,6-Dinitro-2-methylphenol	15 U	15.	5	ug/l	98	110	76-128	12	30
2,4-Dinitrophenol	30 U	30.	10	ug/l	89	106	45-146	17	30
1,2-Diphenylhydrazine	1 U	1.	0.5	ug/l	97	95	68-127	2	30
Hexachlorobenzene	0.5 U	0.5	0.1	ug/l	95	94	75-119	1	30
Hexachlorobutadiene	1 U	1.	0.5	ug/l	91	90	61-115	1	30
Hexachlorocyclopentadiene	15 U	15.	5	ug/l	69	69	30-124	1	30
Hexachloroethane	5 U	5.	1	ug/l	82	81	55-109	1	30
Isophorone	1 U	1.	0.5	ug/l	97	96	74-117	1	30
2-Methylphenol	1 U	1.	0.5	ug/l	89	90	65-115	1	30
4-Methylphenol	1 U	1.	0.5	ug/l	83	85	54-112	3	30
NDPA as diphenylamine	5 U	5.	2	ug/l	95	97	70-130	1	30
2-Nitroaniline	1 U	1.	0.5	ug/l	96	100	84-122	3	30
3-Nitroaniline	1 U	1.	0.5	ug/l	90	99	80-120	10	30
4-Nitroaniline	1 U	1.	0.5	ug/l	94	99	61-110	6	30
Nitrobenzene	1 U	1.	0.5	ug/l	96	96	72-116	0	30
2-Nitrophenol	1 U	1.	0.5	ug/l	102	112	84-118	9	30
4-Nitrophenol	30 U	30.	10	ug/l	75*	80*	13-71	7	30
N-Nitroso-di-n-propylamine	1 U	1.	0.5	ug/l	92	91	69-110	2	30
N-Nitrosodiphenylamine	1 U	1.	0.5	ug/l	95	97	80-115	1	30
Pentachlorophenol	5 U	5.	1	ug/l	96	103	55-131	7	30
Phenol	1 U	1.	0.5	ug/l	55	56	26-68	1	30
Pyridine	5 U	5.	2	ug/l	63	60	13-97	6	30
1,2,4-Trichlorobenzene	1 U	1.	0.5	ug/l	92	91	71-112	1	30
2,4,5-Trichlorophenol	1 U	1.	0.5	ug/l	103	106	80-114	3	30
2,4,6-Trichlorophenol	1 U	1.	0.5	ug/l	101	103	84-119	2	30
Batch number: 13207SLA026	Sample number(s): 7130908								
Acenaphthene	1.7 U	1.7	0.67	ug/kg	106		69-114		
Acenaphthylene	1.7 U	1.7	0.33	ug/kg	95		71-113		
Anthracene	1.7 U	1.7	0.33	ug/kg	95		75-116		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	99		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	98		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	113		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	98		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	95		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	122		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	123		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	98		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	101		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	125		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	121		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	100		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	96		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	79		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	119		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	93		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Batch number: 13203A16A	Sample number(s): 7130899-7130900,7130902-7130904,7130907-7130908									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	71		67-119		
Batch number: 13204A20A	Sample number(s): 7130895-7130896,7130905									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	104	99	75-135	5	30
Batch number: 132030019A	Sample number(s): 7130895-7130896									
2,4-D	0.50	U	0.50	0.16	ug/l	114	117	68-155	2	30
Dalapon	1.3	U	1.3	0.25	ug/l	100	110	39-115	9	30
2,4-DB	1.0	U	1.0	0.30	ug/l	111	116	50-163	5	30
Dicamba	0.30	U	0.30	0.080	ug/l	88	97	55-163	10	30
Dinoseb	0.50	U	0.50	0.12	ug/l	152	184*	16-163	19	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	126	137	89-162	8	30
MCPA	200 U		200.	50	ug/l	88	97	68-154	10	30
MCPP	200 U		200.	50	ug/l	83	95	46-173	14	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	117	122	55-169	4	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	110	116	58-155	6	30
Batch number: 132050025A	Sample number(s): 7130898-7130900									
2,4-D	36	U	36.	12	ug/kg	95		59-122		
Dalapon	90	U	90.	44	ug/kg	50		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	96		54-131		
Dicamba	12	U	12.	4.0	ug/kg	89		60-123		
Dinoseb	24	U	24.	9.0	ug/kg	15		10-36		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	121		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	98		60-127		
MCPP (Mecoprop)	2,500 U		2,500.	750	ug/kg	113		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	99		58-135		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	120		63-130		
Batch number: 132010014A	Sample number(s): 7130901-7130904,7130906-7130908									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	104		85-115		
Batch number: 132030003A	Sample number(s): 7130895									
6b Perchlorate (Method 6850)	1.0	U	1.0	0.20	ug/l	97		85-115		
Batch number: 132000013A	Sample number(s): 7130895-7130896									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	58	60	35-84	3	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	82	97	69-120	17	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	82	102	69-128	21	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132000014A	Sample number(s): 7130895-7130896									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	82	80	55-126	3	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	98	97	63-132	1	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	91	90	63-132	0	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	95	96	68-128	1	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	101	99	62-143	2	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	90	92	56-137	2	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	97	95	45-134	3	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	92	91	63-131	1	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	105	105	65-135	1	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	93	92	48-124	0	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	89	88	53-123	1	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	94	92	60-129	3	30
Endrin	0.016	U	0.016	0.0065	ug/l	68	96	43-139	35*	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	96	88	55-123	9	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	116	98	51-138	17	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	94	93	57-126	2	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	91	92	65-128	1	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	99	96	46-134	3	30
Mirex	0.20	U	0.20	0.068	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132010011A	Sample number(s): 7130898-7130900									
Aldrin	0.83	U	0.83	0.17	ug/kg	85		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	100		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	95		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	99		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	111		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	101		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	103		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	96		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	113		78-135		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Endosulfan I	0.83	U	0.83	0.22	ug/kg	100		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	99		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	103		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	106		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	91		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	102		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	102		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	96		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	107		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132010012A	Sample number(s): 7130897,7130901-7130904,7130906-7130908									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	73	78	36-106	7	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	101		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132010010A	Sample number(s): 7130895-7130896									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	106	102	70-130	4	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	115	108	70-130	6	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	116	109	70-130	6	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	102	102	70-130	1	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	82	77	70-130	6	30
Batch number: 132040015A	Sample number(s): 7130897-7130904,7130906-7130908									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	103		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	110		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	110		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	83		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	84		49-107		
Batch number: 132030637001	Sample number(s): 7130897-7130904,7130906-7130908									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	117		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	98		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	105		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	102		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	101		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	104		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	103		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	109		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	97		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	101		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.73	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	103		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	104		80-120		
Batch number: 132030637001A	Sample number(s): 7130897-7130904,7130906-7130908									
Silver	0.200	U	0.200	0.0260	mg/kg	111		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	109		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	107		80-120		
Batch number: 132030637001B	Sample number(s): 7130897-7130904,7130906-7130908									
Selenium	0.400	U	0.400	0.100	mg/kg	114		80-120		
Batch number: 132030638002	Sample number(s): 7130897-7130904,7130906-7130908									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	119		85-120		
Batch number: 132040635001	Sample number(s): 7130895-7130896									
Aluminum	0.400	U	0.400	0.0828	mg/l	98	99	90-112	1	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	101	99	88-111	2	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	92	92	90-113	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	101	102	90-110	1	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	96	95	88-110	1	20
Boron	0.100	U	0.100	0.0084	mg/l	93	93	89-110	0	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	95	95	90-112	0	20
Calcium	0.400	U	0.400	0.0334	mg/l	98	98	90-110	0	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	98	97	90-110	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	97	96	90-110	1	20
Copper	0.0200	U	0.0200	0.0027	mg/l	96	97	90-112	1	20
Iron	0.400	U	0.400	0.0430	mg/l	97	96	90-112	1	20
Lead	0.0300	U	0.0300	0.0047	mg/l	92	92	88-110	1	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	97	98	90-110	1	20
Magnesium	0.200	U	0.200	0.0167	mg/l	96	96	90-110	0	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	98	98	90-110	0	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	101	100	90-110	1	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	97	96	90-111	1	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	94	93	90-110	1	20
Potassium	1.00	U	1.00	0.0980	mg/l	98	98	85-115	0	20
Sodium	2.00	U	2.00	0.167	mg/l	98	97	87-114	1	20
Tin	0.0400	U	0.0400	0.0029	mg/l	100	100	90-110	0	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	99	98	90-113	0	20
Vanadium	0.0100	U	0.0100	0.0020	mg/l	99	99	90-110	0	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	97	96	90-110	1	20
Zirconium	0.100	U	0.100	0.0084	mg/l	100	100	90-110	1	20
Batch number: 132040639001A	Sample number(s): 7130895-7130896									
Silver	0.0010	U	0.0010	0.00011	mg/l	100	98	90-115	2	20
Strontium	0.0020	U	0.0020	0.00034	mg/l	97	98	80-120	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Thallium	0.0010 U	0.0010	0.00015	mg/l	99	106	80-120	7	20
Batch number: 132040639001B	Sample number(s): 7130895-7130896								
Selenium	0.0040 U	0.0040	0.00050	mg/l	104	102	80-120	2	20
Batch number: 132045713007	Sample number(s): 7130895-7130896								
3b Mercury 7470A	0.00020 U	0.00020	0.00006 0	mg/l	101	101	90-115	0	20
Batch number: 13199373401A	Sample number(s): 7130895-7130896								
2b Chromium VI by EPA 7199	10.0 U	10.0	5.0	ug/l	103	104	90-110	1	20
Batch number: 13203243201A	Sample number(s): 7130906-7130908								
2a Chromium VI by EPA 7199	0.40 U	0.40	0.14	mg/kg	101		80-120		
Batch number: 13199002101A	Sample number(s): 7130895-7130896								
28b pH (9040B and 9040C)					99		99-103		
Batch number: 13199039401A	Sample number(s): 7130897-7130904,7130906								
15a pH by 9045D					100		95-105		
Batch number: 13199039401B	Sample number(s): 7130907-7130908								
15a pH by 9045D					100		95-105		
Batch number: 13205162401A	Sample number(s): 7130897-7130904,7130906-7130908								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13200001	Sample number(s): 7130895-7130896								
2378-TCDD	2.00 U	2.00	0.290	pg/l	93		60-150		
12378-PeCDD	10.0 U	10.0	0.263	pg/l	98		60-150		
123478-HxCDD	0.368 J	10.0	0.195	pg/l	101		60-150		
123678-HxCDD	0.364 J	10.0	0.202	pg/l	99		60-150		
123789-HxCDD	0.327 J	10.0	0.202	pg/l	99		60-150		
1234678-HpCDD	0.373 J	10.0	0.233	pg/l	97		60-150		
OCDD	1.18 J	20.0	0.179	pg/l	98		60-150		
2378-TCDF	2.00 U	2.00	0.237	pg/l	92		60-150		
12378-PeCDF	0.465 J	10.0	0.197	pg/l	97		60-150		
23478-PeCDF	0.511 J	10.0	0.177	pg/l	99		60-150		
123478-HxCDF	0.527 J	10.0	0.106	pg/l	100		60-150		
123678-HxCDF	0.476 J	10.0	0.114	pg/l	95		60-150		
123789-HxCDF	0.586 J	10.0	0.123	pg/l	99		60-150		
234678-HxCDF	0.238 J	10.0	0.102	pg/l	100		60-150		
1234678-HpCDF	0.413 J	10.0	0.0783	pg/l	99		60-150		
1234789-HpCDF	0.325 J	10.0	0.0899	pg/l	98		60-150		
OCDF	0.838 J	20.0	0.243	pg/l	98		60-150		
Batch number: 13206001	Sample number(s): 7130897-7130899,7130901-7130904,7130906-7130908								
2378-TCDD	1.00 U	1.00	0.0506	ng/kg	96		67-158		
12378-PeCDD	5.00 U	5.00	0.0504	ng/kg	101		70-142		
123478-HxCDD	0.0432 J	5.00	0.0277	ng/kg	98		70-164		
123678-HxCDD	5.00 U	5.00	0.0303	ng/kg	96		76-134		
123789-HxCDD	0.0358 J	5.00	0.0303	ng/kg	94		64-162		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
1234678-HpCDD	0.0714	J	5.00	0.0483	ng/kg	92		70-140		
OCDD	0.230	J	10.0	0.0327	ng/kg	94		78-144		
2378-TCDF	1.00	U	1.00	0.0511	ng/kg	97		75-158		
12378-PeCDF	0.0307	J	5.00	0.0297	ng/kg	94		80-134		
23478-PeCDF	5.00	U	5.00	0.0295	ng/kg	95		68-160		
123478-HxCDF	0.0229	J	5.00	0.0197	ng/kg	95		72-134		
123678-HxCDF	0.0231	J	5.00	0.0190	ng/kg	93		84-130		
123789-HxCDF	0.0413	J	5.00	0.0242	ng/kg	91		78-130		
234678-HxCDF	0.0401	J	5.00	0.0180	ng/kg	90		70-156		
1234678-HpCDF	0.0256	J	5.00	0.0122	ng/kg	90		82-122		
1234789-HpCDF	5.00	U	5.00	0.0238	ng/kg	93		78-138		
OCDF	0.159	J	10.0	0.0523	ng/kg	92		63-170		
Batch number: 13200001	Sample number(s): 7130895-7130896									
TEQ WHO 2005 - EDLx0.0	0.0660				pg/l					
Batch number: 13206001	Sample number(s): 7130897-7130899,7130901-7130904,7130906-7130908									
TEQ WHO 2005 - EDLx0.0	0.00240				ng/kg					

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B132052AA	Sample number(s): 7130908 UNSPK: P129596								
Acetone	153	162	31-195	8	30				
Acrolein	169*	239*	10-165	36*	30				
Acrylonitrile	102	111	48-139	10	30				
t-Amyl methyl ether	98	108	39-147	12	30				
Benzene	101	113	55-143	14	30				
Bromobenzene	98	101	43-139	5	30				
Bromochloromethane	102	115	60-137	14	30				
Bromodichloromethane	93	103	53-136	12	30				
Bromoform	95	102	38-124	9	30				
Bromomethane	93	109	42-168	18	30				
2-Butanone	131	140	37-163	9	30				
t-Butyl alcohol	218*	294*	47-153	32*	30				
n-Butylbenzene	87	82	30-146	4	30				
sec-Butylbenzene	96	91	33-157	3	30				
tert-Butylbenzene	95	95	41-152	2	30				
Carbon Disulfide	101	115	48-146	16	30				
Carbon Tetrachloride	101	111	45-153	12	30				
Chlorobenzene	98	107	49-135	11	30				
Chloroethane	85	100	39-152	19	30				
2-Chloroethyl Vinyl Ether	93	100	32-139	9	30				
Chloroform	102	113	61-142	13	30				
1-Chlorohexane	104	102	70-130	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chloromethane	97	114	36-143	18	30				
2-Chlorotoluene	95	95	42-146	2	30				
4-Chlorotoluene	93	95	39-145	4	30				
1,2-Dibromo-3-chloropropane	93	103	30-139	13	30				
Dibromochloromethane	97	108	51-128	13	30				
1,2-Dibromoethane	103	114	54-129	12	30				
Dibromomethane	99	109	57-130	12	30				
1,2-Dichlorobenzene	94	100	36-133	8	30				
1,3-Dichlorobenzene	93	97	34-134	6	30				
1,4-Dichlorobenzene	91	96	35-136	7	30				
Dichlorodifluoromethane	105	118	26-151	14	30				
1,1-Dichloroethane	101	115	63-142	15	30				
1,2-Dichloroethane	101	113	49-150	13	30				
1,1-Dichloroethene	106	119	61-149	14	30				
cis-1,2-Dichloroethene	101	115	49-153	15	30				
trans-1,2-Dichloroethene	105	120	51-153	15	30				
1,2-Dichloropropane	104	114	48-145	11	30				
1,3-Dichloropropane	100	111	45-150	13	30				
2,2-Dichloropropane	95	108	53-147	15	30				
1,1-Dichloropropene	104	116	54-145	12	30				
cis-1,3-Dichloropropene	98	108	35-151	12	30				
trans-1,3-Dichloropropene	95	105	30-149	12	30				
Ethyl t-butyl ether	96	107	58-124	13	30				
Ethylbenzene	95	100	44-141	7	30				
Freon 113	107	122	56-156	15	30				
Hexachlorobutadiene	77	74	10-155	2	30				
2-Hexanone	111	121	32-160	10	30				
di-Isopropyl ether	102	115	59-133	14	30				
Isopropylbenzene	94	96	38-144	4	30				
p-Isopropyltoluene	90	86	29-152	3	30				
Methyl Iodide	107	124	52-139	17	30				
Methyl Tertiary Butyl Ether	100	111	55-129	12	30				
4-Methyl-2-pentanone	112	121	46-139	10	30				
Methylene Chloride	98	114	49-160	17	30				
n-Propylbenzene	96	94	39-157	0	30				
Styrene	95	102	35-134	10	30				
1,1,1,2-Tetrachloroethane	95	105	39-150	13	30				
1,1,2,2-Tetrachloroethane	105	113	40-152	9	30				
Tetrachloroethene	103	109	42-149	8	30				
Toluene	103	113	50-146	12	30				
1,2,3-Trichlorobenzene	79	90	10-140	15	30				
1,2,4-Trichlorobenzene	79	85	10-136	10	30				
1,1,1-Trichloroethane	100	108	43-150	11	30				
1,1,2-Trichloroethane	107	116	47-161	10	30				
Trichloroethene	101	113	53-144	13	30				
Trichlorofluoromethane	104	118	47-163	15	30				
1,2,3-Trichloropropane	109	117	45-154	9	30				
1,2,4-Trimethylbenzene	93	93	37-149	2	30				
1,3,5-Trimethylbenzene	95	96	38-150	3	30				
Vinyl Chloride	104	119	50-154	15	30				
m+p-Xylene	95	99	44-137	7	30				
o-Xylene	93	99	42-137	9	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13199SLE026	Sample number(s): 7130906-7130908 UNSPK: P129596								
Aniline	50	55	10-131	9	30				
Benzidine	13*	10*	35-141	22	30				
Benzo(a)anthracene	93	90	32-150	3	30				
Benzo(a)pyrene	108	98	33-145	10	30				
Benzo(b)fluoranthene	111	92	29-150	19	30				
Benzo(g,h,i)perylene	105	100	48-134	5	30				
Benzo(k)fluoranthene	97	97	41-139	0	30				
Benzoic acid	70	66	23-170	5	30				
Benzyl alcohol	87	79	32-145	9	30				
1,1'-Biphenyl	100	93	36-138	7	30				
4-Bromophenyl-phenylether	111	108	66-122	3	30				
Butylbenzylphthalate	103	100	42-146	3	30				
Di-n-butylphthalate	105	99	49-134	5	30				
Carbazole	100	94	58-126	6	30				
4-Chloro-3-methylphenol	97	94	50-137	4	30				
4-Chloroaniline	52	83	11-114	47*	30				
bis(2-Chloroethoxy)methane	92	92	58-122	1	30				
bis(2-Chloroethyl)ether	89	83	54-128	7	30				
bis(2-Chloroisopropyl)ether	84	82	50-115	3	30				
2-Chloronaphthalene	121	115	50-140	5	30				
2-Chlorophenol	99	93	51-139	7	30				
4-Chlorophenyl-phenylether	102	94	65-117	8	30				
Dibenzofuran	103	99	60-120	4	30				
1,2-Dichlorobenzene	92	91	45-127	2	30				
1,3-Dichlorobenzene	91	88	46-123	3	30				
1,4-Dichlorobenzene	85	84	40-132	1	30				
3,3'-Dichlorobenzidine	68	71	10-143	5	30				
2,4-Dichlorophenol	103	100	54-135	3	30				
2,6-Dichlorophenol	105	98	56-133	6	30				
Diethylphthalate	97	94	53-132	3	30				
2,4-Dimethylphenol	101	73	39-147	31*	30				
Dimethylphthalate	100	93	49-129	6	30				
4,6-Dinitro-2-methylphenol	81	88	10-148	8	30				
2,4-Dinitrophenol	57	73	20-143	25	30				
1,2-Diphenylhydrazine	115	109	51-145	5	30				
bis(2-Ethylhexyl)phthalate	100	95	38-151	4	30				
Hexachlorobenzene	111	106	46-132	4	30				
Hexachlorobutadiene	99	96	58-120	3	30				
Hexachlorocyclopentadiene	82	86	10-153	5	30				
Hexachloroethane	93	87	24-138	7	30				
Isophorone	95	90	59-122	5	30				
2-Methylphenol	92	82	32-146	11	30				
4-Methylphenol	87	84	31-150	3	30				
Naphthalene	97	93	35-141	4	30				
NDPA as diphenylamine	106	95	70-130	11	30				
2-Nitroaniline	102	95	63-137	7	30				
3-Nitroaniline	91	92	31-145	1	30				
4-Nitroaniline	83	82	25-137	1	30				
Nitrobenzene	92	90	46-133	1	30				
2-Nitrophenol	100	96	52-137	4	30				

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
4-Nitrophenol	87	81	25-142	7	30				
N-Nitroso-di-n-propylamine	83	80	45-133	4	30				
N-Nitrosodiphenylamine	107	96	59-135	11	30				
Di-n-octylphthalate	107	102	48-155	4	30				
Pentachlorophenol	94	89	23-145	6	30				
Phenanthrene	100	93	34-147	7	30				
Phenol	88	85	34-146	4	30				
Pyrene	96	95	29-148	1	30				
Pyridine	65	57	16-108	13	30				
1,2,4-Trichlorobenzene	101	100	66-116	1	30				
2,4,5-Trichlorophenol	107	105	41-141	1	30				
2,4,6-Trichlorophenol	104	97	41-142	7	30				
Batch number: 13199SLF026	Sample number(s): 7130906-7130907 UNSPK: P129596								
Acenaphthene	94	95	48-127	1	30				
Acenaphthylene	92	91	49-121	1	30				
Anthracene	96	96	52-126	1	30				
Benzo(a)anthracene	100	100	32-135	1	30				
Benzo(a)pyrene	98	100	36-138	2	30				
Benzo(b)fluoranthene	115	117	26-142	2	30				
Benzo(e)pyrene	96	97	70-130	2	30				
Benzo(g,h,i)perylene	64	61	33-141	6	30				
Benzo(k)fluoranthene	100	105	47-129	6	30				
Chrysene	97	100	29-148	3	30				
Dibenz(a,h)anthracene	80	78	34-125	3	30				
Fluoranthene	100	100	47-135	0	30				
Fluorene	95	94	50-129	1	30				
Indeno(1,2,3-cd)pyrene	76	74	17-136	3	30				
1-Methylnaphthalene	98	98	50-131	1	30				
2-Methylnaphthalene	94	94	28-144	0	30				
Naphthalene	92	94	31-148	1	30				
N-Nitrosodimethylamine	79	77	48-113	3	30				
Phenanthrene	93	95	29-142	2	30				
Pyrene	96	98	26-143	2	30				
Batch number: 13201SLA026	Sample number(s): 7130897-7130904 UNSPK: P129593								
Acenaphthene	87	82	48-127	6	30				
Acenaphthylene	81	78	49-121	3	30				
Anthracene	85	84	52-126	2	30				
Benzo(a)anthracene	88	85	32-135	3	30				
Benzo(a)pyrene	85	83	36-138	2	30				
Benzo(b)fluoranthene	90	89	26-142	2	30				
Benzo(e)pyrene	83	81	70-130	2	30				
Benzo(g,h,i)perylene	85	83	33-141	3	30				
Benzo(k)fluoranthene	91	88	47-129	4	30				
Butylbenzylphthalate	110	107	59-153	3	30				
Di-n-butylphthalate	105	104	62-154	1	30				
Chrysene	86	83	29-148	3	30				
Dibenz(a,h)anthracene	92	89	34-125	3	30				
Diethylphthalate	109	107	76-127	1	30				
Dimethylphthalate	92	90	62-136	3	30				
Bis(2-Ethylhexyl)phthalate	111	110	39-167	1	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Fluoranthene	88	86	47-135	2	30				
Fluorene	86	83	50-129	3	30				
Indeno(1,2,3-cd)pyrene	93	90	17-136	3	30				
1-Methylnaphthalene	90	85	50-131	5	30				
2-Methylnaphthalene	88	82	28-144	7	30				
Naphthalene	85	79	31-148	8	30				
N-Nitrosodimethylamine	68	62	48-113	9	30				
Di-n-octylphthalate	107	105	52-162	2	30				
Phenanthrene	85	83	29-142	3	30				
Pyrene	86	83	26-143	3	30				
Batch number: 13207SLA026	Sample number(s): 7130908 UNSPK: P139498								
Acenaphthene	99	95	48-127	5	30				
Acenaphthylene	90	86	49-121	5	30				
Anthracene	92	86	52-126	7	30				
Benzo(a)anthracene	97	88	32-135	9	30				
Benzo(a)pyrene	96	89	36-138	7	30				
Benzo(b)fluoranthene	104	97	26-142	7	30				
Benzo(e)pyrene	93	86	70-130	7	30				
Benzo(g,h,i)perylene	95	79	33-141	18	30				
Benzo(k)fluoranthene	94	86	47-129	9	30				
Butylbenzylphthalate	121	111	59-153	8	30				
Di-n-butylphthalate	116	111	62-154	4	30				
Chrysene	97	86	29-148	11	30				
Dibenz(a,h)anthracene	101	89	34-125	13	30				
Diethylphthalate	121	115	76-127	6	30				
Dimethylphthalate	100	97	62-136	4	30				
Bis(2-Ethylhexyl)phthalate	130	128	39-167	2	30				
Fluoranthene	97	89	47-135	8	30				
Fluorene	94	88	50-129	6	30				
Indeno(1,2,3-cd)pyrene	101	88	17-136	14	30				
1-Methylnaphthalene	99	95	50-131	4	30				
2-Methylnaphthalene	95	91	28-144	4	30				
Naphthalene	93	90	31-148	3	30				
N-Nitrosodimethylamine	74	70	48-113	5	30				
Di-n-octylphthalate	112	104	52-162	8	30				
Phenanthrene	91	84	29-142	7	30				
Pyrene	96	86	26-143	11	30				
Batch number: 13203A16A	Sample number(s): 7130899-7130900,7130902-7130904,7130907-7130908 UNSPK: P129596								
11a TPH by EPA 8015B GRO	83	82	39-118	5	30				
Batch number: 132050025A	Sample number(s): 7130898-7130900 UNSPK: 7130898								
2,4-D	98	93	42-143	5	35				
Dalapon	53	27	19-109	65*	50				
2,4-DB	111	106	10-179	4	50				
Dicamba	95	78	45-147	20	50				
Dinoseb	20	21	10-52	4	35				
2,4-DP (Dichlorprop)	111	108	32-171	3	50				
MCPA	88	79	23-169	10	50				
MCPP (Mecoprop)	84	76	24-164	9	50				
2,4,5-T	103	105	12-172	2	35				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2,4,5-TP	114	112	10-142	1	35				
Batch number: 132010014A	Sample number(s): 7130901-7130904,7130906-7130908 UNSPK: P129596								
6a Perchlorate (Method 6850)	102	99	80-120	2	20				
Batch number: 132030003A	Sample number(s): 7130895 UNSPK: 7130895								
6b Perchlorate (Method 6850)	99	99	80-120	0	20				
Batch number: 132010011A	Sample number(s): 7130898-7130900 UNSPK: P128144								
Aldrin	89	83	16-126	7	50				
Alpha BHC	98	94	14-140	3	50				
Beta BHC	92	91	10-173	1	50				
Gamma BHC - Lindane	96	92	30-137	3	50				
p,p-DDD	110	106	43-149	3	50				
p,p-DDE	82	65	18-161	16	50				
p,p-DDT	85	76	12-193	8	50				
Delta BHC	94	89	13-153	5	50				
Dieldrin	109	105	19-154	3	50				
Endosulfan I	100	97	16-137	3	50				
Endosulfan II	98	95	10-156	3	50				
Endosulfan Sulfate	102	97	10-181	4	50				
Endrin	107	103	30-152	3	50				
Endrin Aldehyde	85	81	10-152	3	35				
Endrin Ketone	98	95	10-160	2	50				
Heptachlor	100	97	16-152	2	50				
Heptachlor Epoxide	94	90	17-167	4	50				
Methoxychlor	110	105	34-168	4	50				
Batch number: 132010012A	Sample number(s): 7130897,7130901-7130904,7130906-7130908 UNSPK: P129596								
PCB-1016	100	100	16-146	1	50				
PCB-1260	100	105	40-134	4	50				
Batch number: 132040015A	Sample number(s): 7130897-7130904,7130906-7130908 UNSPK: 7130900								
EFH (C12-C14)	105	103	49-123	2	20				
EFH (C15-C20)	162*	138*	49-123	16	20				
EFH (C21-C30)	172*	113	49-123	28*	20				
EFH (C30-C40)	131*	95	49-123	11	20				
EFH (C8-C11)	102	97	49-123	5	20				
Batch number: 132030637001	Sample number(s): 7130897-7130904,7130906-7130908 UNSPK: 7130900 BKG: 7130900								
Aluminum	3157 (2)	2639 (2)	75-125	4	20	18,600	18,700	1	20
Antimony	74*	73*	75-125	1	20	4.67	4.10	13 (1)	20
Arsenic	102	101	75-125	1	20	5.91	6.18	4 (1)	20
Barium	103	101	75-125	1	20	68.1	68.9	1	20
Beryllium	106	103	75-125	3	20	0.344 J	0.375 J	9 (1)	20
Boron	104	102	75-125	2	20	1.05 J	1.06 J	1 (1)	20
Cadmium	94	94	75-125	1	20	0.0980 J	0.120 J	20 (1)	20
Calcium	54 (2)	-325 (2)	75-125	2	20	87,100	78,500	10	20
Chromium	115	106	75-125	4	20	24.9	24.7	1	20
Cobalt	97	92	75-125	4	20	7.88	6.80	15	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Copper	112	111	75-125	1	20	16.4		16.7		2	20
Iron	1337 (2)	667 (2)	75-125	3	20	24,200		24,400		1	20
Lead	102	97	75-125	3	20	7.93		7.38		7 (1)	20
Lithium	104	102	75-125	1	20	17.6		18.0		2 (1)	20
Magnesium	341 (2)	251 (2)	75-125	3	20	5,570		5,640		1	20
Manganese	266 (2)	360 (2)	75-125	9	20	382		319		18	20
Molybdenum	94	92	75-125	2	20	1.93	J	1.46	J	28* (1)	20
Nickel	96	95	75-125	1	20	14.6		13.4		8	20
Phosphorus	161 (2)	118 (2)	75-125	8	20	406		412		1	20
Potassium	177*	162*	75-125	4	20	2,270		2,290		1	20
Sodium	102	100	75-125	2	20	152		151		1 (1)	20
Tin	88	86	75-125	2	20	2.53	J	2.54	J	1 (1)	20
Titanium	405 (2)	367 (2)	75-125	3	20	985		999		1	20
Vanadium	123	116	75-125	3	20	50.5		50.9		1	20
Zinc	105	104	75-125	1	20	51.0		53.4		4	20
Zirconium	97	96	75-125	1	20	2.84	J	3.33	J	16 (1)	20
Batch number: 132030637001A	Sample number(s): 7130897-7130904,7130906-7130908 UNSPK: 7130900 BKG: 7130900										
Silver	102	104	75-125	2	20	0.196	U	0.196	U	0 (1)	20
Strontium	19 (2)	-174 (2)	75-125	10	20	159		147		8	20
Thallium	106	109	75-125	2	20	0.224		0.239		7 (1)	20
Batch number: 132030637001B	Sample number(s): 7130897-7130904,7130906-7130908 UNSPK: 7130900 BKG: 7130900										
Selenium	100	104	75-125	4	20	0.144	J	0.143	J	1 (1)	20
Batch number: 132030638002	Sample number(s): 7130897-7130904,7130906-7130908 UNSPK: 7130897 BKG: 7130897										
3a Mercury 7471A	118	115	65-135	1	20	0.0210		0.0239		13 (1)	20
Batch number: 13203243201A	Sample number(s): 7130906-7130908 UNSPK: P129596 BKG: P129596										
2a Chromium VI by EPA 7199	100		75-125			1.3		0.16	J	157* (1)	20
Batch number: 13199002101A	Sample number(s): 7130895-7130896 BKG: P130827										
28b pH (9040B and 9040C)						6.9		7.0		2	3
Batch number: 13199039401A	Sample number(s): 7130897-7130904,7130906 BKG: 7130897										
15a pH by 9045D						5.99		6.02		0	3
Batch number: 13199039401B	Sample number(s): 7130907-7130908 BKG: 7130907										
15a pH by 9045D						8.40		8.42		0	3
Batch number: 13205162401A	Sample number(s): 7130897-7130904,7130906-7130908 BKG: 7130900										
14a Moisture Content by 160.3						15.9		15.5		3	20
Batch number: 13206001	Sample number(s): 7130897-7130899,7130901-7130904,7130906-7130908 UNSPK: P129596										
2378-TCDD	99	97	40-135	3	20						
12378-PeCDD	100	97	40-135	4	20						
123478-HxCDD	97	99	40-135	1	20						
123678-HxCDD	97	96	40-135	2	20						
123789-HxCDD	94	96	40-135	1	20						
1234678-HpCDD	92	92	40-135	1	20						

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
OCDD	95	94	40-135	2	20				
2378-TCDF	99	98	40-135	2	20				
12378-PeCDF	98	92	40-135	7	20				
23478-PeCDF	97	96	40-135	2	20				
123478-HxCDF	94	96	40-135	1	20				
123678-HxCDF	90	95	40-135	5	20				
123789-HxCDF	91	92	40-135	0	20				
234678-HxCDF	94	94	40-135	0	20				
1234678-HpCDF	90	92	40-135	0	20				
1234789-HpCDF	93	92	40-135	2	20				
OCDF	92	92	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 12a Volatile Organics EPA8260B
Batch number: B132052AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7130908	101	107	97	96
Blank	98	101	99	93
LCS	101	112	100	100
MS	101	105	101	97
MSD	100	105	102	97
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 12b Volatile Organics EPA8260B
Batch number: Y132041AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7130895	108	103	95	94
7130905	108	104	96	95
Blank	106	102	97	96
LCS	105	104	98	103
LCSD	105	104	100	103
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 8a SVOCs by EPA 8270D
Batch number: 13199SLE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7130906	77	85	81	84	90	91
7130907	74	81	79	81	93	90
7130908	65	74	62	75	80	86
Blank	82	94	107	92	98	110

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Surrogate Quality Control

LCS	99	107	104	96	104	110
LCSD	79	91	108			
MS	88	96	96	95	103	107
MSD	84	92	90	92	96	105
Limits:	25-120	25-130	35-130	40-130	45-130	45-130

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13199SLF026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7130906	81	115	96
7130907	85	88	94
Blank	79	85	93
LCS	88	97	101
MS	85	94	97
MSD	87	95	98
Limits:	54-129	61-134	55-129

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13201SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7130897	70	72	86
7130898	72	79	89
7130899	71	79	81
7130900	85	91	96
7130901	83	87	95
7130902	81	86	95
7130903	77	82	84
7130904	81	87	92
Blank	88	95	101
LCS	86	93	97
MS	74	81	88
MSD	74	78	83
Limits:	54-129	61-134	55-129

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13205WAB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7130895	93	101	99
7130896	88	97	96
Blank	100	109	107
LCS	93	102	101
LCSD	93	102	102
Limits:	64-120	62-141	58-134

Analysis Name: 8b SVOCs by EPA 8270D
Batch number: 13205WAC026

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Surrogate Quality Control

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7130895	41	64	93	87	88	102
Blank	34	54	79	75	79	91
LCS	49	70	102	91	92	99
LCSD	50	70	107	91	92	99
Limits:	20-110	20-110	30-110	40-130	45-130	45-130

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13207SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7130908	89	92	102
Blank	88	93	104
LCS	83	90	101
MS	83	88	98
MSD	76	80	92
Limits:	54-129	61-134	55-129

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13203A16A

	Trifluorotoluene-F
7130899	62
7130900	61
7130902	71
7130903	64
7130904	69
7130907	70
7130908	73
Blank	77
LCS	76
MS	70
MSD	70
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13204A20A

	Trifluorotoluene-F
7130895	87
7130896	89
7130905	87
Blank	87
LCS	118
LCSD	118
Limits:	63-135

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132000013A

	Tetrachloro-m-xylene	Decachlorobiphenyl

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Surrogate Quality Control

7130895	104	85
7130896	99	65
Blank	100	46
LCS	95	78
LCSD	110	94
Limits:	45-120	45-120

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132000014A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7130895	95	91
7130896	107	76
Blank	88	47
LCS	88	82
LCSD	87	85
Limits:	60-140	20-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132010011A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7130898	87	100
7130899	87	100
7130900	80	101
Blank	84	100
LCS	87	104
MS	87	101
MSD	80	97
Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132010012A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7130897	112	97
7130901	106	74
7130902	105	85
7130903	105	89
7130904	111	94
7130906	107	88
7130907	99	75
7130908	117	97
Blank	111	97
LCS	108	100
LCSD	115	111
MS	114	102
MSD	113	99
Limits:	45-120	45-120

Analysis Name: 24b Herbicides by EPA 8151A

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Surrogate Quality Control

Batch number: 132030019A

	2,4-Dichlorophenylacetic acid
7130895	77
7130896	74
Blank	67
LCS	88
LCSD	92
Limits:	50-150

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132050025A

	2,4-Dichlorophenylacetic acid
7130898	77
7130899	71
7130900	64
Blank	71
LCS	91
MS	81
MSD	78
Limits:	50-150

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132010010A

	Chlorobenzene	Orthoterphenyl
7130895	97	100
7130896	97	97
Blank	96	99
LCS	105	108
LCSD	96	100
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132040015A

	Chlorobenzene	Orthoterphenyl
7130897	102	106
7130898	99	105
7130899	100	102
7130900	102	107
7130901	102	103
7130902	99	95
7130903	97	91
7130904	94	90
7130906	89	94
7130907	94	94
7130908	101	105
Blank	102	107
LCS	103	108

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Surrogate Quality Control

MS	101	104
MSD	101	105
Limits:	37-125	66-123

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13200001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7130895	69	72	75	76	78	79
7130896	57	58	67	68	67	67
Blank	70	75	79	80	81	83
OPR	75	81	82	83	83	85
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7130895	78	78	79	76	75	79
7130896	72	74	80	60	68	69
Blank	84	86	92	76	78	82
OPR	85	85	90	81	81	85
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7130895	77	78	77	62	70
7130896	66	73	78	52	56
Blank	80	83	89	66	71
OPR	82	85	88	70	77
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13206001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7130897	66	62	55	66	58	55
7130898	77	67	66	72	64	66
7130899	72	73	67	73	69	65
7130901	77	71	70	69	66	78
7130902	76	73	65	76	64	65
7130903	64	62	56	61	56	51
7130904	73	69	69	72	64	63
7130906	82	74	77	73	71	81
7130907	82	74	75	73	63	76
7130908	65	67	73	77	64	61
Blank	85	76	69	78	78	78
MS	65	74	65	75	68	63
MSD	63	71	68	76	72	70
OPR	70	69	62	72	69	71
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405000
Reported: 08/01/13 at 09:13 AM

Surrogate Quality Control

7130897	81	48	43	68	66	69
7130898	88	58	49	75	72	75
7130899	84	63	55	75	73	76
7130901	81	78	94	77	71	72
7130902	94	61	54	80	76	79
7130903	70	56	52	70	65	68
7130904	81	67	60	77	70	76
7130906	80	88	97	79	77	77
7130907	75	87	81	81	74	73
7130908	83	66	66	77	71	77
Blank	105	68	60	83	89	89
MS	99	70	66	76	76	79
MSD	89	64	66	77	74	79
OPR	95	61	56	74	76	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7130897	69	71	71	61	72
7130898	76	78	74	66	79
7130899	76	82	79	68	79
7130901	76	87	109	68	74
7130902	80	85	85	67	85
7130903	67	68	72	56	65
7130904	75	79	79	59	73
7130906	79	87	109	72	75
7130907	75	84	93	69	77
7130908	76	82	91	56	71
Blank	91	93	85	71	86
MS	80	88	89	64	79
MSD	79	78	84	62	74
OPR	80	83	78	60	76
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Acct# 13013 Gp# 1405000 Sample# 7130895-908

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/17/2013
CarrierName: FedEx
AirbillNo: 796254894934

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130717-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-071713	7/17/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB1-071713	7/17/13 15:00	WQ	None	4 - 1 L Amber	10 day									X							X															
EB2-071713	7/17/13 15:30	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB1-071713	7/17/13 15:00	WQ	HCl	6 - 40 mL Vial	10 day																		X		X											
EB1-071713	7/17/13 15:00	WQ	None	1 - 40 mL Vial	10 day												X																			
EB2-071713	7/17/13 15:30	WQ	HCl	3 - 40 mL Vial	10 day																				X											

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[signature]	07/17/2013	1600									
									Brandy Bardley	7.18.13	925

COC Rev 2

COC 20130717-01, Page 1 of 1

acct# 13013 Ap# 1405000 Sample# 7130895-908

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/17/2013
CarrierName: FedEx
AirbillNo: 796254894934

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130717-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB2-071713	7/17/13 15:30	WQ	None	2 - 1 L Amber	10 day									X																						
EB2-071713	7/17/13 15:30	WQ	None	2 - 250 mL Amber	10 day							X			X																					
EB2-071713	7/17/13 15:30	WQ	None	2 - 250 mL Poly	10 day														X	X																
EB2-071713	7/17/13 15:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB1-071713	7/17/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB1-071713	7/17/13 15:00	WQ	None	2 - 250 mL Poly	10 day														X	X																
EB1-071713	7/17/13 15:00	WQ	None	4 - 250 mL Amber	10 day					X		X			X							X														

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Sean Myers	07/17/2013	1600									
									Brandy Bailey	7.18.13	925

COC Rev 2

COC: 20130717-02, Page 1 of 1

acct#13013 Cp#1405000 Sample#1130895-908

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/17/2013
CarrierName: FedEx
AirbillNo: 796254894934

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130717-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-512-SA8-SB-0.0-0.5	7/17/13 08:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-512-SA8-SB-0.0-0.5	7/17/13 08:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-514-SA8-SB-0.0-0.5	7/17/13 08:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X						X	X				X											
SL-514-SA8-SB-0.0-0.5	7/17/13 08:55	SO	None	1 - 4 oz glass	10 day													X																		
SL-514-SA8-SB-4.0-5.0	7/17/13 09:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X						X	X				X											
SL-514-SA8-SB-4.0-5.0	7/17/13 09:55	SO	None	1 - 4 oz glass	10 day													X																		
SL-514-SA8-SB-7.5-8.5	7/17/13 10:15	SO	None	2 - SS-Sleeve	10 day	X	X					X								X	X				X											
SL-514-SA8-SB-7.5-8.5	7/17/13 10:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-515-SA8-SB-0.0-0.5	7/17/13 10:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X		X								X											
SL-515-SA8-SB-0.0-0.5	7/17/13 10:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-515-SA8-SB-4.0-5.0	7/17/13 11:05	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X		X	X							X											
SL-515-SA8-SB-9.0-10.0	7/17/13 11:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X		X	X							X											
SL-515-SA8-SB-14.0-15.0	7/17/13 11:35	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X		X	X							X											

Special Instructions:

Sampler: V. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	7/17/2013	1600							Brandy Bailey	7.18.13	925

acct# 13013 Cap# 1405000 sample# 7130895-908

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/17/2013
CarrierName: FedEx
AirbillNo: 796254894934

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130717-04
Cooler #: 4
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-071713	7/17/13 08:00	WQ	HCl	6 - 40 mL Vial	10 day																	X		X												
SL-514-SA8-SB-4.0-5.0	7/17/13 09:55	SO	None	2 - Encore	10 day																			X												
SL-514-SA8-SB-7.5-8.5	7/17/13 10:15	SO	None	2 - Encore	10 day																			X												
SL-515-SA8-SB-4.0-5.0	7/17/13 11:05	SO	None	2 - Encore	10 day																			X												
SL-515-SA8-SB-9.0-10.0	7/17/13 11:20	SO	None	2 - Encore	10 day																			X												
SL-515-SA8-SB-14.0-15.0	7/17/13 11:35	SO	None	2 - Encore	10 day																			X												
EB2-071713	7/17/13 15:30	WQ	None	2 - 1 L Amber	10 day																X															
EB2-071713	7/17/13 15:30	WQ	None	1 - 250 mL Amber	10 day																	X														
SL-513-SA8-SB-0.0-0.5	7/17/13 13:45	SO	None	2 - SS-Sleeve	10 day	X	X			X		X		X	X		X									X										
SL-513-SA8-SB-0.0-0.5	7/17/13 13:45	SO	None	2 - 4 oz glass	10 day														X		X															
SL-513-SA8-SB-4.0-5.0	7/17/13 14:00	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X		X	X								X										
SL-513-SA8-SB-4.0-5.0	7/17/13 14:00	SO	None	1 - 4 oz glass	10 day															X																
SL-513-SA8-SB-4.0-5.0	7/17/13 14:00	SO	None	2 - Encore	10 day																				X											
SL-513-SA8-SB-8.0-9.0	7/17/13 14:15	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X		X	X								X										
SL-513-SA8-SB-8.0-9.0	7/17/13 14:15	SO	None	1 - 4 oz glass	10 day															X																
SL-513-SA8-SB-8.0-9.0	7/17/13 14:15	SO	None	5 - Encore	10 day																		X		X											

Special Instructions:

Sampler: V. Cortes Pastrana

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Thyssen	07/17/2013	1600							Brandy Beverly	7.18.13	3925

COC Rev 2

COC: 20130717-04, Page 1 of 1

1 of 1

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C# 1405000

Environmental Sample Administration Receipt Documentation Log

Client/Project: COM

Date of Receipt: 9.18.13

Time of Receipt: 925

Source Code: SO-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.3	TB	WI	Y	B	
2	↓	3.7	↓	↓	↓	↓	
3		2.6					
4	↓	0.9	↓	↓	↓	↓	
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brianely Barclay 2299 **Date/Time:** 9.18.13 1038

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH070

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

July 31, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/19/2013
Group Number: 1405341
SDG: PH070
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-506-SA8-SB-0.0-0.5 Soil	7132364
SL-506-SA8-SB-4.0-5.0 Soil	7132365
SL-509-SA8-SB-0.0-0.5 Soil	7132366
SL-509-SA8-SB-4.0-5.0 Soil	7132367
SL-601-SA8-SB-0.0-0.5 Soil	7132368
SL-601-SA8-SB-4.0-5.0 Soil	7132369
TB-071813 Water	7132370
SL-519-SA8-SB-0.0-0.5 Soil	7132371
SL-519-SA8-SB-3.5-4.5 Soil	7132372
SL-520-SA8-SB-0.0-0.5 Soil	7132373
SL-531-SA8-SB-0.0-0.5 Soil	7132374
SL-531-SA8-SB-4.0-5.0 Soil	7132375

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-506-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132364
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:35 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH070-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	350	U	350	180	1
10726	Benzidine	92-87-5	1,800	U	1,800	750	1
10726	Benzoic acid	65-85-0	530	U	530	180	1
10726	Benzyl alcohol	100-51-6	350	U	350	180	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	18	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	18	1
10726	Carbazole	86-74-8	35	U	35	18	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	18	1
10726	4-Chloroaniline	106-47-8	35	U	35	18	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	18	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	18	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	18	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	35	U	35	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	18	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	18	1
10726	Dibenzofuran	132-64-9	35	U	35	18	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	18	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	18	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	18	1
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	110	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	18	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	18	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	18	1
10726	3,5-Dimethylphenol	108-68-9	180	U	180	35	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	530	U	530	180	1
10726	2,4-Dinitrophenol	51-28-5	700	U	700	320	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	18	1
10726	Hexachlorobenzene	118-74-1	18	U	18	4	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	18	1
10726	Hexachlorocyclopentadiene	77-47-4	530	U	530	180	1
10726	Hexachloroethane	67-72-1	180	U	180	35	1
10726	Isophorone	78-59-1	35	U	35	18	1
10726	2-Methylphenol	95-48-7	35	U	35	18	1
10726	4-Methylphenol	106-44-5	35	U	35	18	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	180	U	180	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	18	1
10726	3-Nitroaniline	99-09-2	180	U	180	71	1
10726	4-Nitroaniline	100-01-6	180	U	180	71	1
10726	Nitrobenzene	98-95-3	35	U	35	18	1
10726	2-Nitrophenol	88-75-5	35	U	35	18	1
10726	4-Nitrophenol	100-02-7	530	U	530	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132364
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:35 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH070-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	18	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	18	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenol	108-95-2	35	U	35	18	1
10726	Pyridine	110-86-1	180	U	180	71	1
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	18	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	18	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	18	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	J	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.1	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	6.6	J	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	0.74	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.4	U	5.4	2.3	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	84	U	84	25	1
10592	Aroclor 5442	12642-23-8	84	U	84	25	1
10592	Aroclor 5460	11126-42-4	84	U	84	25	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132364
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:35 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH070-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	5.0	J	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
	Reporting limits were raised for aroclor 5432, aroclor 5442, and aroclor 5460 due to limited sample volume.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	8.5		5.4	2.1	1
12952	EFH (C30-C40)	n.a.	23		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,600		42.0	7.58	1
06944	Antimony	7440-36-0	4.20	U	4.20	0.778	1
06935	Arsenic	7440-38-2	5.81		4.20	0.736	1
06946	Barium	7440-39-3	101		1.05	0.0347	1
06947	Beryllium	7440-41-7	0.704	J	1.05	0.0704	1
07914	Boron	7440-42-8	4.93	J	10.5	0.883	1
06949	Cadmium	7440-43-9	0.520	J	1.05	0.0799	1
01650	Calcium	7440-70-2	16,000		21.0	3.51	1
06951	Chromium	7440-47-3	25.0		3.15	0.168	1
06952	Cobalt	7440-48-4	6.34		1.05	0.104	1
06953	Copper	7440-50-8	11.4		2.10	0.305	1
01654	Iron	7439-89-6	22,500		42.0	3.80	1
06955	Lead	7439-92-1	7.51		3.15	0.525	1
01656	Lithium	7439-93-2	25.3		4.2	0.36	1
01657	Magnesium	7439-95-4	5,630		10.5	1.75	1
06958	Manganese	7439-96-5	322		1.05	0.0872	1
06960	Molybdenum	7439-98-7	0.287	J	2.10	0.179	1
06961	Nickel	7440-02-0	13.8		2.10	0.137	1
10145	Phosphorus	7723-14-0	422		10.5	3.04	1
01662	Potassium	7440-09-7	4,420		105	8.76	1
01667	Sodium	7440-23-5	106		105	17.5	1
06969	Tin	7440-31-5	2.83	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,190		1.05	0.179	1
06971	Vanadium	7440-62-2	48.5		1.05	0.137	1
06972	Zinc	7440-66-6	61.2		4.20	0.210	1
10146	Zirconium	7440-67-7	4.67	J	5.25	0.883	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.315	J	0.420	0.105	2
06142	Silver	7440-22-4	0.0732	J	0.210	0.0273	2
06144	Strontium	7440-24-6	58.8		0.420	0.0715	2
06145	Thallium	7440-28-0	0.413		0.210	0.0315	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132364
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:35 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH070-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0503	0.0172	0.0103	1
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.30 J	0.43	0.15	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	7.60	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	6.7	0.10	0.10	1

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Sample Description: SL-506-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH070-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0424	1
11031	12378-PeCDD	40321-76-4	5.29	U	5.29	0.0504	1
11031	123478-HxCDD	39227-28-6	0.0550	JQ	5.29	0.0428	1
11031	123678-HxCDD	57653-85-7	0.345	JB	5.29	0.0450	1
11031	123789-HxCDD	19408-74-3	0.394	JBQ	5.29	0.0441	1
11031	1234678-HpCDD	35822-46-9	5.80	B	5.29	0.0797	1
11031	OCDD	3268-87-9	114	B	10.6	0.0457	1
11031	2378-TCDF	51207-31-9	0.102	JQ	1.06	0.0484	1
11031	12378-PeCDF	57117-41-6	0.678	JB	5.29	0.0319	1
11031	23478-PeCDF	57117-31-4	0.128	JBQ	5.29	0.0298	1
11031	123478-HxCDF	70648-26-9	0.110	JB	5.29	0.0277	1
11031	123678-HxCDF	57117-44-9	0.111	JBQ	5.29	0.0275	1
11031	123789-HxCDF	72918-21-9	0.229	JB	5.29	0.0292	1
11031	234678-HxCDF	60851-34-5	0.131	JB	5.29	0.0256	1
11031	1234678-HpCDF	67562-39-4	2.50	JB	5.29	0.0260	1
11031	1234789-HpCDF	55673-89-7	0.0679	JB	5.29	0.0369	1
11031	OCDF	39001-02-0	4.13	J	10.6	0.0389	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.221				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	90	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	82	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132364
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:35 by VC

Submitted: 07/19/2013 09:10
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH070-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132364
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

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3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH070-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13203SLE026	07/29/2013 22:48	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13203SLD026	07/25/2013 04:55	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13203SLE026	07/22/2013 22:55	Karen L Beyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13203SLD026	07/22/2013 22:55	Karen L Beyer	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 21:37	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132050017A	07/28/2013 23:08	Monica M Souders	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132060023A	07/29/2013 01:36	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132050017A	07/25/2013 03:00	Sherry L Morrow	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132060023A	07/26/2013 09:00	Kerrie A Freeburn	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132050012A	07/25/2013 20:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132050012A	07/24/2013 18:00	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/29/2013 19:06	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06944	Antimony	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
07914	Boron	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06955	Lead	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06958	Manganese	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06961	Nickel	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132364
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:35 by VC

Submitted: 07/19/2013 09:10
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50600 SDG#: PH070-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06969	Tin	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06970	Titanium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637003	07/23/2013 21:17	John P Hook	1
06141	Selenium	SW-846 6020A	1	132030637003B	07/24/2013 08:08	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637003A	07/24/2013 08:08	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637003A	07/24/2013 08:08	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637003A	07/24/2013 08:08	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132050638001	07/25/2013 08:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638004	07/23/2013 12:45	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132050638001	07/25/2013 03:45	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13203243201A	07/23/2013 19:26	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13200039401A	07/19/2013 21:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401A	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132365
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH070-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	20	U	20	7	0.93
10237	Acrolein	107-02-8	98	U	98	20	0.93
10237	Acrylonitrile	107-13-1	20	U	20	4	0.93
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	0.93
10237	Benzene	71-43-2	5	U	5	0.5	0.93
10237	Bromobenzene	108-86-1	5	U	5	1	0.93
10237	Bromochloromethane	74-97-5	5	U	5	1	0.93
10237	Bromodichloromethane	75-27-4	5	U	5	1	0.93
10237	Bromoform	75-25-2	5	U	5	1	0.93
10237	Bromomethane	74-83-9	5	U	5	2	0.93
10237	2-Butanone	78-93-3	10	U	10	4	0.93
10237	t-Butyl alcohol	75-65-0	49	U	49	20	0.93
10237	n-Butylbenzene	104-51-8	5	U	5	1	0.93
10237	sec-Butylbenzene	135-98-8	5	U	5	1	0.93
10237	tert-Butylbenzene	98-06-6	5	U	5	1	0.93
10237	Carbon Disulfide	75-15-0	5	U	5	1	0.93
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	0.93
10237	Chlorobenzene	108-90-7	5	U	5	1	0.93
10237	Chloroethane	75-00-3	5	U	5	2	0.93
10237	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	0.93
10237	Chloroform	67-66-3	5	U	5	1	0.93
10237	1-Chlorohexane	544-10-5	5	U	5	1	0.93
10237	Chloromethane	74-87-3	5	U	5	2	0.93
10237	2-Chlorotoluene	95-49-8	5	U	5	1	0.93
10237	4-Chlorotoluene	106-43-4	5	U	5	1	0.93
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	0.93
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	0.93
10237	Dibromochloromethane	124-48-1	5	U	5	1	0.93
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	0.93
10237	Dibromomethane	74-95-3	5	U	5	1	0.93
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	0.93
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	0.93
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	0.93
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	0.93
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	0.93
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	0.93
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	0.93
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	0.93
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	0.93
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	0.93
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	0.93
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	0.93
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	0.93
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	0.93
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	0.93
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	0.93
10237	Ethylbenzene	100-41-4	5	U	5	1	0.93
10237	Freon 113	76-13-1	5	U	5	2	0.93
10237	Freon 133a	75-88-7	5	U	5	2	0.93
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	0.93
10237	2-Hexanone	591-78-6	10	U	10	3	0.93

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132365
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH070-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	0.93
10237	Isopropylbenzene	98-82-8	5	U	5	1	0.93
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	0.93
10237	Methyl Iodide	74-88-4	5	U	5	3	0.93
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	0.93
10237	4-Methyl-2-pentanone	108-10-1	10	U	10	3	0.93
10237	Methylene Chloride	75-09-2	5	U	5	2	0.93
10237	n-Propylbenzene	103-65-1	5	U	5	1	0.93
10237	Styrene	100-42-5	5	U	5	1	0.93
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	0.93
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	0.93
10237	Tetrachloroethene	127-18-4	5	U	5	1	0.93
10237	Toluene	108-88-3	5	U	5	1	0.93
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	0.93
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	0.93
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	0.93
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	0.93
10237	Trichloroethene	79-01-6	5	U	5	1	0.93
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	0.93
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	0.93
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	0.93
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	0.93
10237	Vinyl Acetate	108-05-4	10	U	10	2	0.93
10237	Vinyl Chloride	75-01-4	5	U	5	1	0.93
10237	m+p-Xylene	179601-23-1	5	U	5	1	0.93
10237	o-Xylene	95-47-6	5	U	5	1	0.93
GC/MS Semivolatiles	**SW-846 8270D**		ug/kg		ug/kg	ug/kg	
10726	Aniline	62-53-3	350	U	350	170	1
10726	Benzidine	92-87-5	1,700	U	1,700	730	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	350	U	350	170	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	17	1
10726	Carbazole	86-74-8	35	U	35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	17	1
10726	4-Chloroaniline	106-47-8	35	U	35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	17	1
10726	Dibenzofuran	132-64-9	35	U	35	17	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	17	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	17	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132365
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH070-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	100	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	17	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	17	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	680	U	680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	17	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1
10726	Hexachloroethane	67-72-1	170	U	170	35	1
10726	Isophorone	78-59-1	35	U	35	17	1
10726	2-Methylphenol	95-48-7	35	U	35	17	1
10726	4-Methylphenol	106-44-5	35	U	35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	35	U	35	17	1
10726	2-Nitrophenol	88-75-5	35	U	35	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenol	108-95-2	35	U	35	17	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	17	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132365
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH070-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.61
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.3	U	5.3	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,800		40.5	7.31	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.750	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132365
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:50 by VC

Submitted: 07/19/2013 09:10
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH070-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	5.38		4.05	0.709	1
06946	Barium	7440-39-3	67.2		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.677	J	1.01	0.0679	1
07914	Boron	7440-42-8	10.1	U	10.1	0.851	1
06949	Cadmium	7440-43-9	0.289	J	1.01	0.0770	1
01650	Calcium	7440-70-2	2,550		20.3	3.38	1
06951	Chromium	7440-47-3	15.8		3.04	0.162	1
06952	Cobalt	7440-48-4	6.48		1.01	0.100	1
06953	Copper	7440-50-8	5.50		2.03	0.294	1
01654	Iron	7439-89-6	17,700		40.5	3.67	1
06955	Lead	7439-92-1	3.97		3.04	0.507	1
01656	Lithium	7439-93-2	18.3		4.1	0.34	1
01657	Magnesium	7439-95-4	3,940		10.1	1.69	1
06958	Manganese	7439-96-5	214		1.01	0.0841	1
06960	Molybdenum	7439-98-7	0.413	J	2.03	0.172	1
06961	Nickel	7440-02-0	7.22		2.03	0.132	1
10145	Phosphorus	7723-14-0	213		10.1	2.93	1
01662	Potassium	7440-09-7	1,770		101	8.45	1
01667	Sodium	7440-23-5	114		101	16.9	1
06969	Tin	7440-31-5	2.86	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,010		1.01	0.172	1
06971	Vanadium	7440-62-2	31.2		1.01	0.132	1
06972	Zinc	7440-66-6	42.0		4.05	0.203	1
10146	Zirconium	7440-67-7	3.92	J	5.07	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.405	U	0.405	0.101	2
06142	Silver	7440-22-4	0.203	U	0.203	0.0263	2
06144	Strontium	7440-24-6	18.7		0.405	0.0689	2
06145	Thallium	7440-28-0	0.282		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0174	U	0.0174	0.0104	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.44	U	0.44	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.00		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132365
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH070-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0315	1
11031	12378-PeCDD	40321-76-4	5.26	U	5.26	0.0428	1
11031	123478-HxCDD	39227-28-6	5.26	U	5.26	0.0210	1
11031	123678-HxCDD	57653-85-7	0.0325	JBQ	5.26	0.0229	1
11031	123789-HxCDD	19408-74-3	0.0464	JB	5.26	0.0216	1
11031	1234678-HpCDD	35822-46-9	0.101	JBQ	5.26	0.0289	1
11031	OCDD	3268-87-9	1.07	JB	10.5	0.0302	1
11031	2378-TCDF	51207-31-9	0.0324	JQ	1.05	0.0309	1
11031	12378-PeCDF	57117-41-6	0.0519	JBQ	5.26	0.0208	1
11031	23478-PeCDF	57117-31-4	0.0273	JBQ	5.26	0.0193	1
11031	123478-HxCDF	70648-26-9	0.0313	JB	5.26	0.0102	1
11031	123678-HxCDF	57117-44-9	0.0111	JBQ	5.26	0.0104	1
11031	123789-HxCDF	72918-21-9	0.0257	JBQ	5.26	0.0103	1
11031	234678-HxCDF	60851-34-5	0.0157	JBQ	5.26	0.0101	1
11031	1234678-HpCDF	67562-39-4	0.0448	JBQ	5.26	0.00959	1
11031	1234789-HpCDF	55673-89-7	5.26	U	5.26	0.0150	1
11031	OCDF	39001-02-0	0.150	JQ	10.5	0.0339	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00811				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	96	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132365
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH070-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132365
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH070-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B132052AA	07/25/2013 01:15	Andrea E Lando	0.93
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201320031771	07/19/2013 16:36	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201320031771	07/19/2013 16:36	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201320031771	07/19/2013 16:24	Mitchell R Washel	n.a.
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13203SLE026	07/30/2013 00:01	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13203SLD026	07/25/2013 10:43	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13203SLE026	07/22/2013 22:55	Karen L Beyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13203SLD026	07/22/2013 22:55	Karen L Beyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 05:41	Laura M Krieger	24.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320031771	07/19/2013 16:23	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320031771	07/19/2013 16:24	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 22:03	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132060023A	07/29/2013 01:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132060023A	07/26/2013 09:00	Kerrie A Freeburn	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132050012A	07/25/2013 18:01	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132050012A	07/24/2013 18:00	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/29/2013 20:02	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06944	Antimony	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
07914	Boron	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-506-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132365
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 07:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50640 SDG#: PH070-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06955	Lead	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06958	Manganese	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06961	Nickel	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
01667	Sodium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06969	Tin	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06970	Titanium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637003	07/23/2013 21:21	John P Hook	1
06141	Selenium	SW-846 6020A	1	132030637003B	07/24/2013 08:10	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637003A	07/24/2013 08:10	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637003A	07/24/2013 08:10	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637003A	07/24/2013 08:10	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132050638001	07/25/2013 08:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638004	07/23/2013 12:45	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132050638001	07/25/2013 03:45	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13203243201A	07/23/2013 19:40	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13200039401A	07/19/2013 21:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401A	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132366
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 08:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH070-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	360	U	360	180	1
10726	Benzidine	92-87-5	1,800	U	1,800	760	1
10726	Benzoic acid	65-85-0	540	U	540	180	1
10726	Benzyl alcohol	100-51-6	360	U	360	180	1
10726	1,1'-Biphenyl	92-52-4	36	U	36	18	1
10726	4-Bromophenyl-phenylether	101-55-3	36	U	36	18	1
10726	Carbazole	86-74-8	36	U	36	18	1
10726	4-Chloro-3-methylphenol	59-50-7	36	U	36	18	1
10726	4-Chloroaniline	106-47-8	36	U	36	18	1
10726	bis(2-Chloroethoxy)methane	111-91-1	36	U	36	18	1
10726	bis(2-Chloroethyl)ether	111-44-4	36	U	36	18	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	36	U	36	18	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	36	U	36	8	1
10726	2-Chlorophenol	95-57-8	36	U	36	18	1
10726	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	18	1
10726	Dibenzofuran	132-64-9	36	U	36	18	1
10726	1,2-Dichlorobenzene	95-50-1	36	U	36	18	1
10726	1,3-Dichlorobenzene	541-73-1	36	U	36	18	1
10726	1,4-Dichlorobenzene	106-46-7	36	U	36	18	1
10726	3,3'-Dichlorobenzidine	91-94-1	360	U	360	110	1
10726	2,4-Dichlorophenol	120-83-2	36	U	36	18	1
10726	2,6-Dichlorophenol	87-65-0	36	U	36	18	1
10726	2,4-Dimethylphenol	105-67-9	36	U	36	18	1
10726	3,5-Dimethylphenol	108-68-9	180	U	180	36	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	540	U	540	180	1
10726	2,4-Dinitrophenol	51-28-5	720	U	720	330	1
10726	1,2-Diphenylhydrazine	122-66-7	36	U	36	18	1
10726	Hexachlorobenzene	118-74-1	18	U	18	4	1
10726	Hexachlorobutadiene	87-68-3	36	U	36	18	1
10726	Hexachlorocyclopentadiene	77-47-4	540	U	540	180	1
10726	Hexachloroethane	67-72-1	180	U	180	36	1
10726	Isophorone	78-59-1	36	U	36	18	1
10726	2-Methylphenol	95-48-7	36	U	36	18	1
10726	4-Methylphenol	106-44-5	36	U	36	18	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	180	U	180	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	36	U	36	18	1
10726	3-Nitroaniline	99-09-2	180	U	180	72	1
10726	4-Nitroaniline	100-01-6	180	U	180	72	1
10726	Nitrobenzene	98-95-3	36	U	36	18	1
10726	2-Nitrophenol	88-75-5	36	U	36	18	1
10726	4-Nitrophenol	100-02-7	540	U	540	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132366
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 08:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH070-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	N-Nitroso-di-n-propylamine	621-64-7	36	U	36	18	1
10726	N-Nitrosodiphenylamine	86-30-6	36	U	36	18	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	36	1
10726	Phenol	108-95-2	36	U	36	18	1
10726	Pyridine	110-86-1	180	U	180	72	1
10726	1,2,4-Trichlorobenzene	120-82-1	36	U	36	18	1
10726	2,4,5-Trichlorophenol	95-95-4	36	U	36	18	1
10726	2,4,6-Trichlorophenol	88-06-2	36	U	36	18	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	0.78	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.1	J	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.1	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	0.85	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.5	U	5.5	2.3	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132366
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 08:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH070-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	7.8		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	21		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,900		43.9	7.91	1
06944	Antimony	7440-36-0	4.39	U	4.39	0.811	1
06935	Arsenic	7440-38-2	6.79		4.39	0.768	1
06946	Barium	7440-39-3	100		1.10	0.0362	1
06947	Beryllium	7440-41-7	0.781	J	1.10	0.0735	1
07914	Boron	7440-42-8	9.98	J	11.0	0.921	1
06949	Cadmium	7440-43-9	0.670	J	1.10	0.0833	1
01650	Calcium	7440-70-2	49,700		21.9	3.66	1
06951	Chromium	7440-47-3	32.8		3.29	0.175	1
06952	Cobalt	7440-48-4	8.59		1.10	0.109	1
06953	Copper	7440-50-8	15.8		2.19	0.318	1
01654	Iron	7439-89-6	26,800		43.9	3.97	1
06955	Lead	7439-92-1	8.50		3.29	0.548	1
01656	Lithium	7439-93-2	28.3		4.4	0.37	1
01657	Magnesium	7439-95-4	7,850		11.0	1.83	1
06958	Manganese	7439-96-5	403		1.10	0.0910	1
06960	Molybdenum	7439-98-7	2.19	U	2.19	0.186	1
06961	Nickel	7440-02-0	17.4		2.19	0.143	1
10145	Phosphorus	7723-14-0	666		11.0	3.17	1
01662	Potassium	7440-09-7	5,650		110	9.14	1
01667	Sodium	7440-23-5	208		110	18.3	1
06969	Tin	7440-31-5	2.80	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,280		1.10	0.186	1
06971	Vanadium	7440-62-2	63.7		1.10	0.143	1
06972	Zinc	7440-66-6	73.1		4.39	0.219	1
10146	Zirconium	7440-67-7	6.37		5.48	0.921	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.281	J	0.439	0.110	2
06142	Silver	7440-22-4	0.0321	J	0.219	0.0285	2
06144	Strontium	7440-24-6	100		1.10	0.186	5
06145	Thallium	7440-28-0	0.373		0.219	0.0329	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132366
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 08:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH070-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0181 U	0.0181	0.0109	1
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.18 J	0.44	0.15	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	7.80	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	8.8	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132366
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 08:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH070-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0458	1
11031	12378-PeCDD	40321-76-4	0.0696	JQ	5.28	0.0532	1
11031	123478-HxCDD	39227-28-6	0.0416	JQ	5.28	0.0386	1
11031	123678-HxCDD	57653-85-7	0.120	JBQ	5.28	0.0422	1
11031	123789-HxCDD	19408-74-3	0.145	JBQ	5.28	0.0429	1
11031	1234678-HpCDD	35822-46-9	1.98	JB	5.28	0.0690	1
11031	OCDD	3268-87-9	16.6	B	10.6	0.0451	1
11031	2378-TCDF	51207-31-9	0.0695	JQ	1.06	0.0518	1
11031	12378-PeCDF	57117-41-6	0.656	JBQ	5.28	0.0316	1
11031	23478-PeCDF	57117-31-4	0.0517	JBQ	5.28	0.0304	1
11031	123478-HxCDF	70648-26-9	0.0620	JB	5.28	0.0196	1
11031	123678-HxCDF	57117-44-9	5.28	U	5.28	0.0191	1
11031	123789-HxCDF	72918-21-9	0.0842	JBQ	5.28	0.0214	1
11031	234678-HxCDF	60851-34-5	0.0198	JB	5.28	0.0192	1
11031	1234678-HpCDF	67562-39-4	0.154	JBQ	5.28	0.0189	1
11031	1234789-HpCDF	55673-89-7	0.0472	JBQ	5.28	0.0265	1
11031	OCDF	39001-02-0	0.597	JQ	10.6	0.0470	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0331				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132366
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 08:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH070-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132366
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 08:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH070-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13203SLE026	07/30/2013 00:25	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13203SLD026	07/25/2013 11:15	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13203SLE026	07/22/2013 22:55	Karen L Beyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13203SLD026	07/22/2013 22:55	Karen L Beyer	1
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 22:16	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132060023A	07/29/2013 02:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132060023A	07/26/2013 09:00	Kerrie A Freeburn	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132050012A	07/25/2013 21:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132050012A	07/24/2013 18:00	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/29/2013 20:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06944	Antimony	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
07914	Boron	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06955	Lead	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06958	Manganese	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06961	Nickel	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
01667	Sodium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06969	Tin	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06970	Titanium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132366
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 08:50 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH070-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06971	Vanadium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637003	07/23/2013 21:25	John P Hook	1
06141	Selenium	SW-846 6020A	1	132030637003B	07/24/2013 08:13	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637003A	07/24/2013 08:13	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637003A	07/24/2013 10:19	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132030637003A	07/24/2013 08:13	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132050638001	07/25/2013 08:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638004	07/23/2013 12:45	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132050638001	07/25/2013 03:45	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13203243201A	07/23/2013 19:47	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13200039401A	07/19/2013 21:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401A	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132367
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 09:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50940 SDG#: PH070-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	21	U	21	7	0.98
10237	Acrolein	107-02-8	100	U	100	21	0.98
10237	Acrylonitrile	107-13-1	21	U	21	4	0.98
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	0.98
10237	Benzene	71-43-2	5	U	5	0.5	0.98
10237	Bromobenzene	108-86-1	5	U	5	1	0.98
10237	Bromochloromethane	74-97-5	5	U	5	1	0.98
10237	Bromodichloromethane	75-27-4	5	U	5	1	0.98
10237	Bromoform	75-25-2	5	U	5	1	0.98
10237	Bromomethane	74-83-9	5	U	5	2	0.98
10237	2-Butanone	78-93-3	10	U	10	4	0.98
10237	t-Butyl alcohol	75-65-0	52	U	52	21	0.98
10237	n-Butylbenzene	104-51-8	5	U	5	1	0.98
10237	sec-Butylbenzene	135-98-8	5	U	5	1	0.98
10237	tert-Butylbenzene	98-06-6	5	U	5	1	0.98
10237	Carbon Disulfide	75-15-0	5	U	5	1	0.98
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	0.98
10237	Chlorobenzene	108-90-7	5	U	5	1	0.98
10237	Chloroethane	75-00-3	5	U	5	2	0.98
10237	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	0.98
10237	Chloroform	67-66-3	5	U	5	1	0.98
10237	1-Chlorohexane	544-10-5	5	U	5	1	0.98
10237	Chloromethane	74-87-3	5	U	5	2	0.98
10237	2-Chlorotoluene	95-49-8	5	U	5	1	0.98
10237	4-Chlorotoluene	106-43-4	5	U	5	1	0.98
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	0.98
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	0.98
10237	Dibromochloromethane	124-48-1	5	U	5	1	0.98
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	0.98
10237	Dibromomethane	74-95-3	5	U	5	1	0.98
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	0.98
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	0.98
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	0.98
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	0.98
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	0.98
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	0.98
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	0.98
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	0.98
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	0.98
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	0.98
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	0.98
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	0.98
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	0.98
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	0.98
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	0.98
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	0.98
10237	Ethylbenzene	100-41-4	5	U	5	1	0.98
10237	Freon 113	76-13-1	5	U	5	2	0.98
10237	Freon 133a	75-88-7	5	U	5	2	0.98
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	0.98
10237	2-Hexanone	591-78-6	10	U	10	3	0.98

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132367
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 09:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50940 SDG#: PH070-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	0.98
10237	Isopropylbenzene	98-82-8	5	U	5	1	0.98
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	0.98
10237	Methyl Iodide	74-88-4	5	U	5	3	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	0.98
10237	4-Methyl-2-pentanone	108-10-1	10	U	10	3	0.98
10237	Methylene Chloride	75-09-2	5	U	5	2	0.98
10237	n-Propylbenzene	103-65-1	5	U	5	1	0.98
10237	Styrene	100-42-5	5	U	5	1	0.98
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	0.98
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	0.98
10237	Tetrachloroethene	127-18-4	5	U	5	1	0.98
10237	Toluene	108-88-3	5	U	5	1	0.98
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	0.98
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	0.98
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	0.98
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	0.98
10237	Trichloroethene	79-01-6	5	U	5	1	0.98
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	0.98
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	0.98
10237	Vinyl Acetate	108-05-4	10	U	10	2	0.98
10237	Vinyl Chloride	75-01-4	5	U	5	1	0.98
10237	m+p-Xylene	179601-23-1	5	U	5	1	0.98
10237	o-Xylene	95-47-6	5	U	5	1	0.98
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	350	U	350	170	1
10726	Benzidine	92-87-5	1,700	U	1,700	730	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	350	U	350	170	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	17	1
10726	Carbazole	86-74-8	35	U	35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	17	1
10726	4-Chloroaniline	106-47-8	35	U	35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	35	U	35	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	17	1
10726	Dibenzofuran	132-64-9	35	U	35	17	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	17	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	17	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132367
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 09:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50940 SDG#: PH070-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	100	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	17	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	17	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	690	U	690	310	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	17	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1
10726	Hexachloroethane	67-72-1	170	U	170	35	1
10726	Isophorone	78-59-1	35	U	35	17	1
10726	2-Methylphenol	95-48-7	35	U	35	17	1
10726	4-Methylphenol	106-44-5	35	U	35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	70	1
10726	4-Nitroaniline	100-01-6	170	U	170	70	1
10726	Nitrobenzene	98-95-3	35	U	35	17	1
10726	2-Nitrophenol	88-75-5	35	U	35	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenol	108-95-2	35	U	35	17	1
10726	Pyridine	110-86-1	170	U	170	70	1
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	17	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132367
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 09:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50940 SDG#: PH070-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.46
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.3	U	5.3	2.2	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,200		41.3	7.44	1
06944	Antimony	7440-36-0	4.13	U	4.13	0.764	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132367
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 09:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50940 SDG#: PH070-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	4.72		4.13	0.722	1
06946	Barium	7440-39-3	79.4		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.530	J	1.03	0.0691	1
07914	Boron	7440-42-8	1.26	J	10.3	0.867	1
06949	Cadmium	7440-43-9	0.425	J	1.03	0.0784	1
01650	Calcium	7440-70-2	4,240		20.6	3.45	1
06951	Chromium	7440-47-3	19.7		3.10	0.165	1
06952	Cobalt	7440-48-4	5.77		1.03	0.102	1
06953	Copper	7440-50-8	8.29		2.06	0.299	1
01654	Iron	7439-89-6	21,400		41.3	3.74	1
06955	Lead	7439-92-1	3.93		3.10	0.516	1
01656	Lithium	7439-93-2	26.0		4.1	0.35	1
01657	Magnesium	7439-95-4	5,940		10.3	1.72	1
06958	Manganese	7439-96-5	301		1.03	0.0857	1
06960	Molybdenum	7439-98-7	2.06	U	2.06	0.175	1
06961	Nickel	7440-02-0	10.7		2.06	0.134	1
10145	Phosphorus	7723-14-0	395		10.3	2.98	1
01662	Potassium	7440-09-7	2,680		103	8.61	1
01667	Sodium	7440-23-5	170		103	17.2	1
06969	Tin	7440-31-5	2.93	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,400		1.03	0.175	1
06971	Vanadium	7440-62-2	42.2		1.03	0.134	1
06972	Zinc	7440-66-6	58.8		4.13	0.206	1
10146	Zirconium	7440-67-7	5.23		5.16	0.867	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.413	U	0.413	0.103	2
06142	Silver	7440-22-4	0.206	U	0.206	0.0268	2
06144	Strontium	7440-24-6	20.2		0.413	0.0702	2
06145	Thallium	7440-28-0	0.306		0.206	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0102	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.18	J	0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.52		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132367
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 09:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50940 SDG#: PH070-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0434	1
11031	12378-PeCDD	40321-76-4	5.14	U	5.14	0.0516	1
11031	123478-HxCDD	39227-28-6	5.14	U	5.14	0.0296	1
11031	123678-HxCDD	57653-85-7	0.0404	JB	5.14	0.0333	1
11031	123789-HxCDD	19408-74-3	0.0652	JBQ	5.14	0.0320	1
11031	1234678-HpCDD	35822-46-9	0.133	JB	5.14	0.0373	1
11031	OCDD	3268-87-9	1.83	JB	10.3	0.0449	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0393	1
11031	12378-PeCDF	57117-41-6	5.14	U	5.14	0.0259	1
11031	23478-PeCDF	57117-31-4	5.14	U	5.14	0.0246	1
11031	123478-HxCDF	70648-26-9	5.14	U	5.14	0.0144	1
11031	123678-HxCDF	57117-44-9	5.14	U	5.14	0.0153	1
11031	123789-HxCDF	72918-21-9	0.0682	JBQ	5.14	0.0157	1
11031	234678-HxCDF	60851-34-5	5.14	U	5.14	0.0140	1
11031	1234678-HpCDF	67562-39-4	0.131	JB	5.14	0.0122	1
11031	1234789-HpCDF	55673-89-7	5.14	U	5.14	0.0192	1
11031	OCDF	39001-02-0	0.750	JQ	10.3	0.0431	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00716				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	84	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132367
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 09:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50940 SDG#: PH070-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132367
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 09:00 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50940 SDG#: PH070-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B132052AA	07/25/2013 01:37	Andrea E Lando	0.98
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201320031771	07/19/2013 16:36	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201320031771	07/19/2013 16:36	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201320031771	07/19/2013 16:28	Mitchell R Washel	n.a.
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13203SLE026	07/30/2013 00:49	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13203SLD026	07/25/2013 11:47	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13203SLE026	07/22/2013 22:55	Karen L Beyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13203SLD026	07/22/2013 22:55	Karen L Beyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 06:19	Laura M Krieger	24.46
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320031771	07/19/2013 16:26	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320031771	07/19/2013 16:27	Mitchell R Washel	n.a.
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	132010014A	07/22/2013 22:28	Richard A Shober	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132060023A	07/29/2013 03:09	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132060023A	07/26/2013 09:00	Kerrie A Freeburn	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	132010014A	07/22/2013 06:40	Maria Davenport	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132050012A	07/25/2013 18:22	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132050012A	07/24/2013 18:00	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/29/2013 21:56	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06944	Antimony	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
07914	Boron	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132367
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 09:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50940 SDG#: PH070-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06955	Lead	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06958	Manganese	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06961	Nickel	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
01667	Sodium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06969	Tin	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06970	Titanium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637003	07/23/2013 21:29	John P Hook	1
06141	Selenium	SW-846 6020A	1	132030637003B	07/24/2013 08:15	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637003A	07/24/2013 08:15	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637003A	07/24/2013 08:15	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637003A	07/24/2013 08:15	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132050638001	07/25/2013 08:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638004	07/23/2013 12:45	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132050638001	07/25/2013 03:45	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13203243201A	07/23/2013 20:02	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13200039401A	07/19/2013 21:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13207162401A	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132368
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60100 SDG#: PH070-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	3.4		1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.73	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	0.93	J	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	13		5.4	2.1	1
12952	EFH (C30-C40)	n.a.	29		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132368
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60100 SDG#: PH070-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,800		40.8	7.35	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.755	1
06935	Arsenic	7440-38-2	8.07		4.08	0.714	1
06946	Barium	7440-39-3	77.4		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.790	J	1.02	0.0683	1
07914	Boron	7440-42-8	9.22	J	10.2	0.857	1
06949	Cadmium	7440-43-9	0.599	J	1.02	0.0775	1
01650	Calcium	7440-70-2	39,500		20.4	3.41	1
06951	Chromium	7440-47-3	26.4		3.06	0.163	1
06952	Cobalt	7440-48-4	7.14		1.02	0.101	1
06953	Copper	7440-50-8	15.4		2.04	0.296	1
01654	Iron	7439-89-6	22,800		40.8	3.69	1
06955	Lead	7439-92-1	8.58		3.06	0.510	1
01656	Lithium	7439-93-2	24.5		4.1	0.35	1
01657	Magnesium	7439-95-4	6,340		10.2	1.70	1
06958	Manganese	7439-96-5	423		1.02	0.0846	1
06960	Molybdenum	7439-98-7	0.452	J	2.04	0.173	1
06961	Nickel	7440-02-0	15.0		2.04	0.133	1
10145	Phosphorus	7723-14-0	671		10.2	2.95	1
01662	Potassium	7440-09-7	4,600		102	8.50	1
01667	Sodium	7440-23-5	93.6	J	102	17.0	1
06969	Tin	7440-31-5	2.63	J	10.2	0.224	1
06970	Titanium	7440-32-6	909		1.02	0.173	1
06971	Vanadium	7440-62-2	47.5		1.02	0.133	1
06972	Zinc	7440-66-6	66.1		4.08	0.204	1
10146	Zirconium	7440-67-7	2.94	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.248	J	0.408	0.102	2
06142	Silver	7440-22-4	0.0287	J	0.204	0.0265	2
06144	Strontium	7440-24-6	59.1		0.408	0.0693	2
06145	Thallium	7440-28-0	0.347		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175	U	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.76		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132368
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60100 SDG#: PH070-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0498	1
11031	12378-PeCDD	40321-76-4	5.30	U	5.30	0.0550	1
11031	123478-HxCDD	39227-28-6	0.0367	JQ	5.30	0.0330	1
11031	123678-HxCDD	57653-85-7	0.0569	JBQ	5.30	0.0373	1
11031	123789-HxCDD	19408-74-3	0.0378	JB	5.30	0.0348	1
11031	1234678-HpCDD	35822-46-9	0.153	JBQ	5.30	0.0401	1
11031	OCDD	3268-87-9	1.01	JBQ	10.6	0.0400	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0469	1
11031	12378-PeCDF	57117-41-6	0.0513	JBQ	5.30	0.0309	1
11031	23478-PeCDF	57117-31-4	5.30	U	5.30	0.0294	1
11031	123478-HxCDF	70648-26-9	0.0247	JBQ	5.30	0.0162	1
11031	123678-HxCDF	57117-44-9	0.0352	JB	5.30	0.0160	1
11031	123789-HxCDF	72918-21-9	0.0244	JBQ	5.30	0.0173	1
11031	234678-HxCDF	60851-34-5	0.0369	JBQ	5.30	0.0156	1
11031	1234678-HpCDF	67562-39-4	0.0548	JBQ	5.30	0.0142	1
11031	1234789-HpCDF	55673-89-7	5.30	U	5.30	0.0223	1
11031	OCDF	39001-02-0	0.178	JQ	10.6	0.0516	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00728				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	63	25 - 181
13C12-123478-HxCDD	58	32 - 141
13C12-123678-HxCDD	59	28 - 130
13C12-123789-HxCDD	62	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	55	26 - 152
13C12-123678-HxCDF	61	26 - 123
13C12-234678-HxCDF	58	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	69	28 - 143
13C12-1234789-HpCDF	56	26 - 138
13C12-OCDF	48	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132368
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60100 SDG#: PH070-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132368
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60100 SDG#: PH070-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13203SLD026	07/25/2013 12:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13203SLD026	07/22/2013 22:55	Karen L Beyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132060023A	07/29/2013 03:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132060023A	07/26/2013 09:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132050012A	07/25/2013 21:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132050012A	07/24/2013 18:00	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/29/2013 22:52	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06944	Antimony	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
07914	Boron	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06955	Lead	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06958	Manganese	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06961	Nickel	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
01667	Sodium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06969	Tin	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06970	Titanium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637003	07/23/2013 21:33	John P Hook	1
06141	Selenium	SW-846 6020A	1	132030637003B	07/24/2013 08:17	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637003A	07/24/2013 08:17	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637003A	07/24/2013 08:17	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637003A	07/24/2013 08:17	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132368
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60100 SDG#: PH070-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132050638001	07/25/2013 08:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638004	07/23/2013 12:45	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132050638001	07/25/2013 03:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13200039401A	07/19/2013 21:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401A	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132369
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60140 SDG#: PH070-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.08
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132369
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60140 SDG#: PH070-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	4.4	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	7.3	J	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,300		40.7	7.34	1
06944	Antimony	7440-36-0	4.07	U	4.07	0.753	1
06935	Arsenic	7440-38-2	7.14		4.07	0.712	1
06946	Barium	7440-39-3	88.3		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.730	J	1.02	0.0682	1
07914	Boron	7440-42-8	4.04	J	10.2	0.855	1
06949	Cadmium	7440-43-9	0.412	J	1.02	0.0773	1
01650	Calcium	7440-70-2	14,000		20.4	3.40	1
06951	Chromium	7440-47-3	19.4		3.05	0.163	1
06952	Cobalt	7440-48-4	6.05		1.02	0.101	1
06953	Copper	7440-50-8	10.0		2.04	0.295	1
01654	Iron	7439-89-6	20,400		40.7	3.68	1
06955	Lead	7439-92-1	6.36		3.05	0.509	1
01656	Lithium	7439-93-2	26.3		4.1	0.35	1
01657	Magnesium	7439-95-4	4,370		10.2	1.70	1
06958	Manganese	7439-96-5	344		1.02	0.0845	1
06960	Molybdenum	7439-98-7	0.351	J	2.04	0.173	1
06961	Nickel	7440-02-0	12.3		2.04	0.132	1
10145	Phosphorus	7723-14-0	300		10.2	2.94	1
01662	Potassium	7440-09-7	3,970		102	8.49	1
01667	Sodium	7440-23-5	92.7	J	102	17.0	1
06969	Tin	7440-31-5	2.88	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,020		1.02	0.173	1
06971	Vanadium	7440-62-2	40.1		1.02	0.132	1
06972	Zinc	7440-66-6	56.3		4.07	0.204	1
10146	Zirconium	7440-67-7	3.65	J	5.09	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.123	J	0.407	0.102	2
06142	Silver	7440-22-4	0.0299	J	0.204	0.0265	2
06144	Strontium	7440-24-6	23.2		0.407	0.0692	2
06145	Thallium	7440-28-0	0.359		0.204	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.24		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132369
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60140 SDG#: PH070-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132369
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60140 SDG#: PH070-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0357	1
11031	12378-PeCDD	40321-76-4	5.26	U	5.26	0.0447	1
11031	123478-HxCDD	39227-28-6	5.26	U	5.26	0.0258	1
11031	123678-HxCDD	57653-85-7	5.26	U	5.26	0.0288	1
11031	123789-HxCDD	19408-74-3	0.135	JBQ	5.26	0.0275	1
11031	1234678-HpCDD	35822-46-9	0.0961	JBQ	5.26	0.0292	1
11031	OCDD	3268-87-9	0.337	JBQ	10.5	0.0333	1
11031	2378-TCDF	51207-31-9	1.05	U	1.05	0.0291	1
11031	12378-PeCDF	57117-41-6	0.0707	JB	5.26	0.0204	1
11031	23478-PeCDF	57117-31-4	5.26	U	5.26	0.0211	1
11031	123478-HxCDF	70648-26-9	0.0281	JBQ	5.26	0.0132	1
11031	123678-HxCDF	57117-44-9	0.0226	JB	5.26	0.0127	1
11031	123789-HxCDF	72918-21-9	0.0890	JB	5.26	0.0143	1
11031	234678-HxCDF	60851-34-5	0.0192	JBQ	5.26	0.0127	1
11031	1234678-HpCDF	67562-39-4	0.0294	JBQ	5.26	0.00794	1
11031	1234789-HpCDF	55673-89-7	0.0204	JBQ	5.26	0.0148	1
11031	OCDF	39001-02-0	0.0885	J	10.5	0.0388	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0132				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132369
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60140 SDG#: PH070-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132369
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60140 SDG#: PH070-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13203SLD026	07/25/2013 12:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13203SLD026	07/22/2013 22:55	Karen L Beyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 06:57	Laura M Krieger	24.08
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320031771	07/19/2013 16:29	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320031771	07/19/2013 16:30	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132060023A	07/29/2013 03:46	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132060023A	07/26/2013 09:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132050012A	07/25/2013 18:43	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132050012A	07/24/2013 18:00	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/29/2013 23:49	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06944	Antimony	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
07914	Boron	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06955	Lead	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06958	Manganese	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06961	Nickel	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
01667	Sodium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06969	Tin	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06970	Titanium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637003	07/23/2013 21:38	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-601-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132369
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 10:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60140 SDG#: PH070-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132030637003B	07/24/2013 08:20	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637003A	07/24/2013 08:20	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637003A	07/24/2013 08:20	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637003A	07/24/2013 08:20	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132050638001	07/25/2013 09:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638004	07/23/2013 12:45	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132050638001	07/25/2013 03:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13200039401A	07/19/2013 21:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401A	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7132370
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 08:00

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB718 SDG#: PH070-07TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	20	U	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7132370
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 08:00

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB718 SDG#: PH070-07TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: chlorotrifluoroethane.

GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y132041AA	07/23/2013 13:35	Angela D Sneeringer	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7132370
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 08:00

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB718 SDG#: PH070-07TB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y132041AA	07/23/2013 13:35	Angela D Sneeringer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13204A20A	07/23/2013 21:12	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13204A20A	07/23/2013 21:12	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132371
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH070-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	0.38	J	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	0.96	J	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.4	J	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	5.0		1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	4.0	J	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	2.6		1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	6.3		1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	21		19	6.4	1
12969	Chrysene	218-01-9	9.8		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0		1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.9	J	19	6.4	1
12969	Fluoranthene	206-44-0	2.2		1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	J	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.1	J	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	2.2		1.8	0.71	1
12969	Naphthalene	91-20-3	3.6		1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	2.8		1.8	0.71	1
12969	Pyrene	129-00-0	2.9		1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	53		18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	2.8	J	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	32		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	71		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132371
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH070-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,500		42.5	7.66	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.786	1
06935	Arsenic	7440-38-2	6.71		4.25	0.744	1
06946	Barium	7440-39-3	104		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.827	J	1.06	0.0712	1
07914	Boron	7440-42-8	12.1		10.6	0.892	1
06949	Cadmium	7440-43-9	0.751	J	1.06	0.0807	1
01650	Calcium	7440-70-2	15,400		21.2	3.55	1
06951	Chromium	7440-47-3	29.2		3.19	0.170	1
06952	Cobalt	7440-48-4	8.53		1.06	0.105	1
06953	Copper	7440-50-8	19.6		2.12	0.308	1
01654	Iron	7439-89-6	24,000		42.5	3.85	1
06955	Lead	7439-92-1	13.8		3.19	0.531	1
01656	Lithium	7439-93-2	19.2		4.2	0.36	1
01657	Magnesium	7439-95-4	6,560		10.6	1.77	1
06958	Manganese	7439-96-5	485		1.06	0.0882	1
06960	Molybdenum	7439-98-7	0.377	J	2.12	0.181	1
06961	Nickel	7440-02-0	18.2		2.12	0.138	1
10145	Phosphorus	7723-14-0	595		10.6	3.07	1
01662	Potassium	7440-09-7	5,530		106	8.86	1
01667	Sodium	7440-23-5	103	J	106	17.7	1
06969	Tin	7440-31-5	2.69	J	10.6	0.234	1
06970	Titanium	7440-32-6	952		1.06	0.181	1
06971	Vanadium	7440-62-2	48.8		1.06	0.138	1
06972	Zinc	7440-66-6	107		4.25	0.212	1
10146	Zirconium	7440-67-7	5.41		5.31	0.892	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.209	J	0.425	0.106	2
06142	Silver	7440-22-4	0.0699	J	0.212	0.0276	2
06144	Strontium	7440-24-6	41.7		0.425	0.0722	2
06145	Thallium	7440-28-0	0.355		0.212	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0676		0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.76		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132371
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH070-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0425	1
11031	12378-PeCDD	40321-76-4	0.134	JQ	5.35	0.0568	1
11031	123478-HxCDD	39227-28-6	0.115	JQ	5.35	0.0501	1
11031	123678-HxCDD	57653-85-7	0.481	JB	5.35	0.0536	1
11031	123789-HxCDD	19408-74-3	0.394	JBQ	5.35	0.0514	1
11031	1234678-HpCDD	35822-46-9	8.45	B	5.35	0.0497	1
11031	OCDD	3268-87-9	55.5	B	10.7	0.0358	1
11031	2378-TCDF	51207-31-9	0.519	J	1.07	0.124	1
11031	12378-PeCDF	57117-41-6	2.90	JB	5.35	0.0638	1
11031	23478-PeCDF	57117-31-4	1.17	JBQ	5.35	0.0642	1
11031	123478-HxCDF	70648-26-9	0.397	JB	5.35	0.0364	1
11031	123678-HxCDF	57117-44-9	0.426	JB	5.35	0.0373	1
11031	123789-HxCDF	72918-21-9	0.122	JB	5.35	0.0324	1
11031	234678-HxCDF	60851-34-5	0.526	JB	5.35	0.0378	1
11031	1234678-HpCDF	67562-39-4	1.92	JB	5.35	0.0231	1
11031	1234789-HpCDF	55673-89-7	0.161	JBQ	5.35	0.0275	1
11031	OCDF	39001-02-0	3.25	J	10.7	0.0330	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.455				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	93	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132371
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH070-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132371
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH070-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13203SLD026	07/26/2013 13:48	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13203SLD026	07/22/2013 22:55	Karen L Beyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132060023A	07/29/2013 04:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132060023A	07/26/2013 09:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132050012A	07/25/2013 21:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132050012A	07/24/2013 18:00	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/30/2013 00:46	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06944	Antimony	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
07914	Boron	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06955	Lead	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06958	Manganese	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06961	Nickel	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
01667	Sodium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06969	Tin	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06970	Titanium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637003	07/23/2013 21:49	John P Hook	1
06141	Selenium	SW-846 6020A	1	132030637003B	07/24/2013 08:22	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637003A	07/24/2013 08:22	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637003A	07/24/2013 08:22	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637003A	07/24/2013 08:22	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132371
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51900 SDG#: PH070-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132050638001	07/25/2013 09:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638004	07/23/2013 12:45	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132050638001	07/25/2013 03:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13200039401A	07/19/2013 21:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401A	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132372
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:40 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51935 SDG#: PH070-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.04
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132372
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:40 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51935 SDG#: PH070-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	9,650		41.4	7.46	1
06944	Antimony	7440-36-0	4.14	U	4.14	0.766	1
06935	Arsenic	7440-38-2	3.75	J	4.14	0.724	1
06946	Barium	7440-39-3	73.2		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.458	J	1.03	0.0693	1
07914	Boron	7440-42-8	10.3	U	10.3	0.869	1
06949	Cadmium	7440-43-9	0.339	J	1.03	0.0786	1
01650	Calcium	7440-70-2	3,620		20.7	3.46	1
06951	Chromium	7440-47-3	10.5		3.10	0.166	1
06952	Cobalt	7440-48-4	4.23		1.03	0.102	1
06953	Copper	7440-50-8	5.06		2.07	0.300	1
01654	Iron	7439-89-6	18,000		41.4	3.75	1
06955	Lead	7439-92-1	3.32		3.10	0.517	1
01656	Lithium	7439-93-2	24.6		4.1	0.35	1
01657	Magnesium	7439-95-4	4,350		10.3	1.73	1
06958	Manganese	7439-96-5	281		1.03	0.0859	1
06960	Molybdenum	7439-98-7	2.07	U	2.07	0.176	1
06961	Nickel	7440-02-0	6.72		2.07	0.134	1
10145	Phosphorus	7723-14-0	312		10.3	2.99	1
01662	Potassium	7440-09-7	2,050		103	8.63	1
01667	Sodium	7440-23-5	88.1	J	103	17.3	1
06969	Tin	7440-31-5	2.85	J	10.3	0.228	1
06970	Titanium	7440-32-6	1,050		1.03	0.176	1
06971	Vanadium	7440-62-2	28.2		1.03	0.134	1
06972	Zinc	7440-66-6	49.2		4.14	0.207	1
10146	Zirconium	7440-67-7	4.37	J	5.17	0.869	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.414	U	0.414	0.103	2
06142	Silver	7440-22-4	0.207	U	0.207	0.0269	2
06144	Strontium	7440-24-6	11.6		0.414	0.0704	2
06145	Thallium	7440-28-0	0.244		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	8.60		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132372
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:40 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51935 SDG#: PH070-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132372
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:40 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51935 SDG#: PH070-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.996	U	0.996	0.0323	1
11031	12378-PeCDD	40321-76-4	0.0944	JQ	4.98	0.0406	1
11031	123478-HxCDD	39227-28-6	4.98	U	4.98	0.0233	1
11031	123678-HxCDD	57653-85-7	0.0264	JBQ	4.98	0.0249	1
11031	123789-HxCDD	19408-74-3	0.0278	JB	4.98	0.0269	1
11031	1234678-HpCDD	35822-46-9	0.0612	JBQ	4.98	0.0289	1
11031	OCDD	3268-87-9	0.151	JBQ	9.96	0.0446	1
11031	2378-TCDF	51207-31-9	0.996	U	0.996	0.0321	1
11031	12378-PeCDF	57117-41-6	0.0864	JBQ	4.98	0.0201	1
11031	23478-PeCDF	57117-31-4	4.98	U	4.98	0.0204	1
11031	123478-HxCDF	70648-26-9	0.0331	JBQ	4.98	0.0131	1
11031	123678-HxCDF	57117-44-9	0.0467	JBQ	4.98	0.0121	1
11031	123789-HxCDF	72918-21-9	0.0424	JB	4.98	0.0134	1
11031	234678-HxCDF	60851-34-5	0.0226	JBQ	4.98	0.0126	1
11031	1234678-HpCDF	67562-39-4	0.0393	JBQ	4.98	0.00867	1
11031	1234789-HpCDF	55673-89-7	4.98	U	4.98	0.0184	1
11031	OCDF	39001-02-0	0.120	J	9.96	0.0424	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00711				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	86	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	88	32 - 141
13C12-123678-HxCDD	89	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	92	29 - 147
13C12-1234678-HpCDF	103	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132372
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:40 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51935 SDG#: PH070-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132372
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:40 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51935 SDG#: PH070-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13203SLD026	07/25/2013 13:22	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13203SLD026	07/22/2013 22:55	Karen L Beyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 07:35	Laura M Krieger	24.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320031771	07/19/2013 16:31	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320031771	07/19/2013 16:31	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132060023A	07/29/2013 04:23	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132060023A	07/26/2013 09:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132050012A	07/25/2013 19:04	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132050012A	07/24/2013 18:00	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/30/2013 01:43	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06944	Antimony	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
07914	Boron	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06955	Lead	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06958	Manganese	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06961	Nickel	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
01667	Sodium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06969	Tin	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06970	Titanium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637003	07/23/2013 21:53	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-519-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132372
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:40 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51935 SDG#: PH070-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132030637003B	07/24/2013 08:24	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637003A	07/24/2013 08:24	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637003A	07/24/2013 08:24	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637003A	07/24/2013 08:24	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132050638001	07/25/2013 09:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638004	07/23/2013 12:45	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132050638001	07/25/2013 03:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13200039401A	07/19/2013 21:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401A	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132373
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH070-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	0.92	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.43	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	110		18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	3.9	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	7.9	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132373
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH070-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,600		41.7	7.52	1
06944	Antimony	7440-36-0	4.17	U	4.17	0.772	1
06935	Arsenic	7440-38-2	6.01		4.17	0.730	1
06946	Barium	7440-39-3	99.0		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.785	J	1.04	0.0699	1
07914	Boron	7440-42-8	4.36	J	10.4	0.876	1
06949	Cadmium	7440-43-9	0.591	J	1.04	0.0792	1
01650	Calcium	7440-70-2	5,010		20.9	3.48	1
06951	Chromium	7440-47-3	26.1		3.13	0.167	1
06952	Cobalt	7440-48-4	7.65		1.04	0.103	1
06953	Copper	7440-50-8	15.1		2.09	0.302	1
01654	Iron	7439-89-6	23,100		41.7	3.77	1
06955	Lead	7439-92-1	7.65		3.13	0.521	1
01656	Lithium	7439-93-2	22.2		4.2	0.35	1
01657	Magnesium	7439-95-4	5,440		10.4	1.74	1
06958	Manganese	7439-96-5	414		1.04	0.0865	1
06960	Molybdenum	7439-98-7	0.315	J	2.09	0.177	1
06961	Nickel	7440-02-0	15.6		2.09	0.136	1
10145	Phosphorus	7723-14-0	584		10.4	3.01	1
01662	Potassium	7440-09-7	4,680		104	8.70	1
01667	Sodium	7440-23-5	84.3	J	104	17.4	1
06969	Tin	7440-31-5	2.66	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,160		1.04	0.177	1
06971	Vanadium	7440-62-2	48.3		1.04	0.136	1
06972	Zinc	7440-66-6	65.3		4.17	0.209	1
10146	Zirconium	7440-67-7	4.76	J	5.21	0.876	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.156	J	0.417	0.104	2
06142	Silver	7440-22-4	0.0373	J	0.209	0.0271	2
06144	Strontium	7440-24-6	22.0		0.417	0.0709	2
06145	Thallium	7440-28-0	0.375		0.209	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0170	U	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.64		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132373
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH070-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0360	JQ	1.00	0.0281	1
11031	12378-PeCDD	40321-76-4	5.01	U	5.01	0.0420	1
11031	123478-HxCDD	39227-28-6	0.0392	JQ	5.01	0.0246	1
11031	123678-HxCDD	57653-85-7	0.140	JBQ	5.01	0.0272	1
11031	123789-HxCDD	19408-74-3	0.412	JB	5.01	0.0255	1
11031	1234678-HpCDD	35822-46-9	0.553	JB	5.01	0.0343	1
11031	OCDD	3268-87-9	5.20	JB	10.0	0.0771	1
11031	2378-TCDF	51207-31-9	0.274	J	1.00	0.0702	1
11031	12378-PeCDF	57117-41-6	7.97	B	5.01	0.0385	1
11031	23478-PeCDF	57117-31-4	5.01	U	5.01	0.0389	1
11031	123478-HxCDF	70648-26-9	0.213	JBQ	5.01	0.0231	1
11031	123678-HxCDF	57117-44-9	0.480	JBQ	5.01	0.0217	1
11031	123789-HxCDF	72918-21-9	0.223	JBQ	5.01	0.0250	1
11031	234678-HxCDF	60851-34-5	0.0872	JB	5.01	0.0224	1
11031	1234678-HpCDF	67562-39-4	0.672	JB	5.01	0.0129	1
11031	1234789-HpCDF	55673-89-7	0.0642	JBQ	5.01	0.0281	1
11031	OCDF	39001-02-0	0.920	J	10.0	0.0562	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.331				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132373
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH070-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132373
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH070-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13203SLD026	07/25/2013 13:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13203SLD026	07/22/2013 22:55	Karen L Beyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132060023A	07/29/2013 05:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132060023A	07/26/2013 09:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132050012A	07/25/2013 19:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132050012A	07/24/2013 18:00	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/30/2013 05:37	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06944	Antimony	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
07914	Boron	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06955	Lead	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06958	Manganese	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06961	Nickel	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
01667	Sodium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06969	Tin	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06970	Titanium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637003	07/23/2013 21:57	John P Hook	1
06141	Selenium	SW-846 6020A	1	132030637003B	07/24/2013 08:27	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637003A	07/24/2013 08:27	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637003A	07/24/2013 08:27	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637003A	07/24/2013 08:27	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-520-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132373
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 13:00 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52000 SDG#: PH070-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132050638001	07/25/2013 09:11	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638004	07/23/2013 12:45	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132050638001	07/25/2013 03:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13200039401A	07/19/2013 21:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401A	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132374
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 14:15 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53100 SDG#: PH070-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.5	J	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.0	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	40		19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	0.82	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	5.5	J	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	2.5	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	7.9		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	15		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132374
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 14:15 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53100 SDG#: PH070-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,500		42.5	7.66	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.786	1
06935	Arsenic	7440-38-2	6.59		4.25	0.744	1
06946	Barium	7440-39-3	99.4		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.882	J	1.06	0.0712	1
07914	Boron	7440-42-8	8.08	J	10.6	0.893	1
06949	Cadmium	7440-43-9	0.673	J	1.06	0.0808	1
01650	Calcium	7440-70-2	29,600		21.3	3.55	1
06951	Chromium	7440-47-3	30.9		3.19	0.170	1
06952	Cobalt	7440-48-4	8.21		1.06	0.105	1
06953	Copper	7440-50-8	18.6		2.13	0.308	1
01654	Iron	7439-89-6	24,100		42.5	3.85	1
06955	Lead	7439-92-1	9.35		3.19	0.531	1
01656	Lithium	7439-93-2	21.4		4.3	0.36	1
01657	Magnesium	7439-95-4	6,540		10.6	1.77	1
06958	Manganese	7439-96-5	436		1.06	0.0882	1
06960	Molybdenum	7439-98-7	0.238	J	2.13	0.181	1
06961	Nickel	7440-02-0	17.6		2.13	0.138	1
10145	Phosphorus	7723-14-0	524		10.6	3.07	1
01662	Potassium	7440-09-7	5,110		106	8.86	1
01667	Sodium	7440-23-5	94.6	J	106	17.7	1
06969	Tin	7440-31-5	2.65	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,070		1.06	0.181	1
06971	Vanadium	7440-62-2	54.7		1.06	0.138	1
06972	Zinc	7440-66-6	65.1		4.25	0.213	1
10146	Zirconium	7440-67-7	4.37	J	5.31	0.893	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.225	J	0.425	0.106	2
06142	Silver	7440-22-4	0.0320	J	0.213	0.0276	2
06144	Strontium	7440-24-6	52.0		0.425	0.0723	2
06145	Thallium	7440-28-0	0.319		0.213	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0166	U	0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.54		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132374
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 14:15 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53100 SDG#: PH070-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0392	J	1.04	0.0384	1
11031	12378-PeCDD	40321-76-4	5.20	U	5.20	0.0469	1
11031	123478-HxCDD	39227-28-6	5.20	U	5.20	0.0272	1
11031	123678-HxCDD	57653-85-7	0.105	JBQ	5.20	0.0289	1
11031	123789-HxCDD	19408-74-3	0.200	JB	5.20	0.0273	1
11031	1234678-HpCDD	35822-46-9	1.15	JB	5.20	0.0473	1
11031	OCDD	3268-87-9	14.6	B	10.4	0.0573	1
11031	2378-TCDF	51207-31-9	0.0875	JQ	1.04	0.0453	1
11031	12378-PeCDF	57117-41-6	0.483	JBQ	5.20	0.0254	1
11031	23478-PeCDF	57117-31-4	0.0804	JBQ	5.20	0.0286	1
11031	123478-HxCDF	70648-26-9	0.0742	JBQ	5.20	0.0201	1
11031	123678-HxCDF	57117-44-9	0.0725	JBQ	5.20	0.0190	1
11031	123789-HxCDF	72918-21-9	0.178	JB	5.20	0.0193	1
11031	234678-HxCDF	60851-34-5	0.0588	JBQ	5.20	0.0196	1
11031	1234678-HpCDF	67562-39-4	0.486	JB	5.20	0.0129	1
11031	1234789-HpCDF	55673-89-7	0.0349	JBQ	5.20	0.0305	1
11031	OCDF	39001-02-0	1.44	J	10.4	0.0664	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0981				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	97	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	109	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	42	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132374
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 14:15 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53100 SDG#: PH070-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132374
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 14:15 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53100 SDG#: PH070-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13203SLD026	07/25/2013 14:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13203SLD026	07/22/2013 22:55	Karen L Beyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132060023A	07/29/2013 06:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132060023A	07/26/2013 09:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132050012A	07/25/2013 19:45	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132050012A	07/24/2013 18:00	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/30/2013 06:34	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06944	Antimony	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
07914	Boron	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06955	Lead	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06958	Manganese	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06961	Nickel	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
01667	Sodium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06969	Tin	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06970	Titanium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637003	07/23/2013 22:01	John P Hook	1
06141	Selenium	SW-846 6020A	1	132030637003B	07/24/2013 08:37	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637003A	07/24/2013 08:37	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637003A	07/24/2013 08:37	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637003A	07/24/2013 08:37	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132374
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 14:15 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53100 SDG#: PH070-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132050638001	07/25/2013 09:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638004	07/23/2013 12:45	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132050638001	07/25/2013 03:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13200039401B	07/19/2013 21:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401A	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132375
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 14:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53140 SDG#: PH070-12*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.64
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132375
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 14:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53140 SDG#: PH070-12*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,400		43.1	7.77	1
06944	Antimony	7440-36-0	4.31	U	4.31	0.797	1
06935	Arsenic	7440-38-2	7.47		4.31	0.754	1
06946	Barium	7440-39-3	120		1.08	0.0356	1
06947	Beryllium	7440-41-7	0.944	J	1.08	0.0722	1
07914	Boron	7440-42-8	3.58	J	10.8	0.905	1
06949	Cadmium	7440-43-9	0.505	J	1.08	0.0819	1
01650	Calcium	7440-70-2	14,900		21.5	3.60	1
06951	Chromium	7440-47-3	29.8		3.23	0.172	1
06952	Cobalt	7440-48-4	7.75		1.08	0.107	1
06953	Copper	7440-50-8	12.9		2.15	0.312	1
01654	Iron	7439-89-6	25,400		43.1	3.90	1
06955	Lead	7439-92-1	7.69		3.23	0.539	1
01656	Lithium	7439-93-2	24.1		4.3	0.37	1
01657	Magnesium	7439-95-4	5,360		10.8	1.80	1
06958	Manganese	7439-96-5	361		1.08	0.0894	1
06960	Molybdenum	7439-98-7	0.343	J	2.15	0.183	1
06961	Nickel	7440-02-0	16.3		2.15	0.140	1
10145	Phosphorus	7723-14-0	164		10.8	3.11	1
01662	Potassium	7440-09-7	2,520		108	8.99	1
01667	Sodium	7440-23-5	98.4	J	108	18.0	1
06969	Tin	7440-31-5	2.91	J	10.8	0.237	1
06970	Titanium	7440-32-6	1,220		1.08	0.183	1
06971	Vanadium	7440-62-2	56.8		1.08	0.140	1
06972	Zinc	7440-66-6	51.9		4.31	0.215	1
10146	Zirconium	7440-67-7	5.87		5.39	0.905	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.431	U	0.431	0.108	2
06142	Silver	7440-22-4	0.0474	J	0.215	0.0280	2
06144	Strontium	7440-24-6	31.9		0.431	0.0733	2
06145	Thallium	7440-28-0	0.290		0.215	0.0323	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0139	J	0.0186	0.0112	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.97		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132375
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 14:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53140 SDG#: PH070-12*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	11.6	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132375
LL Group # 1405341
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Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53140 SDG#: PH070-12*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.10 U	1.10	0.0261	1
11031	12378-PeCDD	40321-76-4	0.0482 JQ	5.49	0.0360	1
11031	123478-HxCDD	39227-28-6	0.0210 JQ	5.49	0.0206	1
11031	123678-HxCDD	57653-85-7	0.0348 JBQ	5.49	0.0234	1
11031	123789-HxCDD	19408-74-3	5.49 U	5.49	0.0218	1
11031	1234678-HpCDD	35822-46-9	0.0908 JB	5.49	0.0296	1
11031	OCDD	3268-87-9	0.484 JBQ	11.0	0.0458	1
11031	2378-TCDF	51207-31-9	1.10 U	1.10	0.0252	1
11031	12378-PeCDF	57117-41-6	5.49 U	5.49	0.0201	1
11031	23478-PeCDF	57117-31-4	5.49 U	5.49	0.0196	1
11031	123478-HxCDF	70648-26-9	5.49 U	5.49	0.00984	1
11031	123678-HxCDF	57117-44-9	5.49 U	5.49	0.00995	1
11031	123789-HxCDF	72918-21-9	5.49 U	5.49	0.0122	1
11031	234678-HxCDF	60851-34-5	0.0291 JBQ	5.49	0.0106	1
11031	1234678-HpCDF	67562-39-4	0.0321 JBQ	5.49	0.00916	1
11031	1234789-HpCDF	55673-89-7	0.0315 JBQ	5.49	0.0178	1
11031	OCDF	39001-02-0	0.0502 JQ	11.0	0.0465	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.000905			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132375
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 14:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53140 SDG#: PH070-12*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132375
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53140 SDG#: PH070-12*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13203SLD026	07/26/2013 13:16	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13203SLD026	07/22/2013 22:55	Karen L Beyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 08:13	Laura M Krieger	22.64
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320031771	07/19/2013 16:32	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320031771	07/19/2013 16:33	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132060023A	07/29/2013 06:32	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132060023A	07/26/2013 09:00	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132050012A	07/25/2013 17:40	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132050012A	07/24/2013 18:00	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/30/2013 07:30	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06944	Antimony	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06946	Barium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
07914	Boron	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
01650	Calcium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06951	Chromium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06953	Copper	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
01654	Iron	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06955	Lead	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06958	Manganese	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06961	Nickel	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
01662	Potassium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
01667	Sodium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06969	Tin	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06970	Titanium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
06972	Zinc	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132030637003	07/23/2013 22:05	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7132375
LL Group # 1405341
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/18/2013 14:30 by VC

Submitted: 07/19/2013 09:10
Reported: 07/31/2013 11:21

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53140 SDG#: PH070-12*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132030637003B	07/24/2013 08:40	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637003A	07/24/2013 08:40	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637003A	07/24/2013 08:40	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637003A	07/24/2013 08:40	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132050638001	07/25/2013 09:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637003	07/23/2013 10:58	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638004	07/23/2013 12:45	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132050638001	07/25/2013 03:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13200039401B	07/19/2013 21:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401A	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405341
Reported: 07/31/13 at 11:21 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B132052AA	Sample number(s): 7132365,7132367								
Acetone	20 U	20.	7	ug/kg	151		18-197		
Acrolein	100 U	100.	20	ug/kg	81		50-137		
Acrylonitrile	20 U	20.	4	ug/kg	108		60-133		
t-Amyl methyl ether	5 U	5.	1	ug/kg	99		63-130		
Benzene	5 U	5.	0.5	ug/kg	98		80-120		
Bromobenzene	5 U	5.	1	ug/kg	95		79-120		
Bromochloromethane	5 U	5.	1	ug/kg	100		82-133		
Bromodichloromethane	5 U	5.	1	ug/kg	93		75-114		
Bromoform	5 U	5.	1	ug/kg	100		70-120		
Bromomethane	5 U	5.	2	ug/kg	93		32-162		
2-Butanone	10 U	10.	4	ug/kg	134		38-146		
t-Butyl alcohol	50 U	50.	20	ug/kg	92		60-149		
n-Butylbenzene	5 U	5.	1	ug/kg	92		72-120		
sec-Butylbenzene	5 U	5.	1	ug/kg	94		75-120		
tert-Butylbenzene	5 U	5.	1	ug/kg	93		75-120		
Carbon Disulfide	5 U	5.	1	ug/kg	98		59-129		
Carbon Tetrachloride	5 U	5.	1	ug/kg	97		69-122		
Chlorobenzene	5 U	5.	1	ug/kg	97		80-120		
Chloroethane	5 U	5.	2	ug/kg	86		37-154		
2-Chloroethyl Vinyl Ether	10 U	10.	2	ug/kg	95		44-137		
Chloroform	5 U	5.	1	ug/kg	98		80-120		
1-Chlorohexane	5 U	5.	1	ug/kg	100		70-130		
Chloromethane	5 U	5.	2	ug/kg	92		56-120		
2-Chlorotoluene	5 U	5.	1	ug/kg	93		78-120		
4-Chlorotoluene	5 U	5.	1	ug/kg	93		79-120		
Chlorotrifluoroethene	5 U	5.	2	ug/kg	53	43	22-131	21	30
1,2-Dibromo-3-chloropropane	5 U	5.	2	ug/kg	106		55-128		
Dibromochloromethane	5 U	5.	1	ug/kg	94		77-120		
1,2-Dibromoethane	5 U	5.	1	ug/kg	103		80-120		
Dibromomethane	5 U	5.	1	ug/kg	100		80-120		
1,2-Dichlorobenzene	5 U	5.	1	ug/kg	96		80-120		
1,3-Dichlorobenzene	5 U	5.	1	ug/kg	95		80-120		
1,4-Dichlorobenzene	5 U	5.	1	ug/kg	94		80-120		
Dichlorodifluoromethane	5 U	5.	2	ug/kg	95		32-120		
1,1-Dichloroethane	5 U	5.	1	ug/kg	98		80-120		
1,2-Dichloroethane	5 U	5.	1	ug/kg	101		72-126		
1,1-Dichloroethene	5 U	5.	1	ug/kg	99		73-129		
cis-1,2-Dichloroethene	5 U	5.	1	ug/kg	98		80-120		
trans-1,2-Dichloroethene	5 U	5.	1	ug/kg	101		79-120		
1,2-Dichloropropane	5 U	5.	1	ug/kg	100		77-120		
1,3-Dichloropropane	5 U	5.	1	ug/kg	100		80-120		
2,2-Dichloropropane	5 U	5.	1	ug/kg	92		72-123		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405341
Reported: 07/31/13 at 11:21 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloropropene	5	U	5.	1	ug/kg	99		77-120		
cis-1,3-Dichloropropene	5	U	5.	1	ug/kg	96		74-120		
trans-1,3-Dichloropropene	5	U	5.	1	ug/kg	94		77-120		
Ethyl t-butyl ether	5	U	5.	1	ug/kg	98		64-124		
Ethylbenzene	5	U	5.	1	ug/kg	93		80-120		
Freon 113	5	U	5.	2	ug/kg	98		64-137		
Freon 133a	5	U	5.	2	ug/kg	93	78	78-120	18	30
Hexachlorobutadiene	5	U	5.	2	ug/kg	87		46-130		
2-Hexanone	10	U	10.	3	ug/kg	115		40-129		
di-Isopropyl ether	5	U	5.	1	ug/kg	101		68-128		
Isopropylbenzene	5	U	5.	1	ug/kg	94		76-120		
p-Isopropyltoluene	5	U	5.	1	ug/kg	91		75-120		
Methyl Iodide	5	U	5.	3	ug/kg	103		72-130		
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/kg	103		74-121		
4-Methyl-2-pentanone	10	U	10.	3	ug/kg	123		52-125		
Methylene Chloride	5	U	5.	2	ug/kg	97		76-124		
n-Propylbenzene	5	U	5.	1	ug/kg	94		77-120		
Styrene	5	U	5.	1	ug/kg	96		76-120		
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/kg	95		80-120		
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/kg	107		71-123		
Tetrachloroethene	5	U	5.	1	ug/kg	96		78-126		
Toluene	5	U	5.	1	ug/kg	97		80-120		
1,2,3-Trichlorobenzene	5	U	5.	1	ug/kg	88		64-120		
1,2,4-Trichlorobenzene	5	U	5.	1	ug/kg	88		68-113		
1,1,1-Trichloroethane	5	U	5.	1	ug/kg	92		71-125		
1,1,2-Trichloroethane	5	U	5.	1	ug/kg	106		80-120		
Trichloroethene	5	U	5.	1	ug/kg	99		80-120		
Trichlorofluoromethane	5	U	5.	2	ug/kg	96		58-133		
1,2,3-Trichloropropane	5	U	5.	1	ug/kg	110		71-123		
1,2,4-Trimethylbenzene	5	U	5.	1	ug/kg	93		79-120		
1,3,5-Trimethylbenzene	5	U	5.	1	ug/kg	94		78-120		
Vinyl Acetate	10	U	10.	2	ug/kg	135*	125*	29-111	7	30
Vinyl Chloride	5	U	5.	1	ug/kg	99		53-120		
m+p-Xylene	5	U	5.	1	ug/kg	94		80-120		
o-Xylene	5	U	5.	1	ug/kg	95		80-120		
Batch number: Y132041AA	Sample number(s): 7132370									
Acetone	20	U	20.	6	ug/l	99	98	35-181	1	30
Acrolein	100	U	100.	40	ug/l	85	88	46-146	3	30
Acrylonitrile	20	U	20.	4	ug/l	85	87	61-130	1	30
t-Amyl methyl ether	5	U	5.	0.8	ug/l	102	102	66-120	1	30
Benzene	5	U	5.	0.5	ug/l	100	101	77-121	1	30
Bromobenzene	5	U	5.	1	ug/l	100	101	80-120	1	30
Bromochloromethane	5	U	5.	1	ug/l	111	110	80-121	1	30
Bromodichloromethane	5	U	5.	1	ug/l	108	108	73-120	0	30
Bromoform	5	U	5.	1	ug/l	103	102	61-120	0	30
Bromomethane	5	U	5.	1	ug/l	89	92	51-120	3	30
2-Butanone	10	U	10.	3	ug/l	93	91	57-141	2	30
t-Butyl alcohol	50	U	50.	10	ug/l	107	106	75-120	1	30
n-Butylbenzene	5	U	5.	1	ug/l	103	104	73-130	1	30
sec-Butylbenzene	5	U	5.	1	ug/l	105	107	74-124	1	30
tert-Butylbenzene	5	U	5.	1	ug/l	99	101	80-120	2	30
Carbon Disulfide	5	U	5.	1	ug/l	82	81	68-121	1	30
Carbon Tetrachloride	5	U	5.	1	ug/l	115	114	65-137	1	30
Chlorobenzene	5	U	5.	0.8	ug/l	107	107	80-120	0	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405341
Reported: 07/31/13 at 11:21 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chloroethane	5	U	5.	1	ug/l	80	79	60-120	1	30
2-Chloroethyl Vinyl Ether	10	U	10.	2	ug/l	92	93	52-127	1	30
Chloroform	5	U	5.	0.8	ug/l	113	111	77-122	2	30
1-Chlorohexane	5	U	5.	1	ug/l	104	105	70-130	1	30
Chloromethane	5	U	5.	1	ug/l	81	88	54-123	8	30
2-Chlorotoluene	5	U	5.	1	ug/l	101	104	80-120	2	30
4-Chlorotoluene	5	U	5.	1	ug/l	101	101	80-120	0	30
Chlorotrifluoroethene	5	U	5.	2	ug/l	44*	43*	47-120	4	30
1,2-Dibromo-3-chloropropane	5	U	5.	2	ug/l	105	107	56-120	1	30
Dibromochloromethane	5	U	5.	1	ug/l	101	101	72-120	0	30
1,2-Dibromoethane	5	U	5.	1	ug/l	108	108	76-120	1	30
Dibromomethane	5	U	5.	1	ug/l	109	108	80-120	2	30
1,2-Dichlorobenzene	5	U	5.	1	ug/l	111	111	80-120	0	30
1,3-Dichlorobenzene	5	U	5.	1	ug/l	106	106	80-120	0	30
1,4-Dichlorobenzene	5	U	5.	1	ug/l	107	106	80-120	1	30
Dichlorodifluoromethane	5	U	5.	2	ug/l	109	110	35-122	0	30
1,1-Dichloroethane	5	U	5.	1	ug/l	98	98	79-120	0	30
1,2-Dichloroethane	5	U	5.	1	ug/l	117	114	64-130	2	30
1,1-Dichloroethene	5	U	5.	0.8	ug/l	97	98	76-124	1	30
cis-1,2-Dichloroethene	5	U	5.	0.8	ug/l	106	104	80-120	2	30
trans-1,2-Dichloroethene	5	U	5.	0.8	ug/l	102	103	80-120	0	30
1,2-Dichloropropane	5	U	5.	1	ug/l	100	101	80-120	1	30
1,3-Dichloropropane	5	U	5.	1	ug/l	97	99	80-120	2	30
2,2-Dichloropropane	5	U	5.	1	ug/l	108	107	67-124	2	30
1,1-Dichloropropene	5	U	5.	1	ug/l	106	105	80-120	1	30
cis-1,3-Dichloropropene	5	U	5.	1	ug/l	105	105	78-120	0	30
trans-1,3-Dichloropropene	5	U	5.	1	ug/l	95	96	66-124	1	30
Ethyl t-butyl ether	5	U	5.	0.8	ug/l	97	97	66-120	0	30
Ethylbenzene	5	U	5.	0.8	ug/l	101	103	79-120	1	30
Freon 113	5	U	5.	2	ug/l	105	104	69-128	1	30
Freon 133a	5	U	5.	2	ug/l	86	85	64-120	1	30
Hexachlorobutadiene	5	U	5.	2	ug/l	106	110	58-120	3	30
2-Hexanone	10	U	10.	3	ug/l	88	88	59-125	1	30
di-Isopropyl ether	5	U	5.	0.8	ug/l	90	90	65-120	1	30
Isopropylbenzene	5	U	5.	1	ug/l	106	106	77-120	0	30
p-Isopropyltoluene	5	U	5.	1	ug/l	104	105	77-121	1	30
Methyl Iodide	5	U	5.	1	ug/l	102	103	71-122	1	30
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/l	103	103	68-121	1	30
4-Methyl-2-pentanone	10	U	10.	3	ug/l	91	93	65-122	1	30
Methylene Chloride	5	U	5.	2	ug/l	101	101	84-118	1	30
n-Propylbenzene	5	U	5.	1	ug/l	104	105	77-130	1	30
Styrene	5	U	5.	1	ug/l	104	104	77-120	0	30
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/l	109	109	79-120	0	30
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/l	99	102	70-129	3	30
Tetrachloroethene	5	U	5.	0.8	ug/l	106	105	79-120	0	30
Toluene	5	U	5.	0.7	ug/l	102	103	79-120	1	30
1,2,3-Trichlorobenzene	5	U	5.	1	ug/l	113	113	67-120	0	30
1,2,4-Trichlorobenzene	5	U	5.	1	ug/l	112	112	65-120	1	30
1,1,1-Trichloroethane	5	U	5.	0.8	ug/l	104	104	66-126	0	30
1,1,2-Trichloroethane	5	U	5.	0.8	ug/l	105	107	80-120	2	30
Trichloroethene	5	U	5.	1	ug/l	110	109	80-120	1	30
Trichlorofluoromethane	5	U	5.	2	ug/l	109	109	65-130	0	30
1,2,3-Trichloropropane	5	U	5.	1	ug/l	106	106	76-120	1	30
1,2,4-Trimethylbenzene	5	U	5.	1	ug/l	105	108	69-122	3	30
1,3,5-Trimethylbenzene	5	U	5.	1	ug/l	105	106	68-124	1	30
Vinyl Acetate	10	U	10.	2	ug/l	120	118	57-147	2	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405341
Reported: 07/31/13 at 11:21 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Vinyl Chloride	5	U	5.	1	ug/l	88	90	63-120	3	30
m+p-Xylene	5	U	5.	0.8	ug/l	104	104	77-120	0	30
o-Xylene	5	U	5.	0.8	ug/l	103	103	77-120	0	30
Batch number: 13203SLD026	Sample number(s): 7132364-7132369,7132371-7132375									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	103		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	94		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	97		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	101		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	98		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	126		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	125		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	103		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	103		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	128*		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	127		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	104		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	81		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	126		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	97		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	102		71-120		
Batch number: 13203SLE026	Sample number(s): 7132364-7132367									
Aniline	330 U		330.	170	ug/kg	87		44-103		
Benzidine	1,700 U		1,700.	700	ug/kg	40		25-94		
Benzoic acid	500 U		500.	170	ug/kg	90		41-122		
Benzyl alcohol	330 U		330.	170	ug/kg	108		78-115		
1,1'-Biphenyl	33	U	33.	17	ug/kg	102		77-111		
4-Bromophenyl-phenylether	33	U	33.	17	ug/kg	110		79-117		
Carbazole	33	U	33.	17	ug/kg	105		79-118		
4-Chloro-3-methylphenol	33	U	33.	17	ug/kg	108		80-124		
4-Chloroaniline	33	U	33.	17	ug/kg	50		10-97		
bis(2-Chloroethoxy)methane	33	U	33.	17	ug/kg	108		77-112		
bis(2-Chloroethyl)ether	33	U	33.	17	ug/kg	106		77-115		
bis(2-Chloroisopropyl)ether	33	U	33.	17	ug/kg	96		64-114		
2-Chloronaphthalene	33	U	33.	7	ug/kg	107		56-144		
2-Chlorophenol	33	U	33.	17	ug/kg	116		80-122		
4-Chlorophenyl-phenylether	33	U	33.	17	ug/kg	103		79-110		
Dibenzofuran	33	U	33.	17	ug/kg	108		78-116		
1,2-Dichlorobenzene	33	U	33.	17	ug/kg	108		79-112		
1,3-Dichlorobenzene	33	U	33.	17	ug/kg	104		79-113		
1,4-Dichlorobenzene	33	U	33.	17	ug/kg	98		79-112		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405341
Reported: 07/31/13 at 11:21 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
3,3'-Dichlorobenzidine	330 U		330.	100	ug/kg	94		20-111		
2,4-Dichlorophenol	33	U	33.	17	ug/kg	115		81-123		
2,6-Dichlorophenol	33	U	33.	17	ug/kg	111		77-113		
2,4-Dimethylphenol	33	U	33.	17	ug/kg	113		83-120		
3,5-Dimethylphenol	170 U		170.	33	ug/kg	110	113	70-130	3	30
4,6-Dinitro-2-methylphenol	500 U		500.	170	ug/kg	114		56-132		
2,4-Dinitrophenol	660 U		660.	300	ug/kg	105		26-145		
1,2-Diphenylhydrazine	33	U	33.	17	ug/kg	115*		77-111		
Hexachlorobenzene	17	U	17.	3	ug/kg	111		74-118		
Hexachlorobutadiene	33	U	33.	17	ug/kg	101		76-115		
Hexachlorocyclopentadiene	500 U		500.	170	ug/kg	131		66-135		
Hexachloroethane	170 U		170.	33	ug/kg	102		76-109		
Isophorone	33	U	33.	17	ug/kg	104		76-112		
2-Methylphenol	33	U	33.	17	ug/kg	114		75-126		
4-Methylphenol	33	U	33.	17	ug/kg	109		73-124		
NDPA as diphenylamine	170 U		170.	33	ug/kg	107		70-130		
2-Nitroaniline	33	U	33.	17	ug/kg	109		83-118		
3-Nitroaniline	170 U		170.	67	ug/kg	104		69-122		
4-Nitroaniline	170 U		170.	67	ug/kg	88		51-107		
Nitrobenzene	33	U	33.	17	ug/kg	99		73-118		
2-Nitrophenol	33	U	33.	17	ug/kg	108		81-114		
4-Nitrophenol	500 U		500.	170	ug/kg	91		49-136		
N-Nitroso-di-n-propylamine	33	U	33.	17	ug/kg	98		70-113		
N-Nitrosodiphenylamine	33	U	33.	17	ug/kg	108		83-118		
Pentachlorophenol	170 U		170.	33	ug/kg	103		56-132		
Phenol	33	U	33.	17	ug/kg	107		69-126		
Pyridine	170 U		170.	67	ug/kg	76		48-99		
1,2,4-Trichlorobenzene	33	U	33.	17	ug/kg	105		80-109		
2,4,5-Trichlorophenol	33	U	33.	17	ug/kg	116		80-117		
2,4,6-Trichlorophenol	33	U	33.	17	ug/kg	109		81-123		
Batch number: 13203A16A	Sample number(s): 7132365,7132367,7132369,7132372,7132375									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	71		67-119		
Batch number: 13204A20A	Sample number(s): 7132370									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	104	99	75-135	5	30
Batch number: 132010014A	Sample number(s): 7132364-7132367									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	104		85-115		
Batch number: 132050017A	Sample number(s): 7132364									
PCB-1016	17	U	17.	3.3	ug/kg	94		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					

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Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	97		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132060023A	Sample number(s): 7132364-7132369,7132371-7132375									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	55	74	36-106	28	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	95		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132050012A	Sample number(s): 7132364-7132369,7132371-7132375									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	94		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	98		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	101		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	87		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	82		49-107		
Batch number: 132030637003	Sample number(s): 7132364-7132369,7132371-7132375									
Aluminum	40.0	U	40.0	7.21	mg/kg	99		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	98		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	96		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	100		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	99		80-120		
Boron	0.920	J	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	99		80-120		
Calcium	12.9	J	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	98		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	100		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	105		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	101		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	102		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	99		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	97		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	100		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	97		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	102		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	101		80-120		
Potassium	100 U		100.	8.34	mg/kg	97		80-120		
Sodium	100 U		100.	16.7	mg/kg	97		80-120		
Tin	1.46	J	10.0	0.220	mg/kg	96		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	98		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	98		80-120		
Zinc	0.353	J	4.00	0.200	mg/kg	101		80-120		

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Zirconium	5.00 U	5.00	0.840	mg/kg	97		80-120		
Batch number: 132030637003A	Sample number(s): 7132364-7132369,7132371-7132375								
Silver	0.200 U	0.200	0.0260	mg/kg	104		80-120		
Strontium	0.0744 J	0.400	0.0680	mg/kg	104		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	107		80-120		
Batch number: 132030637003B	Sample number(s): 7132364-7132369,7132371-7132375								
Selenium	0.400 U	0.400	0.100	mg/kg	105		80-120		
Batch number: 132050638001	Sample number(s): 7132364-7132369,7132371-7132375								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	106		85-120		
Batch number: 13203243201A	Sample number(s): 7132364-7132367								
2a Chromium VI by EPA 7199	0.40 U	0.40	0.14	mg/kg	101		80-120		
Batch number: 13200039401A	Sample number(s): 7132364-7132369,7132371-7132373								
15a pH by 9045D					100		95-105		
Batch number: 13200039401B	Sample number(s): 7132374-7132375								
15a pH by 9045D					100		95-105		
Batch number: 13206162401A	Sample number(s): 7132364-7132366,7132368-7132369,7132371-7132375								
14a Moisture Content by 160.3					100		80-120		
Batch number: 13207162401A	Sample number(s): 7132367								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13207001	Sample number(s): 7132364-7132369,7132371-7132375								
2378-TCDD	1.00 U	1.00	0.0407	ng/kg	102		67-158		
12378-PeCDD	5.00 U	5.00	0.0481	ng/kg	108		70-142		
123478-HxCDD	5.00 U	5.00	0.0288	ng/kg	106		70-164		
123678-HxCDD	0.0352 J	5.00	0.0316	ng/kg	103		76-134		
123789-HxCDD	0.0341 J	5.00	0.0299	ng/kg	102		64-162		
1234678-HpCDD	0.0394 J	5.00	0.0312	ng/kg	99		70-140		
OCDD	0.233 J	10.0	0.0331	ng/kg	101		78-144		
2378-TCDF	1.00 U	1.00	0.0363	ng/kg	103		75-158		
12378-PeCDF	0.0485 J	5.00	0.0206	ng/kg	104		80-134		
23478-PeCDF	0.0474 J	5.00	0.0205	ng/kg	107		68-160		
123478-HxCDF	0.0219 J	5.00	0.0143	ng/kg	102		72-134		
123678-HxCDF	0.0208 J	5.00	0.0137	ng/kg	102		84-130		
123789-HxCDF	0.0358 J	5.00	0.0154	ng/kg	97		78-130		
234678-HxCDF	0.0291 J	5.00	0.0132	ng/kg	102		70-156		
1234678-HpCDF	0.0286 J	5.00	0.00890	ng/kg	99		82-122		
1234789-HpCDF	0.0272 J	5.00	0.0157	ng/kg	97		78-138		
OCDF	10.0 U	10.0	0.0383	ng/kg	98		63-170		
TEQ WHO 2005 - EDLx0.0	0.00150			ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405341
Reported: 07/31/13 at 11:21 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B132052AA	Sample number(s): 7132365,7132367 UNSPK: P129596								
Acetone	153	162	31-195	8	30				
Acrolein	169*	239*	10-165	36*	30				
Acrylonitrile	102	111	48-139	10	30				
t-Amyl methyl ether	98	108	39-147	12	30				
Benzene	101	113	55-143	14	30				
Bromobenzene	98	101	43-139	5	30				
Bromochloromethane	102	115	60-137	14	30				
Bromodichloromethane	93	103	53-136	12	30				
Bromoform	95	102	38-124	9	30				
Bromomethane	93	109	42-168	18	30				
2-Butanone	131	140	37-163	9	30				
t-Butyl alcohol	218*	294*	47-153	32*	30				
n-Butylbenzene	87	82	30-146	4	30				
sec-Butylbenzene	96	91	33-157	3	30				
tert-Butylbenzene	95	95	41-152	2	30				
Carbon Disulfide	101	115	48-146	16	30				
Carbon Tetrachloride	101	111	45-153	12	30				
Chlorobenzene	98	107	49-135	11	30				
Chloroethane	85	100	39-152	19	30				
2-Chloroethyl Vinyl Ether	93	100	32-139	9	30				
Chloroform	102	113	61-142	13	30				
1-Chlorohexane	104	102	70-130	0	30				
Chloromethane	97	114	36-143	18	30				
2-Chlorotoluene	95	95	42-146	2	30				
4-Chlorotoluene	93	95	39-145	4	30				
1,2-Dibromo-3-chloropropane	93	103	30-139	13	30				
Dibromochloromethane	97	108	51-128	13	30				
1,2-Dibromoethane	103	114	54-129	12	30				
Dibromomethane	99	109	57-130	12	30				
1,2-Dichlorobenzene	94	100	36-133	8	30				
1,3-Dichlorobenzene	93	97	34-134	6	30				
1,4-Dichlorobenzene	91	96	35-136	7	30				
Dichlorodifluoromethane	105	118	26-151	14	30				
1,1-Dichloroethane	101	115	63-142	15	30				
1,2-Dichloroethane	101	113	49-150	13	30				
1,1-Dichloroethene	106	119	61-149	14	30				
cis-1,2-Dichloroethene	101	115	49-153	15	30				
trans-1,2-Dichloroethene	105	120	51-153	15	30				
1,2-Dichloropropane	104	114	48-145	11	30				
1,3-Dichloropropane	100	111	45-150	13	30				
2,2-Dichloropropane	95	108	53-147	15	30				
1,1-Dichloropropene	104	116	54-145	12	30				
cis-1,3-Dichloropropene	98	108	35-151	12	30				
trans-1,3-Dichloropropene	95	105	30-149	12	30				
Ethyl t-butyl ether	96	107	58-124	13	30				
Ethylbenzene	95	100	44-141	7	30				
Freon 113	107	122	56-156	15	30				

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Quality Control Summary

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Reported: 07/31/13 at 11:21 AM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Hexachlorobutadiene	77	74	10-155	2	30				
2-Hexanone	111	121	32-160	10	30				
di-Isopropyl ether	102	115	59-133	14	30				
Isopropylbenzene	94	96	38-144	4	30				
p-Isopropyltoluene	90	86	29-152	3	30				
Methyl Iodide	107	124	52-139	17	30				
Methyl Tertiary Butyl Ether	100	111	55-129	12	30				
4-Methyl-2-pentanone	112	121	46-139	10	30				
Methylene Chloride	98	114	49-160	17	30				
n-Propylbenzene	96	94	39-157	0	30				
Styrene	95	102	35-134	10	30				
1,1,1,2-Tetrachloroethane	95	105	39-150	13	30				
1,1,2,2-Tetrachloroethane	105	113	40-152	9	30				
Tetrachloroethene	103	109	42-149	8	30				
Toluene	103	113	50-146	12	30				
1,2,3-Trichlorobenzene	79	90	10-140	15	30				
1,2,4-Trichlorobenzene	79	85	10-136	10	30				
1,1,1-Trichloroethane	100	108	43-150	11	30				
1,1,2-Trichloroethane	107	116	47-161	10	30				
Trichloroethene	101	113	53-144	13	30				
Trichlorofluoromethane	104	118	47-163	15	30				
1,2,3-Trichloropropane	109	117	45-154	9	30				
1,2,4-Trimethylbenzene	93	93	37-149	2	30				
1,3,5-Trimethylbenzene	95	96	38-150	3	30				
Vinyl Chloride	104	119	50-154	15	30				
m+p-Xylene	95	99	44-137	7	30				
o-Xylene	93	99	42-137	9	30				
Batch number: 13203SLD026	Sample number(s): 7132364-7132369,7132371-7132375 UNSPK: 7132364								
Acenaphthene	101	101	48-127	1	30				
Acenaphthylene	96	97	49-121	0	30				
Anthracene	96	99	52-126	3	30				
Benzo(a)anthracene	103	103	32-135	0	30				
Benzo(a)pyrene	102	103	36-138	1	30				
Benzo(b)fluoranthene	111	111	26-142	1	30				
Benzo(e)pyrene	101	102	70-130	1	30				
Benzo(g,h,i)perylene	92	87	33-141	6	30				
Benzo(k)fluoranthene	106	109	47-129	2	30				
Butylbenzylphthalate	136	144	59-153	5	30				
Di-n-butylphthalate	130	131	62-154	0	30				
Chrysene	99	101	29-148	1	30				
Dibenz(a,h)anthracene	104	99	34-125	5	30				
Diethylphthalate	127	128*	76-127	0	30				
Dimethylphthalate	109	108	62-136	1	30				
Bis(2-Ethylhexyl)phthalate	121	125	39-167	2	30				
Fluoranthene	107	108	47-135	0	30				
Fluorene	101	100	50-129	1	30				
Indeno(1,2,3-cd)pyrene	103	99	17-136	4	30				
1-Methylnaphthalene	107	106	50-131	1	30				
2-Methylnaphthalene	106	104	28-144	2	30				
Naphthalene	101	99	31-148	2	30				
N-Nitrosodimethylamine	85	82	48-113	3	30				

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Quality Control Summary

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Reported: 07/31/13 at 11:21 AM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Di-n-octylphthalate	131	136	52-162	3	30				
Phenanthrene	102	100	29-142	2	30				
Pyrene	103	104	26-143	1	30				
Batch number: 13203SLE026	Sample number(s): 7132364-7132367 UNSPK: 7132364								
Aniline	58	57	10-131	3	30				
Benzidine	0*	0*	35-141	0	30				
Benzoic acid	38	41	23-170	9	30				
Benzyl alcohol	92	94	32-145	2	30				
1,1'-Biphenyl	96	100	36-138	4	30				
4-Bromophenyl-phenylether	103	107	66-122	3	30				
Carbazole	92	94	58-126	1	30				
4-Chloro-3-methylphenol	96	99	50-137	3	30				
4-Chloroaniline	66	58	11-114	15	30				
bis(2-Chloroethoxy)methane	98	103	58-122	5	30				
bis(2-Chloroethyl)ether	94	93	54-128	1	30				
bis(2-Chloroisopropyl)ether	88	89	50-115	0	30				
2-Chloronaphthalene	103	90	50-140	14	30				
2-Chlorophenol	99	102	51-139	2	30				
4-Chlorophenyl-phenylether	95	100	65-117	5	30				
Dibenzofuran	99	102	60-120	2	30				
1,2-Dichlorobenzene	96	94	45-127	3	30				
1,3-Dichlorobenzene	93	92	46-123	2	30				
1,4-Dichlorobenzene	90	89	40-132	2	30				
3,3'-Dichlorobenzidine	81	74	10-143	9	30				
2,4-Dichlorophenol	103	106	54-135	3	30				
2,6-Dichlorophenol	101	105	56-133	4	30				
2,4-Dimethylphenol	96	101	39-147	5	30				
4,6-Dinitro-2-methylphenol	70	74	10-148	5	30				
2,4-Dinitrophenol	45	46	20-143	2	30				
1,2-Diphenylhydrazine	108	112	51-145	3	30				
Hexachlorobenzene	106	106	46-132	0	30				
Hexachlorobutadiene	99	97	58-120	2	30				
Hexachlorocyclopentadiene	95	98	10-153	3	30				
Hexachloroethane	92	93	24-138	1	30				
Isophorone	95	96	59-122	0	30				
2-Methylphenol	94	95	32-146	1	30				
4-Methylphenol	95	96	31-150	0	30				
NDPA as diphenylamine	97	101	70-130	4	30				
2-Nitroaniline	98	101	63-137	2	30				
3-Nitroaniline	95	96	31-145	1	30				
4-Nitroaniline	80	78	25-137	3	30				
Nitrobenzene	92	93	46-133	0	30				
2-Nitrophenol	97	100	52-137	2	30				
4-Nitrophenol	91	90	25-142	1	30				
N-Nitroso-di-n-propylamine	88	87	45-133	1	30				
N-Nitrosodiphenylamine	98	102	59-135	4	30				
Pentachlorophenol	78	82	23-145	5	30				
Phenol	92	92	34-146	1	30				
Pyridine	55	59	16-108	6	30				
1,2,4-Trichlorobenzene	103	101	66-116	3	30				
2,4,5-Trichlorophenol	107	108	41-141	1	30				

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Quality Control Summary

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2,4,6-Trichlorophenol	99	102	41-142	3	30				
Batch number: 13203A16A	Sample number(s): 7132365,7132367,7132369,7132372,7132375 UNSPK: P129596								
11a TPH by EPA 8015B GRO	83	82	39-118	5	30				
Batch number: 132010014A	Sample number(s): 7132364-7132367 UNSPK: P129596								
6a Perchlorate (Method 6850)	102	99	80-120	2	20				
Batch number: 132050017A	Sample number(s): 7132364 UNSPK: P132365								
PCB-1016	94	97	16-146	4	50				
PCB-1260	97	97	40-134	0	50				
Batch number: 132060023A	Sample number(s): 7132364-7132369,7132371-7132375 UNSPK: 7132365								
PCB-1016	93	93	16-146	1	50				
PCB-1260	93	94	40-134	2	50				
Batch number: 132050012A	Sample number(s): 7132364-7132369,7132371-7132375 UNSPK: 7132364								
EFH (C12-C14)	97	102	49-123	5	20				
EFH (C15-C20)	154*	203*	49-123	28*	20				
EFH (C21-C30)	135*	258*	49-123	32*	20				
EFH (C30-C40)	182 (2)	449 (2)	49-123	36*	20				
EFH (C8-C11)	94	111	49-123	17	20				
Batch number: 132030637003	Sample number(s): 7132364-7132369,7132371-7132375 UNSPK: P125061 BKG: P125061								
Aluminum	688 (2)	510 (2)	75-125	2	20	15,500	15,500	0	20
Antimony	42*	45*	75-125	6	20	3.81 U	4.00 U	0 (1)	20
Arsenic	88	92	75-125	3	20	7.87	8.22	4 (1)	20
Barium	95	91	75-125	3	20	82.6	75.3	9	20
Beryllium	100	98	75-125	2	20	0.624 J	0.626 J	0 (1)	20
Boron	95	94	75-125	1	20	0.888 J	10.0 U	200* (1)	20
Cadmium	92	90	75-125	2	20	0.501 J	0.521 J	4 (1)	20
Calcium	-1114 (2)	-643 (2)	75-125	28*	20	9,960	7,540	28*	20
Chromium	104	66*	75-125	18	20	26.3	26.4	0	20
Cobalt	93	89	75-125	4	20	6.24	6.60	6	20
Copper	95	87	75-125	6	20	10.0	10.9	9	20
Iron	-1653 (2)	-2598 (2)	75-125	4	20	24,900	25,100	1	20
Lead	82	84	75-125	2	20	6.36	6.15	3 (1)	20
Lithium	99	94	75-125	4	20	22.2	23.0	4	20
Magnesium	76 (2)	-413 (2)	75-125	18	20	5,480	5,500	0	20
Manganese	390 (2)	107 (2)	75-125	37*	20	253	264	5	20
Molybdenum	91	90	75-125	1	20	0.522 J	0.397 J	27* (1)	20
Nickel	99	85	75-125	12	20	13.2	13.5	3	20
Phosphorus	21 (2)	-53 (2)	75-125	13	20	584	569	2	20
Potassium	138*	115	75-125	6	20	2,350	2,420	3	20
Sodium	93	87	75-125	4	20	385	381	1 (1)	20
Tin	84	83	75-125	0	20	2.85 J	3.07 J	7 (1)	20
Titanium	325 (2)	151 (2)	75-125	10	20	1,420	1,440	2	20
Vanadium	98	90	75-125	4	20	47.1	47.7	1	20
Zinc	90	62*	75-125	14	20	62.8	64.4	3	20

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Quality Control Summary

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Reported: 07/31/13 at 11:21 AM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Zirconium	97	96	75-125	1	20	3.70	J	4.59	J	21* (1)	20
Batch number: 132030637003A	Sample number(s): 7132364-7132369,7132371-7132375 UNSPK: P125061 BKG: P125061										
Silver	100	105	75-125	4	20	0.0265	J	0.0276	J	4 (1)	20
Strontium	-40 (2)	-16 (2)	75-125	5	20	36.0		31.3		14	20
Thallium	103	75	75-125	15	20	0.388		0.418		7 (1)	20
Batch number: 132030637003B	Sample number(s): 7132364-7132369,7132371-7132375 UNSPK: P125061 BKG: P125061										
Selenium	97	99	75-125	2	20	0.381	U	0.400	U	0 (1)	20
Batch number: 132050638001	Sample number(s): 7132364-7132369,7132371-7132375 UNSPK: 7132375 BKG: 7132375										
3a Mercury 7471A	112	111	65-135	2	20	0.0123	J	0.0164	U	200* (1)	20
Batch number: 13203243201A	Sample number(s): 7132364-7132367 UNSPK: P129596 BKG: P129596										
2a Chromium VI by EPA 7199	100		75-125			1.3		0.16	J	157* (1)	20
Batch number: 13200039401A	Sample number(s): 7132364-7132369,7132371-7132373 BKG: 7132364										
15a pH by 9045D						7.60		7.64		1	3
Batch number: 13200039401B	Sample number(s): 7132374-7132375 BKG: 7132374										
15a pH by 9045D						7.54		7.57		0	3
Batch number: 13206162401A	Sample number(s): 7132364-7132366,7132368-7132369,7132371-7132375 BKG: P132367										
14a Moisture Content by 160.3						8.7		6.6		27*	20
Batch number: 13207162401A	Sample number(s): 7132367 BKG: 7132367										
14a Moisture Content by 160.3						5.0		4.8		5	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 12a Volatile Organics EPA8260B
Batch number: B132052AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7132365	102	107	97	96
7132367	102	107	98	95
Blank	98	101	99	93
LCS	101	112	100	100
MS	101	105	101	97
MSD	100	105	102	97
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 12b Volatile Organics EPA8260B
Batch number: Y132041AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene

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Quality Control Summary

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Reported: 07/31/13 at 11:21 AM

Surrogate Quality Control

7132370	109	105	96	93
Blank	106	102	97	96
LCS	105	104	98	103
LCSD	105	104	100	103
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13203SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7132364	72	76	85
7132365	84	90	95
7132366	81	86	95
7132367	82	90	91
7132368	84	92	101
7132369	82	91	96
7132371	91	96	106
7132372	89	97	106
7132373	90	98	105
7132374	91	97	106
7132375	88	95	101
Blank	76	79	87
LCS	90	96	105
MS	91	97	106
MSD	89	97	104
Limits:	54-129	61-134	55-129

Analysis Name: 8a SVOCs by EPA 8270D
Batch number: 13203SLE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7132364	97	107	102	95	99	107
7132365	87	93	101	87	91	101
7132366	77	84	78	79	82	90
7132367	88	95	101	91	95	107
Blank	96	109	116	104	103	118
LCS	107	115	108	100	106	115
LCSD	89	101	114			
MS	93	99	98	93	101	110
MSD	93	98	97	93	100	106
Limits:	25-120	25-130	35-130	40-130	45-130	45-130

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13203A16A

	Trifluorotoluene-F
7132365	71
7132367	70
7132369	68
7132372	69
7132375	63

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405341
Reported: 07/31/13 at 11:21 AM

Surrogate Quality Control

Blank	77	
LCS	76	
MS	70	
MSD	70	
Limits:	61-122	

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13204A20A

	Trifluorotoluene-F
7132370	86
Blank	87
LCS	118
LCSD	118
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132050017A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7132364	94	88
Blank	99	100
LCS	101	99
MS	99	102
MSD	101	100
Limits:	45-120	45-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132060023A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7132364	101	96
7132365	96	92
7132366	92	85
7132367	98	94
7132368	88	80
7132369	96	88
7132371	96	79
7132372	98	89
7132373	92	87
7132374	93	88
7132375	97	91
Blank	101	95
LCS	106	100
LCSD	105	101
MS	99	100
MSD	100	95
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132050012A

	Chlorobenzene	Orthoterphenyl

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405341
Reported: 07/31/13 at 11:21 AM

Surrogate Quality Control

7132364	86	90
7132365	94	98
7132366	87	91
7132367	89	94
7132368	92	97
7132369	90	96
7132371	84	86
7132372	95	100
7132373	89	91
7132374	88	92
7132375	85	89
Blank	89	93
LCS	93	98
MS	89	93
MSD	97	103
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13207001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7132364	71	79	79	80	81	90
7132365	80	83	77	82	81	96
7132366	72	75	72	76	74	83
7132367	84	84	71	75	76	84
7132368	60	63	55	61	58	67
7132369	74	73	68	74	69	80
7132371	77	72	67	67	65	93
7132372	86	78	77	85	79	92
7132373	78	75	69	78	73	80
7132374	82	83	68	77	72	86
7132375	82	72	69	75	70	73
Blank	93	107	91	100	98	112
OPR	79	88	86	95	92	108
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7132364	89	81	82	72	73	74
7132365	98	80	71	81	82	84
7132366	82	75	71	72	71	76
7132367	91	75	72	82	76	79
7132368	69	56	48	63	58	59
7132369	89	61	54	74	74	76
7132371	82	78	73	75	68	74
7132372	103	65	61	80	88	89
7132373	99	57	56	78	77	81
7132374	109	59	42	84	77	81
7132375	91	62	49	77	74	74
Blank	129	97	89	100	95	100
OPR	122	97	85	82	87	93
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405341
Reported: 07/31/13 at 11:21 AM

Surrogate Quality Control

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7132364	75	79	87	73	78
7132365	85	85	81	75	87
7132366	75	76	78	73	78
7132367	79	80	83	78	86
7132368	62	64	64	57	64
7132369	77	74	73	69	80
7132371	73	82	89	71	78
7132372	87	86	87	77	83
7132373	82	79	85	73	83
7132374	81	81	73	75	97
7132375	76	74	63	77	78
Blank	102	109	108	93	112
OPR	94	103	92	84	93
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Cap# 1405341 Sample# 71323364-75

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/18/2013
CarrierName: FedEx
AirbillNo: 796265347380

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130718-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-506-SA8-SB-0.0-0.5	7/18/13 07:35	SO	None	2 - SS-Sleeve	10 day	X	X			X		X		X	X		X								X											
SL-506-SA8-SB-0.0-0.5	7/18/13 07:35	SO	None	2 - 4 oz glass	10 day														X	X																
SL-506-SA8-SB-4.0-5.0	7/18/13 07:50	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X		X	X							X											
SL-506-SA8-SB-4.0-5.0	7/18/13 07:50	SO	None	1 - 4 oz glass	10 day															X																
SL-509-SA8-SB-0.0-0.5	7/18/13 08:50	SO	None	2 - SS-Sleeve	10 day	X	X			X		X		X	X		X								X											
SL-509-SA8-SB-0.0-0.5	7/18/13 08:50	SO	None	2 - 4 oz glass	10 day														X	X																
SL-509-SA8-SB-4.0-5.0	7/18/13 09:00	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X		X	X							X											
SL-509-SA8-SB-4.0-5.0	7/18/13 09:00	SO	None	1 - 4 oz glass	10 day															X																
SL-601-SA8-SB-0.0-0.5	7/18/13 10:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-601-SA8-SB-0.0-0.5	7/18/13 10:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-601-SA8-SB-4.0-5.0	7/18/13 10:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X							X											

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shelly Myers	07/18/2013	1600									
									[illegible]	7/19/13	0910

COC Rev 2

COC: 20130718-01, Page 1 of 1

1 of 1

acct# 13013 Gp# 1405341 sample# 7132364-75

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/18/2013
CarrierName: FedEx
AirbillNo: 796265347380

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130718-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-506-SA8-SB-4.0-5.0	7/18/13 07:50	SO	None	5 - Encore	10 day																	X		X												
SL-509-SA8-SB-4.0-5.0	7/18/13 09:00	SO	None	5 - Encore	10 day																	X		X												
SL-601-SA8-SB-4.0-5.0	7/18/13 10:30	SO	None	2 - Encore	10 day																			X												
TB-071813	7/18/13 08:00	WQ	HCl	6 - 40 mL Vial	10 day																	X		X												
SL-519-SA8-SB-0.0-0.5	7/18/13 13:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-519-SA8-SB-0.0-0.5	7/18/13 13:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-519-SA8-SB-3.5-4.5	7/18/13 13:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X							X											
SL-519-SA8-SB-3.5-4.5	7/18/13 13:40	SO	None	2 - Encore	10 day																			X												
SL-520-SA8-SB-0.0-0.5	7/18/13 13:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-520-SA8-SB-0.0-0.5	7/18/13 13:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-531-SA8-SB-0.0-0.5	7/18/13 14:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-531-SA8-SB-0.0-0.5	7/18/13 14:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-531-SA8-SB-4.0-5.0	7/18/13 14:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X							X											
SL-531-SA8-SB-4.0-5.0	7/18/13 14:30	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Hype	07/18/2013	1600									
									Patty	7/19/13	0910

COC Rev 2

COC 20130718-02, Page 1 of 1

1 of 1

eurofins | Lancaster Laboratories

C# 1405341

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 7/19/13

Time of Receipt: 0910

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.5	TB	WI	Y	B	
2	↓	2.1	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems: ⑨ PE 7/19/13

~~Rec'd only 1 4oz glass Jar for SL-506-SAS-SB 0.0-0.5~~

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 7/19/13 1041

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH071

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 02, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/20/2013
Group Number: 1405522
SDG: PH071
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-516-SA8-SB-0.0-0.5 Soil	7133304
SL-521-SA8-SB-0.0-0.5 Soil	7133305
SL-517-SA8-SB-0.0-0.5 Soil	7133306
SL-517-SA8-SB-3.0-4.0 Soil	7133307
SL-518-SA8-SB-0.0-0.5 Soil	7133308
SL-518-SA8-SB-4.0-5.0 Soil	7133309
SL-532-SA8-SB-0.0-0.5 Soil	7133310
SL-532-SA8-SB-6.5-7.5 Soil	7133311
TB-071913 Water	7133312
SL-606-SA8-SB-0.0-0.5 Soil	7133313
SL-606-SA8-SB-4.0-5.0 Soil	7133314

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-516-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133304
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51600 SDG#: PH071-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.5	J	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	0.68	J	1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	18	6.0	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	7.0		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	35		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-516-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133304
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51600 SDG#: PH071-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,700		39.4	7.11	1
06944	Antimony	7440-36-0	3.94	U	3.94	0.730	1
06935	Arsenic	7440-38-2	11.8		3.94	0.690	1
06946	Barium	7440-39-3	97.3		0.986	0.0325	1
06947	Beryllium	7440-41-7	0.575	J	0.986	0.0661	1
07914	Boron	7440-42-8	9.86	U	9.86	0.828	1
06949	Cadmium	7440-43-9	0.131	J	0.986	0.0750	1
01650	Calcium	7440-70-2	2,690		19.7	3.29	1
06951	Chromium	7440-47-3	18.0		2.96	0.158	1
06952	Cobalt	7440-48-4	5.32		0.986	0.0976	1
06953	Copper	7440-50-8	13.5		1.97	0.286	1
01654	Iron	7439-89-6	22,800		39.4	3.57	1
06955	Lead	7439-92-1	9.98		2.96	0.493	1
01656	Lithium	7439-93-2	27.0		3.9	0.34	1
01657	Magnesium	7439-95-4	4,590		9.86	1.65	1
06958	Manganese	7439-96-5	327		0.986	0.0819	1
06960	Molybdenum	7439-98-7	0.479	J	1.97	0.168	1
06961	Nickel	7440-02-0	12.3		1.97	0.128	1
10145	Phosphorus	7723-14-0	548		9.86	2.85	1
01662	Potassium	7440-09-7	3,760		98.6	8.22	1
01667	Sodium	7440-23-5	69.9	J	98.6	16.5	1
06969	Tin	7440-31-5	3.00	J	9.86	0.217	1
06970	Titanium	7440-32-6	1,200		0.986	0.168	1
06971	Vanadium	7440-62-2	33.7		0.986	0.128	1
06972	Zinc	7440-66-6	55.7		3.94	0.197	1
10146	Zirconium	7440-67-7	1.03	J	4.93	0.828	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.394	U	0.394	0.0986	2
06142	Silver	7440-22-4	0.0410	J	0.197	0.0256	2
06144	Strontium	7440-24-6	21.1		0.394	0.0671	2
06145	Thallium	7440-28-0	0.271		0.197	0.0296	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0141	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	5.91		0.0100	0.0100	1
	The pH was measured in water at 21.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.59		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-516-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133304
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51600 SDG#: PH071-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.981	U	0.981	0.0302	1
11031	12378-PeCDD	40321-76-4	4.91	U	4.91	0.0483	1
11031	123478-HxCDD	39227-28-6	4.91	U	4.91	0.0395	1
11031	123678-HxCDD	57653-85-7	0.211	JB	4.91	0.0421	1
11031	123789-HxCDD	19408-74-3	0.312	JB	4.91	0.0392	1
11031	1234678-HpCDD	35822-46-9	0.966	JB	4.91	0.0563	1
11031	OCDD	3268-87-9	5.46	JB	9.81	0.0325	1
11031	2378-TCDF	51207-31-9	0.981	U	0.981	0.0476	1
11031	12378-PeCDF	57117-41-6	0.155	JBQ	4.91	0.0282	1
11031	23478-PeCDF	57117-31-4	0.0949	JBQ	4.91	0.0312	1
11031	123478-HxCDF	70648-26-9	0.0588	JB	4.91	0.0225	1
11031	123678-HxCDF	57117-44-9	0.0418	JBQ	4.91	0.0207	1
11031	123789-HxCDF	72918-21-9	0.132	JBQ	4.91	0.0281	1
11031	234678-HxCDF	60851-34-5	0.0492	JBQ	4.91	0.0221	1
11031	1234678-HpCDF	67562-39-4	0.241	JB	4.91	0.0144	1
11031	1234789-HpCDF	55673-89-7	4.91	U	4.91	0.0330	1
11031	OCDF	39001-02-0	0.462	JQ	9.81	0.0482	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0718				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-516-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133304
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51600 SDG#: PH071-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-516-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133304
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51600 SDG#: PH071-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 05:47	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 08:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 06:14	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/30/2013 08:27	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132030637002	07/30/2013 19:46	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132030637002	07/28/2013 13:46	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132030637002B	07/30/2013 09:13	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637002A	07/30/2013 09:13	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637002A	07/30/2013 09:13	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637002A	07/30/2013 09:13	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-516-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133304
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51600 SDG#: PH071-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132030638003	07/23/2013 10:29	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637002	07/22/2013 23:17	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638003	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13201039401A	07/20/2013 16:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401A	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133305
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 07:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH071-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	0.88	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	2.5		1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.1	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	18	6.1	1
12969	Fluoranthene	206-44-0	0.95	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.78	J	1.7	0.67	1
12969	Pyrene	129-00-0	0.76	J	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	13		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	45		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133305
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 07:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH071-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,900		38.9	7.01	1
06944	Antimony	7440-36-0	3.89	U	3.89	0.719	1
06935	Arsenic	7440-38-2	5.63		3.89	0.681	1
06946	Barium	7440-39-3	99.3		0.972	0.0321	1
06947	Beryllium	7440-41-7	0.582	J	0.972	0.0651	1
07914	Boron	7440-42-8	9.72	U	9.72	0.817	1
06949	Cadmium	7440-43-9	0.207	J	0.972	0.0739	1
01650	Calcium	7440-70-2	2,300		19.4	3.25	1
06951	Chromium	7440-47-3	16.1		2.92	0.156	1
06952	Cobalt	7440-48-4	5.25		0.972	0.0963	1
06953	Copper	7440-50-8	12.8		1.94	0.282	1
01654	Iron	7439-89-6	21,900		38.9	3.52	1
06955	Lead	7439-92-1	10.9		2.92	0.486	1
01656	Lithium	7439-93-2	25.2		3.9	0.33	1
01657	Magnesium	7439-95-4	4,080		9.72	1.62	1
06958	Manganese	7439-96-5	355		0.972	0.0807	1
06960	Molybdenum	7439-98-7	0.454	J	1.94	0.165	1
06961	Nickel	7440-02-0	10.5		1.94	0.126	1
10145	Phosphorus	7723-14-0	479		9.72	2.81	1
01662	Potassium	7440-09-7	3,570		97.2	8.11	1
01667	Sodium	7440-23-5	92.0	J	97.2	16.2	1
06969	Tin	7440-31-5	2.90	J	9.72	0.214	1
06970	Titanium	7440-32-6	1,170		0.972	0.165	1
06971	Vanadium	7440-62-2	32.0		0.972	0.126	1
06972	Zinc	7440-66-6	61.8		3.89	0.194	1
10146	Zirconium	7440-67-7	4.86	U	4.86	0.817	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.227	J	0.389	0.0972	2
06142	Silver	7440-22-4	0.0410	J	0.194	0.0253	2
06144	Strontium	7440-24-6	24.0		0.389	0.0661	2
06145	Thallium	7440-28-0	0.272		0.194	0.0292	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0152	J	0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	5.74		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133305
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 07:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH071-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.964	U	0.964	0.0433	1
11031	12378-PeCDD	40321-76-4	0.297	J	4.82	0.0657	1
11031	123478-HxCDD	39227-28-6	0.0760	JQ	4.82	0.0437	1
11031	123678-HxCDD	57653-85-7	1.81	JB	4.82	0.0464	1
11031	123789-HxCDD	19408-74-3	2.71	JB	4.82	0.0454	1
11031	1234678-HpCDD	35822-46-9	1.72	JB	4.82	0.0518	1
11031	OCDD	3268-87-9	15.3	B	9.64	0.0332	1
11031	2378-TCDF	51207-31-9	0.120	J	0.964	0.0536	1
11031	12378-PeCDF	57117-41-6	0.298	JB	4.82	0.0326	1
11031	23478-PeCDF	57117-31-4	0.109	JB	4.82	0.0352	1
11031	123478-HxCDF	70648-26-9	0.110	JBQ	4.82	0.0267	1
11031	123678-HxCDF	57117-44-9	0.162	JBQ	4.82	0.0255	1
11031	123789-HxCDF	72918-21-9	0.623	JB	4.82	0.0276	1
11031	234678-HxCDF	60851-34-5	0.105	JB	4.82	0.0261	1
11031	1234678-HpCDF	67562-39-4	0.443	JB	4.82	0.0216	1
11031	1234789-HpCDF	55673-89-7	0.0580	JBQ	4.82	0.0355	1
11031	OCDF	39001-02-0	0.879	J	9.64	0.0357	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.901				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133305
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 07:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH071-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133305
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 07:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH071-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 07:23	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 08:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 07:36	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/30/2013 09:24	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132030637002	07/30/2013 20:08	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132030637002	07/28/2013 14:09	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132030637002B	07/30/2013 09:27	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637002A	07/30/2013 09:27	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637002A	07/30/2013 09:27	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637002A	07/30/2013 09:27	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133305
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 07:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52100 SDG#: PH071-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132030638003	07/23/2013 10:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637002	07/22/2013 23:17	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638003	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13201039401A	07/20/2013 16:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401A	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133306
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51700 SDG#: PH071-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	0.73	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.9		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.2		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	15	J	18	6.1	1
12969	Fluoranthene	206-44-0	0.75	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	0.78	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.88	J	1.7	0.68	1
12969	Pyrene	129-00-0	0.89	J	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	34		17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	9.4		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	34		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133306
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51700 SDG#: PH071-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,200		40.2	7.25	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.744	1
06935	Arsenic	7440-38-2	5.99		4.02	0.704	1
06946	Barium	7440-39-3	97.7		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.625	J	1.01	0.0674	1
07914	Boron	7440-42-8	10.1	U	10.1	0.845	1
06949	Cadmium	7440-43-9	0.179	J	1.01	0.0764	1
01650	Calcium	7440-70-2	5,230		20.1	3.36	1
06951	Chromium	7440-47-3	19.6		3.02	0.161	1
06952	Cobalt	7440-48-4	6.23		1.01	0.0995	1
06953	Copper	7440-50-8	16.6		2.01	0.292	1
01654	Iron	7439-89-6	23,200		40.2	3.64	1
06955	Lead	7439-92-1	8.68		3.02	0.503	1
01656	Lithium	7439-93-2	21.6		4.0	0.34	1
01657	Magnesium	7439-95-4	4,460		10.1	1.68	1
06958	Manganese	7439-96-5	357		1.01	0.0835	1
06960	Molybdenum	7439-98-7	2.01	U	2.01	0.171	1
06961	Nickel	7440-02-0	12.8		2.01	0.131	1
10145	Phosphorus	7723-14-0	534		10.1	2.91	1
01662	Potassium	7440-09-7	4,250		101	8.39	1
01667	Sodium	7440-23-5	69.3	J	101	16.8	1
06969	Tin	7440-31-5	2.77	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,130		1.01	0.171	1
06971	Vanadium	7440-62-2	36.2		1.01	0.131	1
06972	Zinc	7440-66-6	59.7		4.02	0.201	1
10146	Zirconium	7440-67-7	1.18	J	5.03	0.845	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.156	J	0.406	0.102	2
06142	Silver	7440-22-4	0.0389	J	0.203	0.0264	2
06144	Strontium	7440-24-6	27.4		0.406	0.0691	2
06145	Thallium	7440-28-0	0.339		0.203	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.347		0.0167	0.010	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.17	J	0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.67		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133306
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51700 SDG#: PH071-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133306
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51700 SDG#: PH071-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0384	1
11031	12378-PeCDD	40321-76-4	5.02	U	5.02	0.0607	1
11031	123478-HxCDD	39227-28-6	5.02	U	5.02	0.0331	1
11031	123678-HxCDD	57653-85-7	0.121	JB	5.02	0.0353	1
11031	123789-HxCDD	19408-74-3	0.183	JBQ	5.02	0.0346	1
11031	1234678-HpCDD	35822-46-9	1.29	JB	5.02	0.0537	1
11031	OCDD	3268-87-9	9.54	JB	10.0	0.0424	1
11031	2378-TCDF	51207-31-9	0.611	JQ	1.00	0.0845	1
11031	12378-PeCDF	57117-41-6	2.59	JB	5.02	0.0455	1
11031	23478-PeCDF	57117-31-4	0.366	JB	5.02	0.0486	1
11031	123478-HxCDF	70648-26-9	0.179	JBQ	5.02	0.0265	1
11031	123678-HxCDF	57117-44-9	0.234	JB	5.02	0.0251	1
11031	123789-HxCDF	72918-21-9	0.0635	JBQ	5.02	0.0329	1
11031	234678-HxCDF	60851-34-5	0.167	JB	5.02	0.0257	1
11031	1234678-HpCDF	67562-39-4	0.628	JB	5.02	0.0207	1
11031	1234789-HpCDF	55673-89-7	0.0901	JBQ	5.02	0.0398	1
11031	OCDF	39001-02-0	0.559	J	10.0	0.0469	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.262				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	65	26 - 123
13C12-234678-HxCDF	62	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133306
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51700 SDG#: PH071-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133306
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51700 SDG#: PH071-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 07:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 09:18	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 07:57	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/30/2013 10:21	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132030637002	07/30/2013 20:11	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132030637002	07/28/2013 14:13	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132030637002B	07/30/2013 09:37	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637002A	07/30/2013 09:37	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637002A	07/30/2013 09:37	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637002A	07/30/2013 09:37	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133306
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51700 SDG#: PH071-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132030638003	07/23/2013 10:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637002	07/22/2013 23:17	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638003	07/23/2013 04:20	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13203243201A	07/24/2013 11:32	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13201039401A	07/20/2013 16:50	Clayton C Litchmore	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401A	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133307
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:40 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51730 SDG#: PH071-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.51
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133307
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:40 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51730 SDG#: PH071-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,200		41.3	7.44	1
06944	Antimony	7440-36-0	4.13	U	4.13	0.763	1
06935	Arsenic	7440-38-2	4.78		4.13	0.722	1
06946	Barium	7440-39-3	97.8		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.640	J	1.03	0.0691	1
07914	Boron	7440-42-8	10.3	U	10.3	0.866	1
06949	Cadmium	7440-43-9	1.03	U	1.03	0.0784	1
01650	Calcium	7440-70-2	2,220		20.6	3.44	1
06951	Chromium	7440-47-3	10.9		3.09	0.165	1
06952	Cobalt	7440-48-4	7.39		1.03	0.102	1
06953	Copper	7440-50-8	11.5		2.06	0.299	1
01654	Iron	7439-89-6	27,300		206	18.7	5
06955	Lead	7439-92-1	6.19		3.09	0.516	1
01656	Lithium	7439-93-2	32.1		4.1	0.35	1
01657	Magnesium	7439-95-4	5,160		10.3	1.72	1
06958	Manganese	7439-96-5	392		1.03	0.0856	1
06960	Molybdenum	7439-98-7	0.202	J	2.06	0.175	1
06961	Nickel	7440-02-0	6.16		2.06	0.134	1
10145	Phosphorus	7723-14-0	306		10.3	2.98	1
01662	Potassium	7440-09-7	4,370		103	8.60	1
01667	Sodium	7440-23-5	102	J	103	17.2	1
06969	Tin	7440-31-5	3.84	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,690		1.03	0.175	1
06971	Vanadium	7440-62-2	32.7		1.03	0.134	1
06972	Zinc	7440-66-6	76.0		4.13	0.206	1
10146	Zirconium	7440-67-7	5.16	U	5.16	0.866	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.413	U	0.413	0.103	2
06142	Silver	7440-22-4	0.206	U	0.206	0.0268	2
06144	Strontium	7440-24-6	15.3		0.413	0.0701	2
06145	Thallium	7440-28-0	0.412		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0102	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.42	U	0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.77		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133307
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:40 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51730 SDG#: PH071-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	4.0	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133307
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:40 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51730 SDG#: PH071-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0307	1
11031	12378-PeCDD	40321-76-4	0.0383	JQ	5.08	0.0335	1
11031	123478-HxCDD	39227-28-6	5.08	U	5.08	0.0178	1
11031	123678-HxCDD	57653-85-7	5.08	U	5.08	0.0199	1
11031	123789-HxCDD	19408-74-3	5.08	U	5.08	0.0195	1
11031	1234678-HpCDD	35822-46-9	0.0278	JBQ	5.08	0.0219	1
11031	OCDD	3268-87-9	0.102	JBQ	10.2	0.0259	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0238	1
11031	12378-PeCDF	57117-41-6	0.0319	JBQ	5.08	0.0177	1
11031	23478-PeCDF	57117-31-4	5.08	U	5.08	0.0184	1
11031	123478-HxCDF	70648-26-9	0.0225	JBQ	5.08	0.0100	1
11031	123678-HxCDF	57117-44-9	0.0155	JBQ	5.08	0.0101	1
11031	123789-HxCDF	72918-21-9	0.0197	JBQ	5.08	0.0101	1
11031	234678-HxCDF	60851-34-5	0.0123	JBQ	5.08	0.0103	1
11031	1234678-HpCDF	67562-39-4	0.0253	JBQ	5.08	0.00708	1
11031	1234789-HpCDF	55673-89-7	0.0141	JBQ	5.08	0.0141	1
11031	OCDF	39001-02-0	0.0748	JQ	10.2	0.0329	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	U				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	59	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	56	26 - 138
13C12-OCDF	51	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133307
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:40 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51730 SDG#: PH071-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133307
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:40 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51730 SDG#: PH071-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 08:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 08:51	Laura M Krieger	25.51
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320131783	07/20/2013 14:45	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320131783	07/20/2013 14:45	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 09:36	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 01:02	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/30/2013 11:17	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637002	07/30/2013 20:48	John P Hook	5
06955	Lead	SW-846 6010C	1	132030637002	07/30/2013 20:22	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132030637002	07/28/2013 14:24	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-517-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133307
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:40 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51730 SDG#: PH071-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132030637002B	07/30/2013 09:39	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637002A	07/30/2013 09:39	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637002A	07/30/2013 09:39	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637002A	07/30/2013 09:39	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638003	07/23/2013 10:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637002	07/22/2013 23:17	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638003	07/23/2013 04:20	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13203243201A	07/24/2013 11:39	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13201039401A	07/20/2013 16:50	Clayton C Litchmore	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401A	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133308
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH071-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133308
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH071-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,000		40.6	7.31	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.751	1
06935	Arsenic	7440-38-2	7.38		4.06	0.710	1
06946	Barium	7440-39-3	95.7		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.579	J	1.01	0.0680	1
07914	Boron	7440-42-8	10.1	U	10.1	0.852	1
06949	Cadmium	7440-43-9	0.121	J	1.01	0.0771	1
01650	Calcium	7440-70-2	28,100		20.3	3.39	1
06951	Chromium	7440-47-3	20.3		3.04	0.162	1
06952	Cobalt	7440-48-4	6.12		1.01	0.100	1
06953	Copper	7440-50-8	13.7		2.03	0.294	1
01654	Iron	7439-89-6	23,200		40.6	3.67	1
06955	Lead	7439-92-1	7.27		3.04	0.507	1
01656	Lithium	7439-93-2	23.1		4.1	0.34	1
01657	Magnesium	7439-95-4	4,210		10.1	1.69	1
06958	Manganese	7439-96-5	322		1.01	0.0842	1
06960	Molybdenum	7439-98-7	0.192	J	2.03	0.172	1
06961	Nickel	7440-02-0	12.5		2.03	0.132	1
10145	Phosphorus	7723-14-0	304		10.1	2.93	1
01662	Potassium	7440-09-7	3,040		101	8.46	1
01667	Sodium	7440-23-5	102		101	16.9	1
06969	Tin	7440-31-5	2.80	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,080		1.01	0.172	1
06971	Vanadium	7440-62-2	39.0		1.01	0.132	1
06972	Zinc	7440-66-6	51.7		4.06	0.203	1
10146	Zirconium	7440-67-7	5.07	U	5.07	0.852	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.406	U	0.406	0.101	2
06142	Silver	7440-22-4	0.0561	J	0.203	0.0264	2
06144	Strontium	7440-24-6	31.9		0.406	0.0690	2
06145	Thallium	7440-28-0	0.333		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0170	U	0.0170	0.0102	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.41	U	0.41	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.11		0.0100	0.0100	1
	The pH was measured in water at 20.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133308
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH071-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133308
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH071-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.0317	1
11031	12378-PeCDD	40321-76-4	5.05	U	5.05	0.0397	1
11031	123478-HxCDD	39227-28-6	5.05	U	5.05	0.0236	1
11031	123678-HxCDD	57653-85-7	5.05	U	5.05	0.0260	1
11031	123789-HxCDD	19408-74-3	0.0640	JBQ	5.05	0.0249	1
11031	1234678-HpCDD	35822-46-9	0.0731	JBQ	5.05	0.0285	1
11031	OCDD	3268-87-9	0.648	JBQ	10.1	0.0360	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.0306	1
11031	12378-PeCDF	57117-41-6	5.05	U	5.05	0.0235	1
11031	23478-PeCDF	57117-31-4	0.0387	JBQ	5.05	0.0234	1
11031	123478-HxCDF	70648-26-9	0.0248	JBQ	5.05	0.0123	1
11031	123678-HxCDF	57117-44-9	0.0157	JBQ	5.05	0.0116	1
11031	123789-HxCDF	72918-21-9	0.0904	JBQ	5.05	0.0129	1
11031	234678-HxCDF	60851-34-5	0.0222	JBQ	5.05	0.0106	1
11031	1234678-HpCDF	67562-39-4	0.0230	JBQ	5.05	0.0100	1
11031	1234789-HpCDF	55673-89-7	0.0226	JB	5.05	0.0164	1
11031	OCDF	39001-02-0	0.0879	JQ	10.1	0.0294	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.000205				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133308
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH071-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133308
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH071-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 08:58	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 09:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 01:23	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/30/2013 12:14	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132030637002	07/30/2013 20:26	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132030637002	07/28/2013 14:28	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132030637002B	07/30/2013 09:42	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637002A	07/30/2013 09:42	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637002A	07/30/2013 09:42	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637002A	07/30/2013 09:42	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133308
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH071-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132030638003	07/23/2013 10:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637002	07/22/2013 23:17	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638003	07/23/2013 04:20	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13203243201A	07/24/2013 12:00	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13201039401A	07/20/2013 16:50	Clayton C Litchmore	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401A	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133309
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH071-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.61
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133309
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH071-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,300		40.8	7.36	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.756	1
06935	Arsenic	7440-38-2	6.91		4.08	0.715	1
06946	Barium	7440-39-3	83.9		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.599	J	1.02	0.0684	1
07914	Boron	7440-42-8	10.2	U	10.2	0.858	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0776	1
01650	Calcium	7440-70-2	6,980		20.4	3.41	1
06951	Chromium	7440-47-3	17.1		3.06	0.163	1
06952	Cobalt	7440-48-4	5.59		1.02	0.101	1
06953	Copper	7440-50-8	11.1		2.04	0.296	1
01654	Iron	7439-89-6	24,500		40.8	3.70	1
06955	Lead	7439-92-1	6.84		3.06	0.511	1
01656	Lithium	7439-93-2	23.7		4.1	0.35	1
01657	Magnesium	7439-95-4	3,890		10.2	1.71	1
06958	Manganese	7439-96-5	356		1.02	0.0848	1
06960	Molybdenum	7439-98-7	2.04	U	2.04	0.174	1
06961	Nickel	7440-02-0	11.4		2.04	0.133	1
10145	Phosphorus	7723-14-0	291		10.2	2.95	1
01662	Potassium	7440-09-7	2,230		102	8.52	1
01667	Sodium	7440-23-5	103		102	17.1	1
06969	Tin	7440-31-5	3.02	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,090		1.02	0.174	1
06971	Vanadium	7440-62-2	36.4		1.02	0.133	1
06972	Zinc	7440-66-6	45.0		4.08	0.204	1
10146	Zirconium	7440-67-7	1.23	J	5.11	0.858	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.408	U	0.408	0.102	2
06142	Silver	7440-22-4	0.0347	J	0.204	0.0266	2
06144	Strontium	7440-24-6	21.8		0.408	0.0694	2
06145	Thallium	7440-28-0	0.240		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0117	J	0.0168	0.0101	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.43	U	0.43	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.94		0.0100	0.0100	1
	The pH was measured in water at 21.3 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133309
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH071-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	4.0	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133309
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH071-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0255	JQ	1.01	0.0101	1
11031	12378-PeCDD	40321-76-4	0.0479	JQ	5.06	0.0174	1
11031	123478-HxCDD	39227-28-6	0.0194	JQ	5.06	0.0114	1
11031	123678-HxCDD	57653-85-7	0.0280	JB	5.06	0.0118	1
11031	123789-HxCDD	19408-74-3	0.0394	JB	5.06	0.0117	1
11031	1234678-HpCDD	35822-46-9	0.137	JB	5.06	0.0128	1
11031	OCDD	3268-87-9	0.848	JB	10.1	0.0152	1
11031	2378-TCDF	51207-31-9	0.0204	JQ	1.01	0.0100	1
11031	12378-PeCDF	57117-41-6	0.102	JBQ	5.06	0.00740	1
11031	23478-PeCDF	57117-31-4	0.0448	JB	5.06	0.00688	1
11031	123478-HxCDF	70648-26-9	0.0482	JB	5.06	0.00510	1
11031	123678-HxCDF	57117-44-9	0.0334	JB	5.06	0.00521	1
11031	123789-HxCDF	72918-21-9	0.0449	JBQ	5.06	0.00594	1
11031	234678-HxCDF	60851-34-5	0.0362	JBQ	5.06	0.00490	1
11031	1234678-HpCDF	67562-39-4	0.132	JBQ	5.06	0.0315	1
11031	1234789-HpCDF	55673-89-7	0.0632	JBQ	5.06	0.0450	1
11031	OCDF	39001-02-0	0.149	J	10.1	0.0206	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0299				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	87	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	86	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133309
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH071-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133309
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH071-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 09:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 09:29	Laura M Krieger	24.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320131783	07/20/2013 14:46	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320131783	07/20/2013 14:47	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 10:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 03:28	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/31/2013 21:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132030637002	07/30/2013 20:30	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132030637002	07/28/2013 14:32	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133309
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 09:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51840 SDG#: PH071-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132030637002B	07/30/2013 09:44	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637002A	07/30/2013 09:44	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637002A	07/30/2013 09:44	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637002A	07/30/2013 09:44	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638003	07/23/2013 10:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637002	07/22/2013 23:17	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638003	07/23/2013 04:20	Annamaria Stipkovits	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13203243201A	07/24/2013 12:08	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13201039401A	07/20/2013 16:50	Clayton C Litchmore	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13203243201A	07/22/2013 20:20	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401A	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133310
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53200 SDG#: PH071-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	0.75	J	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	0.42	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	2.6	J	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	6.1		5.4	2.1	1
12952	EFH (C30-C40)	n.a.	12		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133310
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53200 SDG#: PH071-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,300		42.5	7.66	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.786	1
06935	Arsenic	7440-38-2	7.59		4.25	0.744	1
06946	Barium	7440-39-3	119		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.991	J	1.06	0.0712	1
07914	Boron	7440-42-8	10.6	U	10.6	0.892	1
06949	Cadmium	7440-43-9	1.06	U	1.06	0.0807	1
01650	Calcium	7440-70-2	6,740		21.2	3.55	1
06951	Chromium	7440-47-3	35.2		3.19	0.170	1
06952	Cobalt	7440-48-4	9.68		1.06	0.105	1
06953	Copper	7440-50-8	22.8		2.12	0.308	1
01654	Iron	7439-89-6	30,600		212	19.2	5
06955	Lead	7439-92-1	12.0		3.19	0.531	1
01656	Lithium	7439-93-2	22.5		4.2	0.36	1
01657	Magnesium	7439-95-4	6,390		10.6	1.77	1
06958	Manganese	7439-96-5	468		1.06	0.0882	1
06960	Molybdenum	7439-98-7	2.12	U	2.12	0.181	1
06961	Nickel	7440-02-0	19.7		2.12	0.138	1
10145	Phosphorus	7723-14-0	351		10.6	3.07	1
01662	Potassium	7440-09-7	4,240		106	8.86	1
01667	Sodium	7440-23-5	86.0	J	106	17.7	1
06969	Tin	7440-31-5	3.28	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,340		1.06	0.181	1
06971	Vanadium	7440-62-2	62.5		1.06	0.138	1
06972	Zinc	7440-66-6	64.5		4.25	0.212	1
10146	Zirconium	7440-67-7	2.88	J	5.31	0.892	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.217	J	0.425	0.106	2
06142	Silver	7440-22-4	0.0448	J	0.212	0.0276	2
06144	Strontium	7440-24-6	27.6		0.425	0.0722	2
06145	Thallium	7440-28-0	0.340		0.212	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0177	U	0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.54		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133310
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53200 SDG#: PH071-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.02 U	1.02	0.0289	1
11031	12378-PeCDD	40321-76-4	0.0440 JQ	5.11	0.0324	1
11031	123478-HxCDD	39227-28-6	5.11 U	5.11	0.0227	1
11031	123678-HxCDD	57653-85-7	0.0955 JBQ	5.11	0.0254	1
11031	123789-HxCDD	19408-74-3	0.116 JBQ	5.11	0.0254	1
11031	1234678-HpCDD	35822-46-9	0.0513 JBQ	5.11	0.0267	1
11031	OCDD	3268-87-9	0.558 JBQ	10.2	0.0325	1
11031	2378-TCDF	51207-31-9	1.02 U	1.02	0.0319	1
11031	12378-PeCDF	57117-41-6	0.0403 JBQ	5.11	0.0218	1
11031	23478-PeCDF	57117-31-4	5.11 U	5.11	0.0197	1
11031	123478-HxCDF	70648-26-9	0.0422 JBQ	5.11	0.0123	1
11031	123678-HxCDF	57117-44-9	5.11 U	5.11	0.0123	1
11031	123789-HxCDF	72918-21-9	0.107 JBQ	5.11	0.0139	1
11031	234678-HxCDF	60851-34-5	0.0184 JBQ	5.11	0.0115	1
11031	1234678-HpCDF	67562-39-4	0.0606 JB	5.11	0.00837	1
11031	1234789-HpCDF	55673-89-7	0.0279 JB	5.11	0.0135	1
11031	OCDF	39001-02-0	0.0752 JQ	10.2	0.0270	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.000966			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133310
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53200 SDG#: PH071-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133310
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53200 SDG#: PH071-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 10:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 10:32	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 05:11	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/30/2013 14:07	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637002	07/30/2013 20:52	John P Hook	5
06955	Lead	SW-846 6010C	1	132030637002	07/30/2013 20:33	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132030637002	07/28/2013 14:35	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132030637002B	07/30/2013 09:47	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637002A	07/30/2013 09:47	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637002A	07/30/2013 09:47	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637002A	07/30/2013 09:47	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133310
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:30 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53200 SDG#: PH071-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132030638003	07/23/2013 10:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637002	07/22/2013 23:17	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638003	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13201039401A	07/20/2013 16:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401A	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133311
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:55 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53265 SDG#: PH071-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	25.51
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133311
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:55 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53265 SDG#: PH071-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,900		44.6	8.05	1
06944	Antimony	7440-36-0	4.46	U	4.46	0.826	1
06935	Arsenic	7440-38-2	4.27	J	4.46	0.781	1
06946	Barium	7440-39-3	84.8		1.12	0.0368	1
06947	Beryllium	7440-41-7	0.485	J	1.12	0.0748	1
07914	Boron	7440-42-8	11.2	U	11.2	0.937	1
06949	Cadmium	7440-43-9	0.142	J	1.12	0.0848	1
01650	Calcium	7440-70-2	4,660		22.3	3.73	1
06951	Chromium	7440-47-3	26.1		3.35	0.179	1
06952	Cobalt	7440-48-4	7.25		1.12	0.110	1
06953	Copper	7440-50-8	16.1		2.23	0.324	1
01654	Iron	7439-89-6	25,500		44.6	4.04	1
06955	Lead	7439-92-1	4.86		3.35	0.558	1
01656	Lithium	7439-93-2	25.3		4.5	0.38	1
01657	Magnesium	7439-95-4	6,530		11.2	1.86	1
06958	Manganese	7439-96-5	360		1.12	0.0926	1
06960	Molybdenum	7439-98-7	2.23	U	2.23	0.190	1
06961	Nickel	7440-02-0	16.2		2.23	0.145	1
10145	Phosphorus	7723-14-0	473		11.2	3.23	1
01662	Potassium	7440-09-7	1,960		112	9.31	1
01667	Sodium	7440-23-5	87.5	J	112	18.6	1
06969	Tin	7440-31-5	3.44	J	11.2	0.246	1
06970	Titanium	7440-32-6	1,660		1.12	0.190	1
06971	Vanadium	7440-62-2	46.2		1.12	0.145	1
06972	Zinc	7440-66-6	60.1		4.46	0.223	1
10146	Zirconium	7440-67-7	1.37	J	5.58	0.937	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.446	U	0.446	0.112	2
06142	Silver	7440-22-4	0.223	U	0.223	0.0290	2
06144	Strontium	7440-24-6	22.2		0.446	0.0759	2
06145	Thallium	7440-28-0	0.306		0.223	0.0335	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0187	U	0.0187	0.0112	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.22		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133311
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:55 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53265 SDG#: PH071-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133311
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:55 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53265 SDG#: PH071-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0271 JQ	1.12	0.0155	1
11031	12378-PeCDD	40321-76-4	5.62 U	5.62	0.0168	1
11031	123478-HxCDD	39227-28-6	0.0356 JQ	5.62	0.0128	1
11031	123678-HxCDD	57653-85-7	5.62 U	5.62	0.0140	1
11031	123789-HxCDD	19408-74-3	0.0326 JBQ	5.62	0.0134	1
11031	1234678-HpCDD	35822-46-9	0.0924 JBQ	5.62	0.0120	1
11031	OCDD	3268-87-9	0.330 JBQ	11.2	0.0183	1
11031	2378-TCDF	51207-31-9	0.0117 JQ	1.12	0.0111	1
11031	12378-PeCDF	57117-41-6	0.0566 JBQ	5.62	0.00943	1
11031	23478-PeCDF	57117-31-4	0.0396 JBQ	5.62	0.00816	1
11031	123478-HxCDF	70648-26-9	0.0307 JBQ	5.62	0.00609	1
11031	123678-HxCDF	57117-44-9	0.0185 JB	5.62	0.00598	1
11031	123789-HxCDF	72918-21-9	0.0354 JBQ	5.62	0.00655	1
11031	234678-HxCDF	60851-34-5	0.0161 JBQ	5.62	0.00598	1
11031	1234678-HpCDF	67562-39-4	0.0334 JB	5.62	0.0306	1
11031	1234789-HpCDF	55673-89-7	0.0539 JB	5.62	0.0391	1
11031	OCDF	39001-02-0	0.0891 J	11.2	0.0169	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00276			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	66	28 - 130
13C12-1234678-HpCDD	65	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	59	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	71	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	58	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133311
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:55 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53265 SDG#: PH071-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133311
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:55 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53265 SDG#: PH071-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 10:35	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 10:07	Laura M Krieger	25.51
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320131783	07/20/2013 14:48	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320131783	07/20/2013 14:48	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 10:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 01:44	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/31/2013 22:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132030637002	07/30/2013 20:37	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132030637002	07/28/2013 14:39	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-SA8-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133311
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 10:55 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53265 SDG#: PH071-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132030637002B	07/30/2013 09:49	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637002A	07/30/2013 09:49	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637002A	07/30/2013 09:49	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637002A	07/30/2013 09:49	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638003	07/23/2013 10:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637002	07/22/2013 23:17	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638003	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13201039401A	07/20/2013 16:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401A	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-071913 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7133312
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 08:00

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB719 SDG#: PH071-09TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13204A20A	07/23/2013 21:34	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13204A20A	07/23/2013 21:34	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133313
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60600 SDG#: PH071-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.0	J	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.1	J	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	2.9		1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.2	J	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	12		1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	4.4		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.2	J	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	20	6.5	1
12969	Fluoranthene	206-44-0	2.8		1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.1	J	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	0.93	J	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	2.6		1.8	0.72	1
12969	Naphthalene	91-20-3	2.4		1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	3.1		1.8	0.72	1
12969	Pyrene	129-00-0	2.6		1.8	0.72	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	30	J	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	3.9	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	33		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	57		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133313
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60600 SDG#: PH071-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,700		42.8	7.71	1
06944	Antimony	7440-36-0	4.28	U	4.28	0.791	1
06935	Arsenic	7440-38-2	7.52		4.28	0.748	1
06946	Barium	7440-39-3	109		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.915	J	1.07	0.0716	1
07914	Boron	7440-42-8	10.7	U	10.7	0.898	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0813	1
01650	Calcium	7440-70-2	12,400		21.4	3.57	1
06951	Chromium	7440-47-3	38.7		3.21	0.171	1
06952	Cobalt	7440-48-4	9.71		1.07	0.106	1
06953	Copper	7440-50-8	25.7		2.14	0.310	1
01654	Iron	7439-89-6	32,500		214	19.4	5
06955	Lead	7439-92-1	22.4		3.21	0.535	1
01656	Lithium	7439-93-2	24.1		4.3	0.36	1
01657	Magnesium	7439-95-4	7,910		10.7	1.79	1
06958	Manganese	7439-96-5	497		1.07	0.0887	1
06960	Molybdenum	7439-98-7	2.14	U	2.14	0.182	1
06961	Nickel	7440-02-0	20.9		2.14	0.139	1
10145	Phosphorus	7723-14-0	591		10.7	3.09	1
01662	Potassium	7440-09-7	6,080		107	8.92	1
01667	Sodium	7440-23-5	77.9	J	107	17.9	1
06969	Tin	7440-31-5	3.30	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,380		1.07	0.182	1
06971	Vanadium	7440-62-2	67.1		1.07	0.139	1
06972	Zinc	7440-66-6	79.0		4.28	0.214	1
10146	Zirconium	7440-67-7	3.21	J	5.35	0.898	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.239	J	0.428	0.107	2
06142	Silver	7440-22-4	0.0589	J	0.214	0.0278	2
06144	Strontium	7440-24-6	38.4		0.428	0.0727	2
06145	Thallium	7440-28-0	0.307		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0220		0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.44		0.0100	0.0100	1
	The pH was measured in water at 20.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133313
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60600 SDG#: PH071-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0169	1
11031	12378-PeCDD	40321-76-4	0.0779	JQ	5.23	0.0220	1
11031	123478-HxCDD	39227-28-6	0.146	J	5.23	0.0277	1
11031	123678-HxCDD	57653-85-7	0.375	JB	5.23	0.0302	1
11031	123789-HxCDD	19408-74-3	0.307	JB	5.23	0.0279	1
11031	1234678-HpCDD	35822-46-9	5.30	B	5.23	0.0218	1
11031	OCDD	3268-87-9	43.1	B	10.5	0.0174	1
11031	2378-TCDF	51207-31-9	0.562	J	1.05	0.0576	1
11031	12378-PeCDF	57117-41-6	1.20	JB	5.23	0.0302	1
11031	23478-PeCDF	57117-31-4	0.695	JB	5.23	0.0274	1
11031	123478-HxCDF	70648-26-9	0.202	JB	5.23	0.0232	1
11031	123678-HxCDF	57117-44-9	0.287	JB	5.23	0.0215	1
11031	123789-HxCDF	72918-21-9	0.153	JB	5.23	0.0260	1
11031	234678-HxCDF	60851-34-5	0.394	JB	5.23	0.0216	1
11031	1234678-HpCDF	67562-39-4	1.06	JB	5.23	0.0252	1
11031	1234789-HpCDF	55673-89-7	0.141	JBQ	5.23	0.0349	1
11031	OCDF	39001-02-0	1.53	J	10.5	0.0137	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.564				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133313
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60600 SDG#: PH071-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133313
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60600 SDG#: PH071-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 11:07	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 11:09	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 08:17	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13207001	07/31/2013 23:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13207001	07/26/2013 15:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637002	07/30/2013 20:56	John P Hook	5
06955	Lead	SW-846 6010C	1	132030637002	07/30/2013 20:41	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132030637002	07/28/2013 14:43	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132030637002B	07/30/2013 09:52	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637002A	07/30/2013 09:52	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637002A	07/30/2013 09:52	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637002A	07/30/2013 09:52	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133313
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:00 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60600 SDG#: PH071-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132030638003	07/23/2013 10:58	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637002	07/22/2013 23:17	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638003	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13201039401A	07/20/2013 16:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401A	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133314
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60640 SDG#: PH071-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.6	J	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.51
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133314
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60640 SDG#: PH071-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,100		44.6	8.04	1
06944	Antimony	7440-36-0	4.46	U	4.46	0.825	1
06935	Arsenic	7440-38-2	8.53		4.46	0.780	1
06946	Barium	7440-39-3	121		1.11	0.0368	1
06947	Beryllium	7440-41-7	1.03	J	1.11	0.0747	1
07914	Boron	7440-42-8	11.1	U	11.1	0.936	1
06949	Cadmium	7440-43-9	1.11	U	1.11	0.0847	1
01650	Calcium	7440-70-2	17,600		22.3	3.72	1
06951	Chromium	7440-47-3	43.8		3.34	0.178	1
06952	Cobalt	7440-48-4	10.6		1.11	0.110	1
06953	Copper	7440-50-8	24.9		2.23	0.323	1
01654	Iron	7439-89-6	37,200		223	20.2	5
06955	Lead	7439-92-1	13.3		3.34	0.557	1
01656	Lithium	7439-93-2	28.8		4.5	0.38	1
01657	Magnesium	7439-95-4	8,380		11.1	1.86	1
06958	Manganese	7439-96-5	470		1.11	0.0925	1
06960	Molybdenum	7439-98-7	2.23	U	2.23	0.190	1
06961	Nickel	7440-02-0	22.1		2.23	0.145	1
10145	Phosphorus	7723-14-0	357		11.1	3.22	1
01662	Potassium	7440-09-7	3,470		111	9.30	1
01667	Sodium	7440-23-5	108	J	111	18.6	1
06969	Tin	7440-31-5	3.51	J	11.1	0.245	1
06970	Titanium	7440-32-6	1,510		1.11	0.190	1
06971	Vanadium	7440-62-2	76.7		1.11	0.145	1
06972	Zinc	7440-66-6	72.6		4.46	0.223	1
10146	Zirconium	7440-67-7	4.61	J	5.57	0.936	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.236	J	0.446	0.111	2
06142	Silver	7440-22-4	0.0341	J	0.223	0.0290	2
06144	Strontium	7440-24-6	44.6		0.446	0.0758	2
06145	Thallium	7440-28-0	0.348		0.223	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175	U	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.78		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133314
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60640 SDG#: PH071-11*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60640 SDG#: PH071-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.10	U	1.10	0.0249	1
11031	12378-PeCDD	40321-76-4	0.123	JBQ	5.51	0.0232	1
11031	123478-HxCDD	39227-28-6	0.0908	JB	5.51	0.0148	1
11031	123678-HxCDD	57653-85-7	0.0887	JB	5.51	0.0159	1
11031	123789-HxCDD	19408-74-3	0.0757	JBQ	5.51	0.0156	1
11031	1234678-HpCDD	35822-46-9	0.165	JBQ	5.51	0.0192	1
11031	OCDD	3268-87-9	0.600	JB	11.0	0.0186	1
11031	2378-TCDF	51207-31-9	0.0407	JQ	1.10	0.0200	1
11031	12378-PeCDF	57117-41-6	0.210	JB	5.51	0.0138	1
11031	23478-PeCDF	57117-31-4	0.161	JBQ	5.51	0.0138	1
11031	123478-HxCDF	70648-26-9	0.132	JB	5.51	0.00970	1
11031	123678-HxCDF	57117-44-9	0.112	JB	5.51	0.00892	1
11031	123789-HxCDF	72918-21-9	0.104	JBQ	5.51	0.0105	1
11031	234678-HxCDF	60851-34-5	0.0705	JBQ	5.51	0.00881	1
11031	1234678-HpCDF	67562-39-4	0.0667	JB	5.51	0.00613	1
11031	1234789-HpCDF	55673-89-7	0.0447	JBQ	5.51	0.00992	1
11031	OCDF	39001-02-0	0.120	JB	11.0	0.0215	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0494				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133314
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60640 SDG#: PH071-11*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133314
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:20 by VC

Submitted: 07/20/2013 09:15
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60640 SDG#: PH071-11*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 11:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13203A16A	07/23/2013 10:45	Laura M Krieger	24.51
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320131783	07/20/2013 14:49	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320131783	07/20/2013 14:49	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 11:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 03:49	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/30/2013 23:43	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132030637002	07/30/2013 21:06	John P Hook	5
06955	Lead	SW-846 6010C	1	132030637002	07/30/2013 20:45	John P Hook	1
01656	Lithium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132030637002	07/28/2013 14:47	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-606-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7133314
LL Group # 1405522
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/19/2013 13:20 by VC

Submitted: 07/20/2013 09:15
Reported: 08/02/2013 14:04

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60640 SDG#: PH071-11*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132030637002B	07/30/2013 09:54	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132030637002A	07/30/2013 09:54	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132030637002A	07/30/2013 09:54	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132030637002A	07/30/2013 09:54	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132030638003	07/23/2013 11:04	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132030637002	07/22/2013 23:17	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132030638003	07/23/2013 04:20	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13201039401A	07/20/2013 16:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401A	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405522
Reported: 08/02/13 at 02:04 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13205SLD026	Sample number(s): 7133304-7133311,7133313-7133314									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	107		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	94		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	100		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	104		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	103		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	115		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	99		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	124		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	126		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	102		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	106		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	126*		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	110		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	125		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	106		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	106		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	77		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	121		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	98		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	100		71-120		
Batch number: 13203A16A	Sample number(s): 7133307,7133309,7133311,7133314									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	71		67-119		
Batch number: 13204A20A	Sample number(s): 7133312									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	104	99	75-135	5	30
Batch number: 132070001A	Sample number(s): 7133304-7133311,7133313-7133314									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	72	72	36-106	0	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405522
Reported: 08/02/13 at 02:04 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	99		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132120017A	Sample number(s): 7133304-7133311,7133313-7133314									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	105		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	106		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	106		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	104		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	85		49-107		
Batch number: 132030637002	Sample number(s): 7133304-7133311,7133313-7133314									
Aluminum	40.0	U	40.0	7.21	mg/kg	100		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	115		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	100		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	102		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	105		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	99		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	101		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	101		80-120		
Nickel	0.143	J	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	104		80-120		
Potassium	100 U		100.	8.34	mg/kg	101		80-120		
Sodium	100 U		100.	16.7	mg/kg	99		80-120		
Tin	1.53	J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	102		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	101		80-120		
Zinc	0.327	J	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	104		80-120		
Batch number: 132030637002A	Sample number(s): 7133304-7133311,7133313-7133314									
Silver	0.200	U	0.200	0.0260	mg/kg	110		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	101		80-120		
Batch number: 132030637002B	Sample number(s): 7133304-7133311,7133313-7133314									
Selenium	0.400	U	0.400	0.100	mg/kg	113		80-120		
Batch number: 132030638003	Sample number(s): 7133304-7133311,7133313-7133314									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	119		85-120		
Batch number: 13203243201A	Sample number(s): 7133306-7133309									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	101		80-120		
Batch number: 13201039401A	Sample number(s): 7133304-7133311,7133313-7133314									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405522
Reported: 08/02/13 at 02:04 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
15a pH by 9045D					99		95-105		
Batch number: 13207162401A	Sample number(s): 7133304-7133311,7133313-7133314								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13207001	Sample number(s): 7133304-7133311,7133313								
2378-TCDD	1.00 U	1.00	0.0407	ng/kg	102		67-158		
12378-PeCDD	5.00 U	5.00	0.0481	ng/kg	108		70-142		
123478-HxCDD	5.00 U	5.00	0.0288	ng/kg	106		70-164		
123678-HxCDD	0.0352 J	5.00	0.0316	ng/kg	103		76-134		
123789-HxCDD	0.0341 J	5.00	0.0299	ng/kg	102		64-162		
1234678-HpCDD	0.0394 J	5.00	0.0312	ng/kg	99		70-140		
OCDD	0.233 J	10.0	0.0331	ng/kg	101		78-144		
2378-TCDF	1.00 U	1.00	0.0363	ng/kg	103		75-158		
12378-PeCDF	0.0485 J	5.00	0.0206	ng/kg	104		80-134		
23478-PeCDF	0.0474 J	5.00	0.0205	ng/kg	107		68-160		
123478-HxCDF	0.0219 J	5.00	0.0143	ng/kg	102		72-134		
123678-HxCDF	0.0208 J	5.00	0.0137	ng/kg	102		84-130		
123789-HxCDF	0.0358 J	5.00	0.0154	ng/kg	97		78-130		
234678-HxCDF	0.0291 J	5.00	0.0132	ng/kg	102		70-156		
1234678-HpCDF	0.0286 J	5.00	0.00890	ng/kg	99		82-122		
1234789-HpCDF	0.0272 J	5.00	0.0157	ng/kg	97		78-138		
OCDF	10.0 U	10.0	0.0383	ng/kg	98		63-170		
Batch number: 13210001	Sample number(s): 7133314								
2378-TCDD	0.0257 J	1.00	0.0190	ng/kg	94		67-158		
12378-PeCDD	0.0311 J	5.00	0.0215	ng/kg	96		70-142		
123478-HxCDD	0.0355 J	5.00	0.0137	ng/kg	102		70-164		
123678-HxCDD	0.0248 J	5.00	0.0146	ng/kg	100		76-134		
123789-HxCDD	0.0327 J	5.00	0.0146	ng/kg	99		64-162		
1234678-HpCDD	0.0567 J	5.00	0.0155	ng/kg	98		70-140		
OCDD	0.283 J	10.0	0.0177	ng/kg	99		78-144		
2378-TCDF	1.00 U	1.00	0.0191	ng/kg	94		75-158		
12378-PeCDF	0.0578 J	5.00	0.0121	ng/kg	95		80-134		
23478-PeCDF	0.0367 J	5.00	0.0116	ng/kg	97		68-160		
123478-HxCDF	0.0517 J	5.00	0.00770	ng/kg	102		72-134		
123678-HxCDF	0.0377 J	5.00	0.00710	ng/kg	97		84-130		
123789-HxCDF	0.0544 J	5.00	0.00860	ng/kg	99		78-130		
234678-HxCDF	0.0342 J	5.00	0.00710	ng/kg	99		70-156		
1234678-HpCDF	0.0332 J	5.00	0.00590	ng/kg	95		82-122		
1234789-HpCDF	0.0325 J	5.00	0.0102	ng/kg	98		78-138		
OCDF	0.0947 J	10.0	0.0213	ng/kg	91		63-170		
Batch number: 13207001	Sample number(s): 7133304-7133311,7133313								
TEQ WHO 2005 - EDLx0.0	0.00150			ng/kg					
Batch number: 13210001	Sample number(s): 7133314								
TEQ WHO 2005 - EDLx0.0	0.0278			ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405522
Reported: 08/02/13 at 02:04 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13205SLD026	Sample number(s): 7133304-7133311,7133313-7133314 UNSPK: 7133304								
Acenaphthene	87	94	48-127	9	30				
Acenaphthylene	81	89	49-121	10	30				
Anthracene	81	91	52-126	13	30				
Benzo(a)anthracene	88	96	32-135	9	30				
Benzo(a)pyrene	83	93	36-138	13	30				
Benzo(b)fluoranthene	90	101	26-142	13	30				
Benzo(e)pyrene	82	93	70-130	14	30				
Benzo(g,h,i)perylene	76	84	33-141	10	30				
Benzo(k)fluoranthene	88	101	47-129	14	30				
Butylbenzylphthalate	115	127	59-153	11	30				
Di-n-butylphthalate	104	116	62-154	12	30				
Chrysene	84	95	29-148	12	30				
Dibenz(a,h)anthracene	84	93	34-125	11	30				
Diethylphthalate	108	118	76-127	10	30				
Dimethylphthalate	89	96	62-136	8	30				
Bis(2-Ethylhexyl)phthalate	96	116	39-167	15	30				
Fluoranthene	87	98	47-135	13	30				
Fluorene	83	95	50-129	14	30				
Indeno(1,2,3-cd)pyrene	83	92	17-136	11	30				
1-Methylnaphthalene	89	97	50-131	10	30				
2-Methylnaphthalene	87	95	28-144	10	30				
Naphthalene	83	89	31-148	7	30				
N-Nitrosodimethylamine	64	69	48-113	8	30				
Di-n-octylphthalate	108	125	52-162	15	30				
Phenanthrene	83	94	29-142	14	30				
Pyrene	86	96	26-143	12	30				
Batch number: 13203A16A	Sample number(s): 7133307,7133309,7133311,7133314 UNSPK: P129596								
11a TPH by EPA 8015B GRO	83	82	39-118	5	30				
Batch number: 132070001A	Sample number(s): 7133304-7133311,7133313-7133314 UNSPK: 7133304								
PCB-1016	91	84	16-146	8	50				
PCB-1260	90	85	40-134	6	50				
Batch number: 132120017A	Sample number(s): 7133304-7133311,7133313-7133314 UNSPK: 7133304								
EFH (C12-C14)	98	98	49-123	0	20				
EFH (C15-C20)	150*	147*	49-123	2	20				
EFH (C21-C30)	105	214*	49-123	33*	20				
EFH (C30-C40)	14 (2)	6 (2)	49-123	1	20				
EFH (C8-C11)	80	81	49-123	2	20				
Batch number: 132030637002	Sample number(s): 7133304-7133311,7133313-7133314 UNSPK: 7133304 BKG: 7133304								
Aluminum	1435 (2)	1396 (2)	75-125	0	20	16,600	17,500	5	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405522
Reported: 08/02/13 at 02:04 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Antimony	62*	64*	75-125	3	20	3.92	U	3.92	U	0 (1)	20
Arsenic	93	86	75-125	4	20	11.8		11.5		2 (1)	20
Barium	97	95	75-125	1	20	96.7		99.5		3	20
Beryllium	102	100	75-125	2	20	0.572	J	0.596	J	4 (1)	20
Boron	97	96	75-125	1	20	9.80	U	9.80	U	0 (1)	20
Cadmium	96	95	75-125	2	20	0.130	J	0.139	J	7 (1)	20
Calcium	171 (2)	170 (2)	75-125	0	20	2,670		2,800		5	20
Chromium	104	103	75-125	0	20	17.9		19.2		7	20
Cobalt	94	93	75-125	1	20	5.29		5.60		6	20
Copper	109	105	75-125	2	20	13.4		13.9		4	20
Iron	16 (2)	-313 (2)	75-125	1	20	22,700		23,800		5	20
Lead	98	98	75-125	0	20	9.92		10.1		2 (1)	20
Lithium	100	98	75-125	2	20	26.9		28.1		4	20
Magnesium	148 (2)	119 (2)	75-125	1	20	4,560		4,750		4	20
Manganese	100 (2)	91 (2)	75-125	1	20	326		345		6	20
Molybdenum	89	92	75-125	4	20	0.476	J	0.286	J	50* (1)	20
Nickel	96	94	75-125	1	20	12.2		12.7		4	20
Phosphorus	71 (2)	74 (2)	75-125	0	20	544		563		3	20
Potassium	119	121	75-125	0	20	3,740		3,940		5	20
Sodium	99	97	75-125	2	20	69.5	J	73.6	J	6 (1)	20
Tin	84	87	75-125	4	20	2.98	J	3.08	J	3 (1)	20
Titanium	334 (2)	356 (2)	75-125	1	20	1,200		1,290		7	20
Vanadium	105	103	75-125	1	20	33.5		35.4		6	20
Zinc	98	95	75-125	1	20	55.4		57.8		4	20
Zirconium	86	90	75-125	5	20	1.02	J	1.57	J	42* (1)	20
Batch number: 132030637002A	Sample number(s): 7133304-7133311,7133313-7133314 UNSPK: 7133304 BKG: 7133304										
Silver	106	112	75-125	6	20	0.0407	J	0.0380	J	7 (1)	20
Strontium	98	142*	75-125	11	20	21.0		22.4		6	20
Thallium	102	128*	75-125	14	20	0.270		0.290		7 (1)	20
Batch number: 132030637002B	Sample number(s): 7133304-7133311,7133313-7133314 UNSPK: 7133304 BKG: 7133304										
Selenium	102	111	75-125	8	20	0.392	U	0.149	J	200* (1)	20
Batch number: 132030638003	Sample number(s): 7133304-7133311,7133313-7133314 UNSPK: 7133304 BKG: 7133304										
3a Mercury 7471A	118	119	65-135	2	20	0.0140	J	0.0141	J	1 (1)	20
Batch number: 13203243201A	Sample number(s): 7133306-7133309 UNSPK: P129596 BKG: P129596										
2a Chromium VI by EPA 7199	100		75-125			1.3		0.16	J	157* (1)	20
Batch number: 13201039401A	Sample number(s): 7133304-7133311,7133313-7133314 BKG: 7133306										
15a pH by 9045D						7.67		7.53		2	3
Batch number: 13207162401A	Sample number(s): 7133304-7133311,7133313-7133314 BKG: P132367										
14a Moisture Content by 160.3						5.0		4.8		5	20
Batch number: 13210001	Sample number(s): 7133314 UNSPK: P138011										
2378-TCDD	89	90	40-135	2	20						
12378-PeCDD	94	93	40-135	4	20						
123478-HxCDD	98	103	40-135	2	20						
123678-HxCDD	97	96	40-135	3	20						

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405522
Reported: 08/02/13 at 02:04 PM

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
123789-HxCDD	97	98	40-135	1	20				
1234678-HpCDD	93	97	40-135	1	20				
OCDD	96	96	40-135	1	20				
2378-TCDF	92	92	40-135	2	20				
12378-PeCDF	93	92	40-135	3	20				
23478-PeCDF	96	94	40-135	5	20				
123478-HxCDF	98	98	40-135	2	20				
123678-HxCDF	96	96	40-135	2	20				
123789-HxCDF	97	97	40-135	2	20				
234678-HxCDF	97	97	40-135	3	20				
1234678-HpCDF	94	95	40-135	0	20				
1234789-HpCDF	96	96	40-135	2	20				
OCDF	89	90	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13205SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7133304	84	87	103
7133305	66	67	83
7133306	84	83	99
7133307	84	91	96
7133308	80	86	89
7133309	83	89	94
7133310	80	86	95
7133311	81	86	95
7133313	75	78	90
7133314	76	81	88
Blank	90	95	102
LCS	89	93	99
MS	80	84	96
MSD	85	89	98
Limits:	54-129	61-134	55-129

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13203A16A

	Trifluorotoluene-F
7133307	71
7133309	70
7133311	74
7133314	65

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405522
Reported: 08/02/13 at 02:04 PM

Surrogate Quality Control

Blank 77
LCS 76
MS 70
MSD 70

Limits: 61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13204A20A

	Trifluorotoluene-F
7133312	87
Blank	87
LCS	118
LCSD	118
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132070001A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7133304	91	89
7133305	102	96
7133306	94	89
7133307	100	93
7133308	94	94
7133309	97	89
7133310	101	94
7133311	106	94
7133313	101	86
7133314	94	85
Blank	104	104
LCS	107	105
LCSD	108	106
MS	102	93
MSD	100	97
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132120017A

	Chlorobenzene	Orthoterphenyl
7133304	101	103
7133305	98	102
7133306	99	102
7133307	95	94
7133308	99	100
7133309	96	97
7133310	99	100
7133311	96	96
7133313	98	102
7133314	92	92
Blank	104	104
LCS	101	103

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405522
Reported: 08/02/13 at 02:04 PM

Surrogate Quality Control

MS	98	101
MSD	102	104
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13207001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7133304	72	69	67	74	70	68
7133305	75	82	70	75	71	79
7133306	75	65	60	65	62	61
7133307	65	64	59	64	59	72
7133308	68	63	61	64	65	73
7133309	81	79	87	89	86	86
7133310	68	62	62	66	67	67
7133311	59	61	67	69	68	71
7133313	75	75	80	80	78	81
Blank	93	107	91	100	98	112
OPR	79	88	86	95	92	108
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7133304	101	59	50	72	74	76
7133305	92	73	68	82	79	81
7133306	87	57	49	66	66	72
7133307	83	56	51	68	66	72
7133308	74	60	56	65	70	70
7133309	95	76	67	83	87	88
7133310	75	61	57	65	68	72
7133311	71	65	58	62	65	69
7133313	86	74	67	77	79	79
Blank	129	97	89	100	95	100
OPR	122	97	85	82	87	93
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7133304	78	80	79	65	78
7133305	81	85	91	73	85
7133306	69	71	69	69	74
7133307	69	71	74	60	68
7133308	72	73	70	66	67
7133309	87	84	78	71	80
7133310	72	70	71	62	64
7133311	66	65	60	53	59
7133313	78	76	71	67	74
Blank	102	109	108	93	112
OPR	94	103	92	84	93
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405522
Reported: 08/02/13 at 02:04 PM

Surrogate Quality Control

Batch number: 13210001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7133314	68	71	74	78	75	75
Blank	62	65	70	76	72	73
MS	65	66	69	73	65	66
MSD	66	66	68	72	67	67
OPR	60	68	67	73	70	67
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7133314	92	70	72	74	75	78
Blank	93	67	69	69	76	77
MS	85	60	58	69	72	72
MSD	86	62	60	71	70	74
OPR	91	65	65	72	71	74
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7133314	75	77	79	60	73
Blank	73	77	79	50	66
MS	67	70	70	52	65
MSD	68	70	71	53	67
OPR	69	75	77	51	67
Limits:	28-130	23-140	17-157	24-169	24-185

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Acct# 13013 Gp# 1405532 Sample# 7133304-14

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/19/2013
CarrierName: FedEx
AirbillNo: 796274675913

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130719-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-516-SA8-SB-0.0-0.5	7/19/13 08:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-516-SA8-SB-0.0-0.5	7/19/13 08:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-521-SA8-SB-0.0-0.5	7/19/13 07:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-521-SA8-SB-0.0-0.5	7/19/13 07:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-517-SA8-SB-0.0-0.5	7/19/13 09:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-517-SA8-SB-0.0-0.5	7/19/13 09:30	SO	None	2 - 4 oz glass	10 day													X		X																
SL-517-SA8-SB-3.0-4.0	7/19/13 09:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-517-SA8-SB-3.0-4.0	7/19/13 09:40	SO	None	1 - 4 oz glass	10 day															X																
SL-517-SA8-SB-3.0-4.0	7/19/13 09:40	SO	None	2 - Encore	10 day																			X												
SL-518-SA8-SB-0.0-0.5	7/19/13 08:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-518-SA8-SB-0.0-0.5	7/19/13 08:20	SO	None	2 - 4 oz glass	10 day													X		X																
SL-518-SA8-SB-4.0-5.0	7/19/13 09:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-518-SA8-SB-4.0-5.0	7/19/13 09:00	SO	None	1 - 4 oz glass	10 day															X																
SL-518-SA8-SB-4.0-5.0	7/19/13 09:00	SO	None	2 - Encore	10 day																			X												
SL-532-SA8-SB-0.0-0.5	7/19/13 10:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-532-SA8-SB-0.0-0.5	7/19/13 10:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-532-SA8-SB-6.5-7.5	7/19/13 10:55	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-532-SA8-SB-6.5-7.5	7/19/13 10:55	SO	None	2 - Encore	10 day																			X												
TB-071913	7/19/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-606-SA8-SB-4.0-5.0	7/19/13 13:20	SO	None	2 - Encore	10 day																			X												

acct#13013 Ap# 1405522 Sample# 7133304-14

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/19/2013
CarrierName: FedEx
AirbillNo: 796274675913

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130719-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	7/19/20	131600									
									Pat Gu	7/20/13	0915

COC Rev 2

COC: 20130719-01, Page 1 of 2

2 of 2

acct#13013 Gp#1405522 Sample#7133304-14

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/19/2013
CarrierName: FedEx
AirbillNo: 796274675913

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130719-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-606-SA8-SB-0.0-0.5	7/19/13 13:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-606-SA8-SB-0.0-0.5	7/19/13 13:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-606-SA8-SB-4.0-5.0	7/19/13 13:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										

Special Instructions:

Sampler: V. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stacy Myers	07/19/2013	1600									
									Patsy	7/20/13	0915

COC Rev 2

COC: 20130719-02, Page 2 of 2

1 of 1

eurofins | Lancaster Laboratories

C# 1405522

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 7/20/13

Time of Receipt: 0915

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.4	TB	WI	y	B	
2	↓	1.2	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat Gh 3472 **Date/Time:** 7/20/13 1000

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH072

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 02, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/23/2013
Group Number: 1405909
SDG: PH072
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-550-SA8-SB-0.0-0.5 Soil	7135364
SL-550-SA8-SB-4.0-5.0 Soil	7135365
SL-550-SA8-SB-9.0-10.0 Soil	7135366
SL-550-SA8-SB-14.0-15.0 Soil	7135367
SL-550-SA8-SB-17.0-18.0 Soil	7135368
TB-072213 Water	7135369
SL-554-SA8-SB-0.0-0.5 Soil	7135370
SL-554-SA8-SB-4.0-5.0 Soil	7135371
SL-556-SA8-SB-0.0-0.5 Soil	7135372
SL-556-SA8-SB-4.0-5.0 Soil	7135373

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-550-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135364
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 08:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55000 SDG#: PH072-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	0.87	J	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	0.53	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	7.4		5.6	2.3	1
12952	EFH (C30-C40)	n.a.	18		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135364
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 08:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55000 SDG#: PH072-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,700		44.2	7.96	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.817	1
06935	Arsenic	7440-38-2	7.40		4.42	0.773	1
06946	Barium	7440-39-3	132		1.10	0.0364	1
06947	Beryllium	7440-41-7	1.03	J	1.10	0.0740	1
07914	Boron	7440-42-8	6.34	J	11.0	0.927	1
06949	Cadmium	7440-43-9	0.382	J	1.10	0.0839	1
01650	Calcium	7440-70-2	17,100		22.1	3.69	1
06951	Chromium	7440-47-3	39.9		3.31	0.177	1
06952	Cobalt	7440-48-4	10.2		1.10	0.109	1
06953	Copper	7440-50-8	21.7		2.21	0.320	1
01654	Iron	7439-89-6	36,100		88.3	7.99	2
06955	Lead	7439-92-1	10.8		3.31	0.552	1
01656	Lithium	7439-93-2	26.8		4.4	0.38	1
01657	Magnesium	7439-95-4	8,260		11.0	1.84	1
06958	Manganese	7439-96-5	456		1.10	0.0916	1
06960	Molybdenum	7439-98-7	0.358	J	2.21	0.188	1
06961	Nickel	7440-02-0	22.4		2.21	0.144	1
10145	Phosphorus	7723-14-0	473		11.0	3.19	1
01662	Potassium	7440-09-7	6,640		110	9.21	1
01667	Sodium	7440-23-5	131		110	18.4	1
06969	Tin	7440-31-5	3.34	J	11.0	0.243	1
06970	Titanium	7440-32-6	1,540		1.10	0.188	1
06971	Vanadium	7440-62-2	74.9		1.10	0.144	1
06972	Zinc	7440-66-6	81.1		4.42	0.221	1
10146	Zirconium	7440-67-7	7.77		5.52	0.927	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.315	J	0.442	0.110	2
06142	Silver	7440-22-4	0.0747	J	0.221	0.0287	2
06144	Strontium	7440-24-6	47.7		0.442	0.0751	2
06145	Thallium	7440-28-0	0.346		0.221	0.0331	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0181	U	0.0181	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.18		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135364
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 08:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55000 SDG#: PH072-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.11	U	1.11	0.0282	1
11031	12378-PeCDD	40321-76-4	0.0459	JB	5.57	0.0321	1
11031	123478-HxCDD	39227-28-6	0.0657	JB	5.57	0.0319	1
11031	123678-HxCDD	57653-85-7	0.243	JBQ	5.57	0.0337	1
11031	123789-HxCDD	19408-74-3	0.253	JB	5.57	0.0355	1
11031	1234678-HpCDD	35822-46-9	3.65	JB	5.57	0.0405	1
11031	OCDD	3268-87-9	34.8	B	11.1	0.0286	1
11031	2378-TCDF	51207-31-9	0.0351	J	1.11	0.0318	1
11031	12378-PeCDF	57117-41-6	0.108	JBQ	5.57	0.0190	1
11031	23478-PeCDF	57117-31-4	0.0394	JBQ	5.57	0.0184	1
11031	123478-HxCDF	70648-26-9	0.0822	JBQ	5.57	0.0194	1
11031	123678-HxCDF	57117-44-9	0.0458	JBQ	5.57	0.0197	1
11031	123789-HxCDF	72918-21-9	0.222	JBQ	5.57	0.0240	1
11031	234678-HxCDF	60851-34-5	0.0676	JB	5.57	0.0198	1
11031	1234678-HpCDF	67562-39-4	0.823	JB	5.57	0.0187	1
11031	1234789-HpCDF	55673-89-7	0.0771	JB	5.57	0.0284	1
11031	OCDF	39001-02-0	2.04	JB	11.1	0.0287	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.144				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	62	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	61	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135364
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 08:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55000 SDG#: PH072-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135364
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 08:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55000 SDG#: PH072-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 12:12	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 12:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 05:32	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 00:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 13:34	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 14:15	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:29	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:29	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 11:29	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:29	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135364
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 08:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55000 SDG#: PH072-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 12:35	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13204039401A	07/23/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401B	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135365
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55040 SDG#: PH072-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.37
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135365
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55040 SDG#: PH072-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,200		43.7	7.87	1
06944	Antimony	7440-36-0	4.37	U	4.37	0.808	1
06935	Arsenic	7440-38-2	7.20		4.37	0.764	1
06946	Barium	7440-39-3	147		1.09	0.0360	1
06947	Beryllium	7440-41-7	1.08	J	1.09	0.0731	1
07914	Boron	7440-42-8	2.05	J	10.9	0.917	1
06949	Cadmium	7440-43-9	0.112	J	1.09	0.0829	1
01650	Calcium	7440-70-2	15,800		21.8	3.65	1
06951	Chromium	7440-47-3	37.2		3.27	0.175	1
06952	Cobalt	7440-48-4	9.35		1.09	0.108	1
06953	Copper	7440-50-8	18.1		2.18	0.317	1
01654	Iron	7439-89-6	35,400		87.3	7.90	2
06955	Lead	7439-92-1	10.6		3.27	0.546	1
01656	Lithium	7439-93-2	26.6		4.4	0.37	1
01657	Magnesium	7439-95-4	7,310		10.9	1.82	1
06958	Manganese	7439-96-5	365		1.09	0.0906	1
06960	Molybdenum	7439-98-7	0.222	J	2.18	0.186	1
06961	Nickel	7440-02-0	19.5		2.18	0.142	1
10145	Phosphorus	7723-14-0	216		10.9	3.15	1
01662	Potassium	7440-09-7	3,440		109	9.10	1
01667	Sodium	7440-23-5	213		109	18.2	1
06969	Tin	7440-31-5	3.36	J	10.9	0.240	1
06970	Titanium	7440-32-6	1,230		1.09	0.186	1
06971	Vanadium	7440-62-2	68.5		1.09	0.142	1
06972	Zinc	7440-66-6	70.4		4.37	0.218	1
10146	Zirconium	7440-67-7	7.76		5.46	0.917	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.437	U	0.437	0.109	2
06142	Silver	7440-22-4	0.0606	J	0.218	0.0284	2
06144	Strontium	7440-24-6	64.6		0.437	0.0742	2
06145	Thallium	7440-28-0	0.358		0.218	0.0327	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0180	U	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.78		0.0100	0.0100	1
	The pH was measured in water at 22 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135365
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55040 SDG#: PH072-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	11.9	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135365
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55040 SDG#: PH072-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0491 JBQ	1.11	0.0241	1
11031	12378-PeCDD	40321-76-4	0.168 JB	5.54	0.0285	1
11031	123478-HxCDD	39227-28-6	0.0826 JBQ	5.54	0.0195	1
11031	123678-HxCDD	57653-85-7	0.132 JBQ	5.54	0.0212	1
11031	123789-HxCDD	19408-74-3	0.204 JBQ	5.54	0.0213	1
11031	1234678-HpCDD	35822-46-9	0.381 JB	5.54	0.0271	1
11031	OCDD	3268-87-9	2.83 JB	11.1	0.0199	1
11031	2378-TCDF	51207-31-9	0.0349 JQ	1.11	0.0280	1
11031	12378-PeCDF	57117-41-6	0.260 JBQ	5.54	0.0162	1
11031	23478-PeCDF	57117-31-4	0.131 JB	5.54	0.0146	1
11031	123478-HxCDF	70648-26-9	0.152 JB	5.54	0.0126	1
11031	123678-HxCDF	57117-44-9	0.128 JB	5.54	0.0118	1
11031	123789-HxCDF	72918-21-9	0.188 JBQ	5.54	0.0151	1
11031	234678-HxCDF	60851-34-5	0.0781 JBQ	5.54	0.0117	1
11031	1234678-HpCDF	67562-39-4	0.145 JB	5.54	0.0107	1
11031	1234789-HpCDF	55673-89-7	0.0580 JBQ	5.54	0.0167	1
11031	OCDF	39001-02-0	0.236 JB	11.1	0.0261	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.241			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	66	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	49	24 - 169
13C12-12378-PeCDF	62	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135365
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55040 SDG#: PH072-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135365
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55040 SDG#: PH072-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 12:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/26/2013 01:06	Laura M Krieger	21.37
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320431795	07/23/2013 15:55	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320431795	07/23/2013 15:59	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 13:18	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 04:09	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 01:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 13:38	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 14:19	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135365
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55040 SDG#: PH072-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:31	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:31	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 11:31	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:31	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 12:37	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13204039401A	07/23/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401B	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135366
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:15 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55090 SDG#: PH072-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20.63
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135366
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:15 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55090 SDG#: PH072-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,400		44.1	7.94	1
06944	Antimony	7440-36-0	4.41	U	4.41	0.815	1
06935	Arsenic	7440-38-2	6.00		4.41	0.771	1
06946	Barium	7440-39-3	74.6		1.10	0.0363	1
06947	Beryllium	7440-41-7	0.626	J	1.10	0.0738	1
07914	Boron	7440-42-8	3.06	J	11.0	0.925	1
06949	Cadmium	7440-43-9	0.533	J	1.10	0.0837	1
01650	Calcium	7440-70-2	209,000		220	36.8	10
06951	Chromium	7440-47-3	19.1		3.30	0.176	1
06952	Cobalt	7440-48-4	4.09		1.10	0.109	1
06953	Copper	7440-50-8	6.60		2.20	0.319	1
01654	Iron	7439-89-6	16,300		44.1	3.99	1
06955	Lead	7439-92-1	6.04		3.30	0.551	1
01656	Lithium	7439-93-2	9.5		4.4	0.37	1
01657	Magnesium	7439-95-4	4,310		11.0	1.84	1
06958	Manganese	7439-96-5	213		1.10	0.0914	1
06960	Molybdenum	7439-98-7	2.20	U	2.20	0.187	1
06961	Nickel	7440-02-0	11.7		2.20	0.143	1
10145	Phosphorus	7723-14-0	290		11.0	3.18	1
01662	Potassium	7440-09-7	1,580		110	9.19	1
01667	Sodium	7440-23-5	211		110	18.4	1
06969	Tin	7440-31-5	2.59	J	11.0	0.242	1
06970	Titanium	7440-32-6	754		1.10	0.187	1
06971	Vanadium	7440-62-2	36.2		1.10	0.143	1
06972	Zinc	7440-66-6	33.9		4.41	0.220	1
10146	Zirconium	7440-67-7	4.73	J	5.51	0.925	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.441	U	0.441	0.110	2
06142	Silver	7440-22-4	0.220	U	0.220	0.0286	2
06144	Strontium	7440-24-6	130		1.10	0.187	5
06145	Thallium	7440-28-0	0.156	J	0.220	0.0330	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175	U	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.15		0.0100	0.0100	1
	The pH was measured in water at 22 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135366
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:15 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55090 SDG#: PH072-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	9.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 14:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/26/2013 01:44	Laura M Krieger	20.63
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320431795	07/23/2013 16:00	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320431795	07/23/2013 16:01	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 13:36	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 02:05	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/30/2013 13:42	Joanne M Gates	10
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135366
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:15 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55090 SDG#: PH072-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 14:31	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:40	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:40	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 12:20	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:40	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 12:39	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13204039401A	07/23/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401B	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135367
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55014 SDG#: PH072-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.80	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.40	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.40	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.80	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.80	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.80	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	4.0	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.80	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.80	1
12969	Butylbenzylphthalate	85-68-7	22	U	22	7.2	1
12969	Di-n-butylphthalate	84-74-2	22	U	22	7.2	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.40	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.80	1
12969	Diethylphthalate	84-66-2	22	U	22	7.2	1
12969	Dimethylphthalate	131-11-3	22	U	22	7.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	22	U	22	7.2	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.80	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.80	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.80	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.80	1
12969	2-Methylnaphthalene	91-57-6	2.0	U	2.0	0.80	1
12969	Naphthalene	91-20-3	0.97	J	2.0	0.80	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.80	1
12969	Di-n-octylphthalate	117-84-0	22	U	22	7.2	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.80	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.80	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	22.56
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.1	1
10592	PCB-1232	11141-16-5	20	U	20	4.9	1
10592	PCB-1242	53469-21-9	20	U	20	4.9	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.3	1
10592	PCB-1260	11096-82-5	20	U	20	4.7	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135367
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55014 SDG#: PH072-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	6.0	U	6.0	2.4	1
12952	EFH (C15-C20)	n.a.	6.0	U	6.0	2.4	1
12952	EFH (C21-C30)	n.a.	6.0	U	6.0	2.4	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.8	1
12952	EFH (C8-C11)	n.a.	6.0	U	6.0	2.4	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,900		46.0	8.28	1
06944	Antimony	7440-36-0	4.60	U	4.60	0.850	1
06935	Arsenic	7440-38-2	3.47	J	4.60	0.804	1
06946	Barium	7440-39-3	70.9		1.15	0.0379	1
06947	Beryllium	7440-41-7	0.379	J	1.15	0.0770	1
07914	Boron	7440-42-8	2.68	J	11.5	0.965	1
06949	Cadmium	7440-43-9	0.286	J	1.15	0.0873	1
01650	Calcium	7440-70-2	210,000		230	38.4	10
06951	Chromium	7440-47-3	13.9		3.45	0.184	1
06952	Cobalt	7440-48-4	2.84		1.15	0.114	1
06953	Copper	7440-50-8	4.22		2.30	0.333	1
01654	Iron	7439-89-6	13,100		46.0	4.16	1
06955	Lead	7439-92-1	4.38		3.45	0.574	1
01656	Lithium	7439-93-2	6.1		4.6	0.39	1
01657	Magnesium	7439-95-4	3,870		11.5	1.92	1
06958	Manganese	7439-96-5	160		1.15	0.0953	1
06960	Molybdenum	7439-98-7	2.30	U	2.30	0.195	1
06961	Nickel	7440-02-0	6.87		2.30	0.149	1
10145	Phosphorus	7723-14-0	325		11.5	3.32	1
01662	Potassium	7440-09-7	1,370		115	9.58	1
01667	Sodium	7440-23-5	205		115	19.2	1
06969	Tin	7440-31-5	2.77	J	11.5	0.253	1
06970	Titanium	7440-32-6	759		1.15	0.195	1
06971	Vanadium	7440-62-2	25.3		1.15	0.149	1
06972	Zinc	7440-66-6	34.3		4.60	0.230	1
10146	Zirconium	7440-67-7	3.60	J	5.74	0.965	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.460	U	0.460	0.115	2
06142	Silver	7440-22-4	0.230	U	0.230	0.0299	2
06144	Strontium	7440-24-6	151		1.15	0.195	5
06145	Thallium	7440-28-0	0.164	J	0.230	0.0345	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0191	U	0.0191	0.0115	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.18		0.0100	0.0100	1
	The pH was measured in water at 22 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135367
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55014 SDG#: PH072-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	16.3	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 14:52	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/26/2013 02:22	Laura M Krieger	22.56
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320431795	07/23/2013 16:02	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320431795	07/23/2013 16:03	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 13:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 02:26	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/30/2013 13:46	Joanne M Gates	10
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135367
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55014 SDG#: PH072-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 14:35	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:42	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:42	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 12:22	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:42	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 12:41	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13204039401A	07/23/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401B	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135368
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:45 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55017 SDG#: PH072-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	23.36
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135368
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:45 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55017 SDG#: PH072-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,200		41.5	7.48	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.768	1
06935	Arsenic	7440-38-2	4.63		4.15	0.726	1
06946	Barium	7440-39-3	76.5		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.456	J	1.04	0.0695	1
07914	Boron	7440-42-8	10.4	U	10.4	0.871	1
06949	Cadmium	7440-43-9	0.220	J	1.04	0.0788	1
01650	Calcium	7440-70-2	5,000		20.7	3.47	1
06951	Chromium	7440-47-3	15.0		3.11	0.166	1
06952	Cobalt	7440-48-4	5.00		1.04	0.103	1
06953	Copper	7440-50-8	7.45		2.07	0.301	1
01654	Iron	7439-89-6	21,800		41.5	3.76	1
06955	Lead	7439-92-1	3.75		3.11	0.519	1
01656	Lithium	7439-93-2	25.5		4.1	0.35	1
01657	Magnesium	7439-95-4	5,030		10.4	1.73	1
06958	Manganese	7439-96-5	267		1.04	0.0861	1
06960	Molybdenum	7439-98-7	2.07	U	2.07	0.176	1
06961	Nickel	7440-02-0	8.28		2.07	0.135	1
10145	Phosphorus	7723-14-0	412		10.4	3.00	1
01662	Potassium	7440-09-7	2,450		104	8.65	1
01667	Sodium	7440-23-5	118		104	17.3	1
06969	Tin	7440-31-5	3.14	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,450		1.04	0.176	1
06971	Vanadium	7440-62-2	34.4		1.04	0.135	1
06972	Zinc	7440-66-6	57.7		4.15	0.207	1
10146	Zirconium	7440-67-7	4.60	J	5.19	0.871	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.415	U	0.415	0.104	2
06142	Silver	7440-22-4	0.207	U	0.207	0.0270	2
06144	Strontium	7440-24-6	18.8		0.415	0.0705	2
06145	Thallium	7440-28-0	0.268		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	8.32		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135368
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:45 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55017 SDG#: PH072-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/26/2013 15:23	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/26/2013 03:00	Laura M Krieger	23.36
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320431795	07/23/2013 16:04	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320431795	07/23/2013 16:04	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 14:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 02:46	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-550-SA8-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135368
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 09:45 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55017 SDG#: PH072-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 14:40	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:45	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:45	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 11:45	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:45	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 12:43	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13204039401A	07/23/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401B	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-072213 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7135369
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 08:00

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

037TB SDG#: PH072-06TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13204A20A	07/23/2013 21:56	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13204A20A	07/23/2013 21:56	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135370
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 13:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH072-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.1	J	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.5	J	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	0.76	J	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	0.86	J	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.1	J	1.9	0.75	1
12969	Naphthalene	91-20-3	1.2	J	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	0.80	J	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.5	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135370
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 13:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH072-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,300		45.8	8.26	1
06944	Antimony	7440-36-0	4.58	U	4.58	0.848	1
06935	Arsenic	7440-38-2	7.20		4.58	0.802	1
06946	Barium	7440-39-3	162		1.15	0.0378	1
06947	Beryllium	7440-41-7	1.14	J	1.15	0.0767	1
07914	Boron	7440-42-8	5.89	J	11.5	0.962	1
06949	Cadmium	7440-43-9	0.417	J	1.15	0.0871	1
01650	Calcium	7440-70-2	8,780		22.9	3.83	1
06951	Chromium	7440-47-3	41.4		3.44	0.183	1
06952	Cobalt	7440-48-4	11.3		1.15	0.113	1
06953	Copper	7440-50-8	21.9		2.29	0.332	1
01654	Iron	7439-89-6	36,800		91.6	8.29	2
06955	Lead	7439-92-1	11.6		3.44	0.573	1
01656	Lithium	7439-93-2	26.7		4.6	0.39	1
01657	Magnesium	7439-95-4	8,100		11.5	1.91	1
06958	Manganese	7439-96-5	547		1.15	0.0951	1
06960	Molybdenum	7439-98-7	0.249	J	2.29	0.195	1
06961	Nickel	7440-02-0	23.4		2.29	0.149	1
10145	Phosphorus	7723-14-0	348		11.5	3.31	1
01662	Potassium	7440-09-7	5,070		115	9.55	1
01667	Sodium	7440-23-5	133		115	19.1	1
06969	Tin	7440-31-5	3.38	J	11.5	0.252	1
06970	Titanium	7440-32-6	1,430		1.15	0.195	1
06971	Vanadium	7440-62-2	77.4		1.15	0.149	1
06972	Zinc	7440-66-6	77.9		4.58	0.229	1
10146	Zirconium	7440-67-7	7.68		5.73	0.962	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.299	J	0.458	0.115	2
06142	Silver	7440-22-4	0.0542	J	0.229	0.0298	2
06144	Strontium	7440-24-6	57.8		0.458	0.0779	2
06145	Thallium	7440-28-0	0.446		0.229	0.0344	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0180	U	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.89		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135370
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 13:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH072-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0538	JB	1.09	0.0205	1
11031	12378-PeCDD	40321-76-4	0.193	JBQ	5.47	0.0243	1
11031	123478-HxCDD	39227-28-6	0.0943	JB	5.47	0.0211	1
11031	123678-HxCDD	57653-85-7	0.171	JB	5.47	0.0226	1
11031	123789-HxCDD	19408-74-3	0.227	JB	5.47	0.0234	1
11031	1234678-HpCDD	35822-46-9	0.506	JB	5.47	0.0229	1
11031	OCDD	3268-87-9	3.57	JB	10.9	0.0184	1
11031	2378-TCDF	51207-31-9	0.0462	JQ	1.09	0.0247	1
11031	12378-PeCDF	57117-41-6	0.353	JB	5.47	0.0158	1
11031	23478-PeCDF	57117-31-4	0.207	JB	5.47	0.0158	1
11031	123478-HxCDF	70648-26-9	0.156	JBQ	5.47	0.0144	1
11031	123678-HxCDF	57117-44-9	0.130	JBQ	5.47	0.0132	1
11031	123789-HxCDF	72918-21-9	0.341	JB	5.47	0.0159	1
11031	234678-HxCDF	60851-34-5	0.0836	JB	5.47	0.0134	1
11031	1234678-HpCDF	67562-39-4	0.200	JB	5.47	0.00756	1
11031	1234789-HpCDF	55673-89-7	0.0514	JBQ	5.47	0.0119	1
11031	OCDF	39001-02-0	0.380	JBQ	10.9	0.0223	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.226				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135370
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 13:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH072-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135370
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 13:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH072-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/27/2013 09:38	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 14:32	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 04:30	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 02:33	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 13:57	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 14:44	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:48	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:48	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 11:48	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:48	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135370
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 13:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55400 SDG#: PH072-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 12:45	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13204039401A	07/23/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401B	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135371
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 14:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55404 SDG#: PH072-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	0.40	J	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.67
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135371
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 14:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55404 SDG#: PH072-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,500		44.5	8.02	1
06944	Antimony	7440-36-0	4.45	U	4.45	0.823	1
06935	Arsenic	7440-38-2	7.61		4.45	0.779	1
06946	Barium	7440-39-3	133		1.11	0.0367	1
06947	Beryllium	7440-41-7	1.06	J	1.11	0.0746	1
07914	Boron	7440-42-8	4.27	J	11.1	0.935	1
06949	Cadmium	7440-43-9	0.201	J	1.11	0.0846	1
01650	Calcium	7440-70-2	22,000		22.3	3.72	1
06951	Chromium	7440-47-3	37.1		3.34	0.178	1
06952	Cobalt	7440-48-4	9.87		1.11	0.110	1
06953	Copper	7440-50-8	18.1		2.23	0.323	1
01654	Iron	7439-89-6	35,500		89.0	8.06	2
06955	Lead	7439-92-1	10.6		3.34	0.556	1
01656	Lithium	7439-93-2	26.8		4.5	0.38	1
01657	Magnesium	7439-95-4	7,710		11.1	1.86	1
06958	Manganese	7439-96-5	402		1.11	0.0924	1
06960	Molybdenum	7439-98-7	2.23	U	2.23	0.189	1
06961	Nickel	7440-02-0	20.1		2.23	0.145	1
10145	Phosphorus	7723-14-0	249		11.1	3.22	1
01662	Potassium	7440-09-7	3,320		111	9.28	1
01667	Sodium	7440-23-5	682		111	18.6	1
06969	Tin	7440-31-5	3.36	J	11.1	0.245	1
06970	Titanium	7440-32-6	1,420		1.11	0.189	1
06971	Vanadium	7440-62-2	72.0		1.11	0.145	1
06972	Zinc	7440-66-6	67.9		4.45	0.223	1
10146	Zirconium	7440-67-7	7.87		5.56	0.935	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.198	J	0.445	0.111	2
06142	Silver	7440-22-4	0.0505	J	0.223	0.0289	2
06144	Strontium	7440-24-6	75.2		0.445	0.0757	2
06145	Thallium	7440-28-0	0.321		0.223	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182	U	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	8.34		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135371
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 14:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55404 SDG#: PH072-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135371
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 14:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55404 SDG#: PH072-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.13	U	1.13	0.0275	1
11031	12378-PeCDD	40321-76-4	0.0595	JBQ	5.64	0.0277	1
11031	123478-HxCDD	39227-28-6	5.64	U	5.64	0.0182	1
11031	123678-HxCDD	57653-85-7	0.0600	JB	5.64	0.0187	1
11031	123789-HxCDD	19408-74-3	0.148	JB	5.64	0.0195	1
11031	1234678-HpCDD	35822-46-9	0.124	JBQ	5.64	0.0204	1
11031	OCDD	3268-87-9	0.315	JB	11.3	0.0204	1
11031	2378-TCDF	51207-31-9	1.13	U	1.13	0.0236	1
11031	12378-PeCDF	57117-41-6	0.0720	JBQ	5.64	0.0198	1
11031	23478-PeCDF	57117-31-4	5.64	U	5.64	0.0191	1
11031	123478-HxCDF	70648-26-9	0.0551	JBQ	5.64	0.0110	1
11031	123678-HxCDF	57117-44-9	0.0308	JB	5.64	0.0103	1
11031	123789-HxCDF	72918-21-9	0.213	JB	5.64	0.0124	1
11031	234678-HxCDF	60851-34-5	0.0297	JBQ	5.64	0.0106	1
11031	1234678-HpCDF	67562-39-4	0.0258	JBQ	5.64	0.00726	1
11031	1234789-HpCDF	55673-89-7	0.0143	JB	5.64	0.0106	1
11031	OCDF	39001-02-0	0.0875	JBQ	11.3	0.0258	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0454				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	62	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	62	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	49	24 - 169
13C12-12378-PeCDF	59	24 - 185
13C12-23478-PeCDF	59	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	65	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135371
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 14:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55404 SDG#: PH072-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135371
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 14:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55404 SDG#: PH072-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/27/2013 10:10	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/30/2013 16:37	Laura M Krieger	23.67
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320431795	07/23/2013 16:08	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320431795	07/23/2013 16:10	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 14:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 03:07	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 03:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 14:01	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 14:48	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-554-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135371
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 14:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55404 SDG#: PH072-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:51	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:51	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 11:51	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:51	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 12:47	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13204039401A	07/23/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401B	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135372
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 11:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH072-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135372
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 11:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH072-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	35,200		43.8	7.89	1
06944	Antimony	7440-36-0	4.38	U	4.38	0.809	1
06935	Arsenic	7440-38-2	8.16		4.38	0.766	1
06946	Barium	7440-39-3	159		1.09	0.0361	1
06947	Beryllium	7440-41-7	1.13		1.09	0.0733	1
07914	Boron	7440-42-8	4.09	J	10.9	0.919	1
06949	Cadmium	7440-43-9	0.168	J	1.09	0.0831	1
01650	Calcium	7440-70-2	17,100		21.9	3.65	1
06951	Chromium	7440-47-3	42.5		3.28	0.175	1
06952	Cobalt	7440-48-4	13.2		1.09	0.108	1
06953	Copper	7440-50-8	19.7		2.19	0.317	1
01654	Iron	7439-89-6	38,100		87.5	7.92	2
06955	Lead	7439-92-1	12.5		3.28	0.547	1
01656	Lithium	7439-93-2	29.1		4.4	0.37	1
01657	Magnesium	7439-95-4	8,740		10.9	1.83	1
06958	Manganese	7439-96-5	506		1.09	0.0908	1
06960	Molybdenum	7439-98-7	0.242	J	2.19	0.186	1
06961	Nickel	7440-02-0	24.5		2.19	0.142	1
10145	Phosphorus	7723-14-0	299		10.9	3.16	1
01662	Potassium	7440-09-7	4,210		109	9.12	1
01667	Sodium	7440-23-5	320		109	18.3	1
06969	Tin	7440-31-5	3.44	J	10.9	0.241	1
06970	Titanium	7440-32-6	1,560		1.09	0.186	1
06971	Vanadium	7440-62-2	79.2		1.09	0.142	1
06972	Zinc	7440-66-6	77.8		4.38	0.219	1
10146	Zirconium	7440-67-7	9.06		5.47	0.919	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.225	J	0.438	0.109	2
06142	Silver	7440-22-4	0.0593	J	0.219	0.0284	2
06144	Strontium	7440-24-6	59.5		0.438	0.0744	2
06145	Thallium	7440-28-0	0.348		0.219	0.0328	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.67		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135372
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 11:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH072-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0761 JB	1.10	0.0206	1
11031	12378-PeCDD	40321-76-4	0.130 JBQ	5.50	0.0234	1
11031	123478-HxCDD	39227-28-6	0.103 JBQ	5.50	0.0197	1
11031	123678-HxCDD	57653-85-7	0.124 JB	5.50	0.0209	1
11031	123789-HxCDD	19408-74-3	0.198 JBQ	5.50	0.0215	1
11031	1234678-HpCDD	35822-46-9	0.342 JB	5.50	0.0228	1
11031	OCDD	3268-87-9	1.46 JBQ	11.0	0.0167	1
11031	2378-TCDF	51207-31-9	0.0754 JQ	1.10	0.0215	1
11031	12378-PeCDF	57117-41-6	0.193 JBQ	5.50	0.0140	1
11031	23478-PeCDF	57117-31-4	0.140 JB	5.50	0.0133	1
11031	123478-HxCDF	70648-26-9	0.120 JBQ	5.50	0.0115	1
11031	123678-HxCDF	57117-44-9	0.0936 JBQ	5.50	0.0109	1
11031	123789-HxCDF	72918-21-9	0.184 JB	5.50	0.0129	1
11031	234678-HxCDF	60851-34-5	0.0687 JBQ	5.50	0.0114	1
11031	1234678-HpCDF	67562-39-4	0.103 JB	5.50	0.00819	1
11031	1234789-HpCDF	55673-89-7	0.0910 JBQ	5.50	0.0126	1
11031	OCDF	39001-02-0	0.232 JB	11.0	0.0201	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.153			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	62	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135372
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 11:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH072-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135372
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 11:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH072-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/27/2013 10:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 15:08	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 04:51	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 07:24	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 14:05	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 14:52	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:53	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:53	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 11:53	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:53	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135372
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 11:30 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55600 SDG#: PH072-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 12:49	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13204039401A	07/23/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401B	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135373
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 12:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55604 SDG#: PH072-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	26.43
	Upon receipt of the VOA soil sample at the laboratory, it was observed that the sampler was not full. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135373
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 12:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55604 SDG#: PH072-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	3.2	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	9.3	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,500		42.5	7.66	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.786	1
06935	Arsenic	7440-38-2	3.98	J	4.25	0.744	1
06946	Barium	7440-39-3	72.7		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.473	J	1.06	0.0712	1
07914	Boron	7440-42-8	3.34	J	10.6	0.892	1
06949	Cadmium	7440-43-9	0.501	J	1.06	0.0807	1
01650	Calcium	7440-70-2	276,000		106	17.7	5
06951	Chromium	7440-47-3	14.7		3.19	0.170	1
06952	Cobalt	7440-48-4	2.30		1.06	0.105	1
06953	Copper	7440-50-8	3.65	J	10.6	1.54	5
01654	Iron	7439-89-6	12,800		42.5	3.85	1
06955	Lead	7439-92-1	9.75	J	15.9	2.66	5
01656	Lithium	7439-93-2	7.7	J	21.2	1.8	5
	Reporting limits were raised due to interference from the sample matrix.						
01657	Magnesium	7439-95-4	3,620		10.6	1.77	1
06958	Manganese	7439-96-5	99.1		1.06	0.0882	1
06960	Molybdenum	7439-98-7	2.12	U	2.12	0.181	1
06961	Nickel	7440-02-0	7.56		2.12	0.138	1
10145	Phosphorus	7723-14-0	230		53.1	15.3	5
01662	Potassium	7440-09-7	1,100		106	8.86	1
01667	Sodium	7440-23-5	182		106	17.7	1
06969	Tin	7440-31-5	2.23	J	10.6	0.234	1
06970	Titanium	7440-32-6	668		1.06	0.181	1
06971	Vanadium	7440-62-2	29.2		1.06	0.138	1
06972	Zinc	7440-66-6	67.2		21.2	1.06	5
10146	Zirconium	7440-67-7	4.28	J	5.31	0.892	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.425	U	0.425	0.106	2
06142	Silver	7440-22-4	0.212	U	0.212	0.0276	2
06144	Strontium	7440-24-6	204		1.06	0.181	5
06145	Thallium	7440-28-0	0.114	J	0.212	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0177	U	0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.10		0.0100	0.0100	1
	The pH was measured in water at 22 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135373
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 12:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55604 SDG#: PH072-10*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	8.6	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135373
LL Group # 1405909
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Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55604 SDG#: PH072-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.103	JB	1.08	0.0212	1
11031	12378-PeCDD	40321-76-4	0.233	JB	5.38	0.0242	1
11031	123478-HxCDD	39227-28-6	0.147	JB	5.38	0.0193	1
11031	123678-HxCDD	57653-85-7	0.117	JBQ	5.38	0.0204	1
11031	123789-HxCDD	19408-74-3	0.126	JB	5.38	0.0205	1
11031	1234678-HpCDD	35822-46-9	0.898	JB	5.38	0.0261	1
11031	OCDD	3268-87-9	7.71	JB	10.8	0.0175	1
11031	2378-TCDF	51207-31-9	0.0531	J	1.08	0.0187	1
11031	12378-PeCDF	57117-41-6	0.259	JB	5.38	0.0142	1
11031	23478-PeCDF	57117-31-4	0.232	JB	5.38	0.0136	1
11031	123478-HxCDF	70648-26-9	0.175	JB	5.38	0.0117	1
11031	123678-HxCDF	57117-44-9	0.162	JB	5.38	0.0109	1
11031	123789-HxCDF	72918-21-9	0.104	JBQ	5.38	0.0123	1
11031	234678-HxCDF	60851-34-5	0.111	JB	5.38	0.0113	1
11031	1234678-HpCDF	67562-39-4	0.173	JBQ	5.38	0.00974	1
11031	1234789-HpCDF	55673-89-7	0.0783	JB	5.38	0.0138	1
11031	OCDF	39001-02-0	0.380	JB	10.8	0.0207	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.503				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135373
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 12:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55604 SDG#: PH072-10*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135373
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 12:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55604 SDG#: PH072-10*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13205SLD026	07/27/2013 11:14	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13205SLD026	07/25/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/26/2013 04:54	Laura M Krieger	26.43
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320431795	07/23/2013 16:12	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320431795	07/23/2013 16:13	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132070001A	07/29/2013 15:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	2	132070001A	07/26/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120017A	08/02/2013 09:53	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120017A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 08:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/30/2013 14:09	Joanne M Gates	5
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/30/2013 14:09	Joanne M Gates	5
01654	Iron	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132060637001	07/30/2013 14:09	Joanne M Gates	5
01656	Lithium	SW-846 6010C	1	132060637001	07/30/2013 14:09	Joanne M Gates	5
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/30/2013 14:09	Joanne M Gates	5
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/30/2013 14:09	Joanne M Gates	5
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 14:56	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-556-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7135373
LL Group # 1405909
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/22/2013 12:00 by VC

Submitted: 07/23/2013 09:20
Reported: 08/02/2013 14:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55604 SDG#: PH072-10*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:55	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:55	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 12:46	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:55	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 12:55	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13204039401A	07/23/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13205162401B	07/24/2013 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405909
Reported: 08/02/13 at 02:10 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13205SLD026	Sample number(s): 7135364-7135368,7135370-7135373									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	107		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	94		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	100		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	104		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	103		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	115		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	99		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	124		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	126		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	102		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	106		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	126*		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	110		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	125		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	106		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	106		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	77		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	121		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	98		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	100		71-120		
Batch number: 13204A20A	Sample number(s): 7135369									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	104	99	75-135	5	30
Batch number: 13206A16A	Sample number(s): 7135365-7135368,7135373									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	76		67-119		
Batch number: 13210B16A	Sample number(s): 7135371									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	77		67-119		
Batch number: 132070001A	Sample number(s): 7135364-7135368,7135370-7135373									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	72	72	36-106	0	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405909
Reported: 08/02/13 at 02:10 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	99		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132120017A	Sample number(s): 7135364-7135368,7135370-7135373									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	105		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	106		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	106		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	104		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	85		49-107		
Batch number: 132060637001	Sample number(s): 7135364-7135368,7135370-7135373									
Aluminum	40.0	U	40.0	7.21	mg/kg	108		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	105		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	102		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	106		80-120		
Calcium	5.04	J	20.0	3.34	mg/kg	108		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	104		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	108		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	108		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	106		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	109		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	107		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	107		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	109		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	108		80-120		
Potassium	100 U		100.	8.34	mg/kg	108		80-120		
Sodium	100 U		100.	16.7	mg/kg	108		80-120		
Tin	1.80	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	103		80-120		
Zinc	0.449	J	4.00	0.200	mg/kg	107		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	107		80-120		
Batch number: 132060637001A	Sample number(s): 7135364-7135368,7135370-7135373									
Silver	0.200	U	0.200	0.0260	mg/kg	108		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	118		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	111		80-120		
Batch number: 132060637001B	Sample number(s): 7135364-7135368,7135370-7135373									
Selenium	0.400	U	0.400	0.100	mg/kg	110		80-120		
Batch number: 132060638001	Sample number(s): 7135364-7135368,7135370-7135373									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	107		85-120		
Batch number: 13204039401A	Sample number(s): 7135364-7135368,7135370-7135373									

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405909
Reported: 08/02/13 at 02:10 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
15a pH by 9045D					99		95-105		
Batch number: 13205162401B	Sample number(s): 7135364-7135368,7135370-7135373								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13210001	Sample number(s): 7135364-7135365,7135370-7135373								
2378-TCDD	0.0257 J	1.00	0.0190	ng/kg	94		67-158		
12378-PeCDD	0.0311 J	5.00	0.0215	ng/kg	96		70-142		
123478-HxCDD	0.0355 J	5.00	0.0137	ng/kg	102		70-164		
123678-HxCDD	0.0248 J	5.00	0.0146	ng/kg	100		76-134		
123789-HxCDD	0.0327 J	5.00	0.0146	ng/kg	99		64-162		
1234678-HpCDD	0.0567 J	5.00	0.0155	ng/kg	98		70-140		
OCDD	0.283 J	10.0	0.0177	ng/kg	99		78-144		
2378-TCDF	1.00 U	1.00	0.0191	ng/kg	94		75-158		
12378-PeCDF	0.0578 J	5.00	0.0121	ng/kg	95		80-134		
23478-PeCDF	0.0367 J	5.00	0.0116	ng/kg	97		68-160		
123478-HxCDF	0.0517 J	5.00	0.00770	ng/kg	102		72-134		
123678-HxCDF	0.0377 J	5.00	0.00710	ng/kg	97		84-130		
123789-HxCDF	0.0544 J	5.00	0.00860	ng/kg	99		78-130		
234678-HxCDF	0.0342 J	5.00	0.00710	ng/kg	99		70-156		
1234678-HpCDF	0.0332 J	5.00	0.00590	ng/kg	95		82-122		
1234789-HpCDF	0.0325 J	5.00	0.0102	ng/kg	98		78-138		
OCDF	0.0947 J	10.0	0.0213	ng/kg	91		63-170		
TEQ WHO 2005 - EDLx0.0	0.0278			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13205SLD026	Sample number(s): 7135364-7135368,7135370-7135373 UNSPK: P133304								
Acenaphthene	87	94	48-127	9	30				
Acenaphthylene	81	89	49-121	10	30				
Anthracene	81	91	52-126	13	30				
Benzo(a)anthracene	88	96	32-135	9	30				
Benzo(a)pyrene	83	93	36-138	13	30				
Benzo(b)fluoranthene	90	101	26-142	13	30				
Benzo(e)pyrene	82	93	70-130	14	30				
Benzo(g,h,i)perylene	76	84	33-141	10	30				
Benzo(k)fluoranthene	88	101	47-129	14	30				
Butylbenzylphthalate	115	127	59-153	11	30				
Di-n-butylphthalate	104	116	62-154	12	30				
Chrysene	84	95	29-148	12	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405909
Reported: 08/02/13 at 02:10 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dibenz(a,h)anthracene	84	93	34-125	11	30				
Diethylphthalate	108	118	76-127	10	30				
Dimethylphthalate	89	96	62-136	8	30				
Bis(2-Ethylhexyl)phthalate	96	116	39-167	15	30				
Fluoranthene	87	98	47-135	13	30				
Fluorene	83	95	50-129	14	30				
Indeno(1,2,3-cd)pyrene	83	92	17-136	11	30				
1-Methylnaphthalene	89	97	50-131	10	30				
2-Methylnaphthalene	87	95	28-144	10	30				
Naphthalene	83	89	31-148	7	30				
N-Nitrosodimethylamine	64	69	48-113	8	30				
Di-n-octylphthalate	108	125	52-162	15	30				
Phenanthrene	83	94	29-142	14	30				
Pyrene	86	96	26-143	12	30				
Batch number: 13206A16A	Sample number(s): 7135365-7135368,7135373 UNSPK: P138011								
11a TPH by EPA 8015B GRO	87	69	39-118	25	30				
Batch number: 13210B16A	Sample number(s): 7135371 UNSPK: P141113								
11a TPH by EPA 8015B GRO	75	75	39-118	15	30				
Batch number: 132070001A	Sample number(s): 7135364-7135368,7135370-7135373 UNSPK: P133304								
PCB-1016	91	84	16-146	8	50				
PCB-1260	90	85	40-134	6	50				
Batch number: 132120017A	Sample number(s): 7135364-7135368,7135370-7135373 UNSPK: P133304								
EFH (C12-C14)	98	98	49-123	0	20				
EFH (C15-C20)	150*	147*	49-123	2	20				
EFH (C21-C30)	105	214*	49-123	33*	20				
EFH (C30-C40)	14 (2)	6 (2)	49-123	1	20				
EFH (C8-C11)	80	81	49-123	2	20				
Batch number: 132060637001	Sample number(s): 7135364-7135368,7135370-7135373 UNSPK: P138011 BKG: P138011								
Aluminum	2431 (2)	1232 (2)	75-125	7	20	31,800	31,800	0	20
Antimony	61*	66*	75-125	8	20	3.85 U	3.85 U	0 (1)	20
Arsenic	95	94	75-125	1	20	7.03	6.63	6 (1)	20
Barium	91	93	75-125	2	20	119	109	9	20
Beryllium	99	101	75-125	2	20	0.896 J	0.896 J	0 (1)	20
Boron	94	95	75-125	1	20	2.25 J	3.40 J	41* (1)	20
Cadmium	92	94	75-125	2	20	0.151 J	0.296 J	65* (1)	20
Calcium	1129 (2)	-272 (2)	75-125	12	20	41,700	54,400	26*	20
Chromium	108	101	75-125	3	20	33.4	34.0	2	20
Cobalt	78	82	75-125	4	20	14.4	9.10	45*	20
Copper	100	102	75-125	1	20	15.7	15.4	2	20
Iron	804 (2)	-214 (2)	75-125	3	20	29,800	28,200	5	20
Lead	85	91	75-125	4	20	10.0	10.1	1 (1)	20
Lithium	102	102	75-125	0	20	25.2	24.7	2	20
Magnesium	292 (2)	145 (2)	75-125	4	20	6,400	6,260	2	20
Manganese	-280	-294	75-125	2	20	426	264	47*	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405909
Reported: 08/02/13 at 02:10 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
	(2)	(2)							
Molybdenum	91	92	75-125	0	20	1.92 U	1.92 U	0 (1)	20
Nickel	89	90	75-125	1	20	17.4	15.9	9	20
Phosphorus	103	94	75-125	5	20	87.6	94.4	7	20
Potassium	131*	104	75-125	8	20	2,210	2,100	5	20
Sodium	101	101	75-125	0	20	133	129	3 (1)	20
Tin	89	90	75-125	1	20	3.16 J	3.13 J	1 (1)	20
Titanium	226 (2)	-22 (2)	75-125	20	20	1,090	1,100	1	20
Vanadium	104	92	75-125	5	20	64.7	63.4	2	20
Zinc	98	96	75-125	1	20	53.1	53.4	1	20
Zirconium	100	99	75-125	1	20	6.46	7.83	19 (1)	20
Batch number: 132060637001A	Sample number(s): 7135364-7135368,7135370-7135373 UNSPK: P138011 BKG: P138011								
Silver	96	108	75-125	12	20	0.0504 J	0.0393 J	25* (1)	20
Strontium	58 (2)	328 (2)	75-125	28*	20	58.5	61.6	5	20
Thallium	101	131*	75-125	16	20	0.266	0.279	5 (1)	20
Batch number: 132060637001B	Sample number(s): 7135364-7135368,7135370-7135373 UNSPK: P138011 BKG: P138011								
Selenium	90	89	75-125	1	20	0.385 U	0.385 U	0 (1)	20
Batch number: 132060638001	Sample number(s): 7135364-7135368,7135370-7135373 UNSPK: P138011 BKG: P138011								
3a Mercury 7471A	123	122	65-135	1	20	0.0160 U	0.0161 U	0 (1)	20
Batch number: 13204039401A	Sample number(s): 7135364-7135368,7135370-7135373 BKG: P135549								
15a pH by 9045D						10.9	10.9	0	3
Batch number: 13205162401B	Sample number(s): 7135364-7135368,7135370-7135373 BKG: 7135368								
14a Moisture Content by 160.3						5.5	5.8	5	20
Batch number: 13210001	Sample number(s): 7135364-7135365,7135370-7135373 UNSPK: P138011								
2378-TCDD	89	90	40-135	2	20				
12378-PeCDD	94	93	40-135	4	20				
123478-HxCDD	98	103	40-135	2	20				
123678-HxCDD	97	96	40-135	3	20				
123789-HxCDD	97	98	40-135	1	20				
1234678-HpCDD	93	97	40-135	1	20				
OCDD	96	96	40-135	1	20				
2378-TCDF	92	92	40-135	2	20				
12378-PeCDF	93	92	40-135	3	20				
23478-PeCDF	96	94	40-135	5	20				
123478-HxCDF	98	98	40-135	2	20				
123678-HxCDF	96	96	40-135	2	20				
123789-HxCDF	97	97	40-135	2	20				
234678-HxCDF	97	97	40-135	3	20				
1234678-HpCDF	94	95	40-135	0	20				
1234789-HpCDF	96	96	40-135	2	20				
OCDF	89	90	40-135	1	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405909
Reported: 08/02/13 at 02:10 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13205SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7135364	80	83	92
7135365	84	90	101
7135366	76	85	85
7135367	81	88	92
7135368	86	94	100
7135370	83	85	98
7135371	84	90	99
7135372	86	91	102
7135373	80	88	96
Blank	90	95	102
LCS	89	93	99
MS	80	84	96
MSD	85	89	98
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13204A20A

	Trifluorotoluene-F
7135369	87
Blank	87
LCS	118
LCSD	118
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13206A16A

	Trifluorotoluene-F
7135365	63
7135366	67
7135367	63
7135368	72
7135373	68
Blank	76
LCS	75
MS	75
MSD	69
Limits:	61-122

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13210B16A

	Trifluorotoluene-F
7135371	99

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405909
Reported: 08/02/13 at 02:10 PM

Surrogate Quality Control

Blank	78	
LCS	78	
MS	69	
MSD	68	
Limits:	61-122	

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132070001A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7135364	101	96
7135365	95	88
7135366	102	96
7135367	102	93
7135368	105	99
7135370	93	90
7135371	97	91
7135372	90	85
7135373	98	93
Blank	104	104
LCS	107	105
LCSD	108	106
MS	102	93
MSD	100	97
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132120017A

	Chlorobenzene	Orthoterphenyl
7135364	94	91
7135365	96	82
7135366	96	89
7135367	99	99
7135368	103	104
7135370	95	88
7135371	94	89
7135372	91	83
7135373	103	104
Blank	104	104
LCS	101	103
MS	98	101
MSD	102	104
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13210001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7135364	60	63	63	68	63	63
7135365	57	63	66	71	67	66
7135370	66	66	69	74	70	72
7135371	57	59	60	65	61	62

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1405909
Reported: 08/02/13 at 02:10 PM

Surrogate Quality Control

7135372	64	63	67	72	66	69
7135373	68	65	66	71	67	72
Blank	62	65	70	76	72	73
MS	65	66	69	73	65	66
MSD	66	66	68	72	67	67
OPR	60	68	67	73	70	67
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7135364	75	59	59	64	64	68
7135365	85	64	63	65	69	70
7135370	92	67	67	72	74	74
7135371	74	60	61	62	62	67
7135372	83	63	67	65	68	73
7135373	82	67	68	69	68	73
Blank	93	67	69	69	76	77
MS	85	60	58	69	72	72
MSD	86	62	60	71	70	74
OPR	91	65	65	72	71	74
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7135364	62	64	65	51	61	
7135365	66	70	71	49	62	
7135370	71	76	78	54	68	
7135371	62	64	67	49	59	
7135372	67	71	74	51	62	
7135373	68	72	75	56	65	
Blank	73	77	79	50	66	
MS	67	70	70	52	65	
MSD	68	70	71	53	67	
OPR	69	75	77	51	67	
Limits:	28-130	23-140	17-157	24-169	24-185	

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13013 1405909 7135364-73

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/22/2013
CarrierName: FedEx
AirbillNo: 796287040463

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130722-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	1,4 Dioxane 8260 SIM	VOCs 8260	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-550-SA8-SB-0.0-0.5	7/22/13 08:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-550-SA8-SB-0.0-0.5	7/22/13 08:30	SO	None	1 - 4 oz glass	10 day														X																	
SL-550-SA8-SB-4.0-5.0	7/22/13 09:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X						X											
SL-550-SA8-SB-9.0-10.0	7/22/13 09:15	SO	None	2 - 16 oz glass	10 day	X	X					X			X				X						X											
SL-550-SA8-SB-14.0-15.0	7/22/13 09:30	SO	None	2 - 16 oz glass	10 day	X	X					X			X				X						X											
SL-550-SA8-SB-17.0-18.0	7/22/13 09:45	SO	None	2 - 16 oz glass	10 day	X	X					X			X				X						X											

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Hupe	07/22/2013	1600							Brandy 7.23.13 Barclay 920		

13013 1405909 7135364-73

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/22/2013
CarrierName: FedEx
AirbillNo: 796287040463

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130722-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-550-SA8-SB-4.0-5.0	7/22/13 09:00	SO	None	2 - Encore	10 day																			X												
SL-550-SA8-SB-9.0-10.0	7/22/13 09:15	SO	None	2 - Encore	10 day																			X												
SL-550-SA8-SB-14.0-15.0	7/22/13 09:30	SO	None	2 - Encore	10 day																			X												
SL-550-SA8-SB-17.0-18.0	7/22/13 09:45	SO	None	2 - Encore	10 day																			X												
TB-072213	7/22/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-554-SA8-SB-0.0-0.5	7/22/13 13:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-554-SA8-SB-0.0-0.5	7/22/13 13:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-554-SA8-SB-4.0-5.0	7/22/13 14:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-554-SA8-SB-4.0-5.0	7/22/13 14:00	SO	None	2 - Encore	10 day																			X												
SL-556-SA8-SB-0.0-0.5	7/22/13 11:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-556-SA8-SB-0.0-0.5	7/22/13 11:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-556-SA8-SB-4.0-5.0	7/22/13 12:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-556-SA8-SB-4.0-5.0	7/22/13 12:00	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	07/22/2013	1600							Buenely Bailey	7-23-13	920

COC Rev 2

COC: 20130722-02, Page 1 of 1

1 of 1

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Environmental Sample Administration Receipt Documentation Log

1405909

Client/Project: COM

Date of Receipt: 9.23.13

Time of Receipt: 920

Source Code: SD-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DH46	3.4	TB	WI	X	B	
2	↓	1.5	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Bardley 2299 **Date/Time:** 9.23.13 956

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH073

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 05, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/24/2013
Group Number: 1406357
SDG: PH073
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-551-SA8-SB-0.0-0.5 Soil	7138010
SL-551-SA8-SB-4.0-5.0 Soil	7138011
SL-551-SA8-SB-4.0-5.0MS Soil	7138012
SL-551-SA8-SB-4.0-5.0MSD Soil	7138013
SL-551-SA8-SB-4.0-5.0DUP Soil	7138014
SL-851-SA8-SB-4.0-5.0 Soil	7138015
SL-551-SA8-SB-9.0-10.0 Soil	7138016
SL-551-SA8-SB-14.0-15.0 Soil	7138017
SL-551-SA8-SB-19.0-20.0 Soil	7138018
SL-555-SA8-SB-0.0-0.5 Soil	7138019
SL-555-SA8-SB-4.0-5.0 Soil	7138020
SL-557A-SA8-SB-0.0-0.5 Soil	7138021
SL-557B-SA8-SB-0.0-0.5 Soil	7138022
SL-557C-SA8-SB-0.0-0.5 Soil	7138023
SL-557D-SA8-SB-0.0-0.5 Soil	7138024
TB-072313 Water	7138025

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-551-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138010
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 07:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH073-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	0.59	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.1	J	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	0.97	J	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138010
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 07:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH073-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	36,700		44.4	8.01	1
06944	Antimony	7440-36-0	4.44	U	4.44	0.822	1
06935	Arsenic	7440-38-2	8.43		4.44	0.777	1
06946	Barium	7440-39-3	149		1.11	0.0366	1
06947	Beryllium	7440-41-7	1.11	J	1.11	0.0744	1
07914	Boron	7440-42-8	4.75	J	11.1	0.933	1
06949	Cadmium	7440-43-9	0.122	J	1.11	0.0844	1
01650	Calcium	7440-70-2	23,900		22.2	3.71	1
06951	Chromium	7440-47-3	42.3		3.33	0.178	1
06952	Cobalt	7440-48-4	11.1		1.11	0.110	1
06953	Copper	7440-50-8	20.5		2.22	0.322	1
01654	Iron	7439-89-6	36,000		88.8	8.04	2
06955	Lead	7439-92-1	12.0		3.33	0.555	1
01656	Lithium	7439-93-2	31.7		4.4	0.38	1
01657	Magnesium	7439-95-4	8,820		11.1	1.85	1
06958	Manganese	7439-96-5	459		1.11	0.0922	1
06960	Molybdenum	7439-98-7	0.219	J	2.22	0.189	1
06961	Nickel	7440-02-0	23.3		2.22	0.144	1
10145	Phosphorus	7723-14-0	381		11.1	3.21	1
01662	Potassium	7440-09-7	5,300		111	9.26	1
01667	Sodium	7440-23-5	139		111	18.5	1
06969	Tin	7440-31-5	3.55	J	11.1	0.244	1
06970	Titanium	7440-32-6	1,740		1.11	0.189	1
06971	Vanadium	7440-62-2	80.7		1.11	0.144	1
06972	Zinc	7440-66-6	84.0		4.44	0.222	1
10146	Zirconium	7440-67-7	9.49		5.55	0.933	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.274	J	0.444	0.111	2
06142	Silver	7440-22-4	0.0554	J	0.222	0.0289	2
06144	Strontium	7440-24-6	68.2		0.444	0.0755	2
06145	Thallium	7440-28-0	0.463		0.222	0.0333	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.82		0.0100	0.0100	1
	The pH was measured in water at 21 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138010
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 07:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH073-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0679	JB	1.13	0.0227	1
11031	12378-PeCDD	40321-76-4	0.300	JB	5.63	0.0255	1
11031	123478-HxCDD	39227-28-6	0.124	JBQ	5.63	0.0210	1
11031	123678-HxCDD	57653-85-7	0.143	JBQ	5.63	0.0225	1
11031	123789-HxCDD	19408-74-3	0.223	JBQ	5.63	0.0225	1
11031	1234678-HpCDD	35822-46-9	0.392	JB	5.63	0.0207	1
11031	OCDD	3268-87-9	2.02	JB	11.3	0.0199	1
11031	2378-TCDF	51207-31-9	0.132	J	1.13	0.0207	1
11031	12378-PeCDF	57117-41-6	0.417	JB	5.63	0.0153	1
11031	23478-PeCDF	57117-31-4	0.301	JB	5.63	0.0145	1
11031	123478-HxCDF	70648-26-9	0.192	JB	5.63	0.0144	1
11031	123678-HxCDF	57117-44-9	0.208	JB	5.63	0.0135	1
11031	123789-HxCDF	72918-21-9	0.227	JBQ	5.63	0.0162	1
11031	234678-HxCDF	60851-34-5	0.109	JB	5.63	0.0139	1
11031	1234678-HpCDF	67562-39-4	0.132	JB	5.63	0.00702	1
11031	1234789-HpCDF	55673-89-7	0.0435	JBQ	5.63	0.0106	1
11031	OCDF	39001-02-0	0.254	JBQ	11.3	0.0219	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.540				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	63	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	49	24 - 169
13C12-12378-PeCDF	59	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	62	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138010
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 07:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH073-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138010
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 07:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH073-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13206SLD026	07/30/2013 09:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13206SLD026	07/26/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 19:43	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 14:14	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120018A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 09:17	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 14:17	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 15:00	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:58	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:58	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 11:58	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:58	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138010
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 07:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55100 SDG#: PH073-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 12:57	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13205039401A	07/24/2013 20:40	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138011
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20.63
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138011
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,200		40.2	7.25	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.744	1
06935	Arsenic	7440-38-2	7.35		4.02	0.704	1
06946	Barium	7440-39-3	125		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.937	J	1.01	0.0674	1
07914	Boron	7440-42-8	2.35	J	10.1	0.845	1
06949	Cadmium	7440-43-9	0.158	J	1.01	0.0764	1
01650	Calcium	7440-70-2	43,700		20.1	3.36	1
06951	Chromium	7440-47-3	34.9		3.02	0.161	1
06952	Cobalt	7440-48-4	15.1		1.01	0.0996	1
06953	Copper	7440-50-8	16.4		2.01	0.292	1
01654	Iron	7439-89-6	31,200		80.5	7.28	2
06955	Lead	7439-92-1	10.5		3.02	0.503	1
01656	Lithium	7439-93-2	26.4		4.0	0.34	1
01657	Magnesium	7439-95-4	6,690		10.1	1.68	1
06958	Manganese	7439-96-5	445		1.01	0.0835	1
06960	Molybdenum	7439-98-7	2.01	U	2.01	0.171	1
06961	Nickel	7440-02-0	18.2		2.01	0.131	1
10145	Phosphorus	7723-14-0	91.6		10.1	2.91	1
01662	Potassium	7440-09-7	2,310		101	8.39	1
01667	Sodium	7440-23-5	139		101	16.8	1
06969	Tin	7440-31-5	3.30	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,140		1.01	0.171	1
06971	Vanadium	7440-62-2	67.7		1.01	0.131	1
06972	Zinc	7440-66-6	55.5		4.02	0.201	1
10146	Zirconium	7440-67-7	6.76		5.03	0.845	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.402	U	0.402	0.101	2
06142	Silver	7440-22-4	0.0527	J	0.201	0.0262	2
06144	Strontium	7440-24-6	61.2		0.402	0.0684	2
06145	Thallium	7440-28-0	0.278		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.42		0.0100	0.0100	1
	The pH was measured in water at 21 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138011
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	4.4	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138011
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.997	U	0.997	0.0301	1
11031	12378-PeCDD	40321-76-4	0.118	JBQ	4.99	0.0301	1
11031	123478-HxCDD	39227-28-6	0.0680	JBQ	4.99	0.0171	1
11031	123678-HxCDD	57653-85-7	0.0539	JBQ	4.99	0.0187	1
11031	123789-HxCDD	19408-74-3	0.110	JBQ	4.99	0.0199	1
11031	1234678-HpCDD	35822-46-9	0.115	JB	4.99	0.0211	1
11031	OCDD	3268-87-9	0.907	JB	9.97	0.0242	1
11031	2378-TCDF	51207-31-9	0.0673	JQ	0.997	0.0238	1
11031	12378-PeCDF	57117-41-6	0.161	JB	4.99	0.0197	1
11031	23478-PeCDF	57117-31-4	0.154	JBQ	4.99	0.0182	1
11031	123478-HxCDF	70648-26-9	0.0963	JBQ	4.99	0.0122	1
11031	123678-HxCDF	57117-44-9	0.112	JB	4.99	0.0115	1
11031	123789-HxCDF	72918-21-9	0.0945	JB	4.99	0.0150	1
11031	234678-HxCDF	60851-34-5	0.0968	JBQ	4.99	0.0117	1
11031	1234678-HpCDF	67562-39-4	0.104	JB	4.99	0.00816	1
11031	1234789-HpCDF	55673-89-7	0.0312	JB	4.99	0.0128	1
11031	OCDF	39001-02-0	0.172	JBQ	9.97	0.0289	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0282				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	44	25 - 164
13C12-12378-PeCDD	49	25 - 181
13C12-123478-HxCDD	49	32 - 141
13C12-123678-HxCDD	54	28 - 130
13C12-123789-HxCDD	49	28 - 130
13C12-1234678-HpCDD	51	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	37	24 - 169
13C12-12378-PeCDF	46	24 - 185
13C12-23478-PeCDF	46	21 - 178
13C12-123478-HxCDF	48	26 - 152
13C12-123678-HxCDF	52	26 - 123
13C12-234678-HxCDF	48	28 - 136
13C12-123789-HxCDF	47	29 - 147
13C12-1234678-HpCDF	61	28 - 143
13C12-1234789-HpCDF	47	26 - 138
13C12-OCDF	46	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138011
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138011
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

55140 SDG#: PH073-02BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

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12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13206SLD026	07/30/2013 07:57	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13206SLD026	07/26/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/25/2013 18:14	Laura M Krieger	20.63
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320531807	07/24/2013 17:44	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320531807	07/24/2013 17:45	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 20:02	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 11:50	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120018A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 10:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 13:10	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 13:50	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138011
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:15	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:15	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 11:15	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:15	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 12:59	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13205039401A	07/24/2013 20:40	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138012
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	37		1.7	0.70	1
12969	Acenaphthylene	208-96-8	32		1.7	0.35	1
12969	Anthracene	120-12-7	33		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	34		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	34		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	37		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	32		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	36		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	34		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	44		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	43		19	6.3	1
12969	Chrysene	218-01-9	34		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	37		1.7	0.70	1
12969	Diethylphthalate	84-66-2	43		19	6.3	1
12969	Dimethylphthalate	131-11-3	36		19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	42		19	6.3	1
12969	Fluoranthene	206-44-0	35		1.7	0.70	1
12969	Fluorene	86-73-7	33		1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	37		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	34		1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	33		1.7	0.70	1
12969	Naphthalene	91-20-3	32		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	25		1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	40		19	6.3	1
12969	Phenanthrene	85-01-8	32		1.7	0.70	1
12969	Pyrene	129-00-0	33		1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.6		0.9	0.2	21.51
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	160		18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	170		18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138012
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	3.0	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.0	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	5.3	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	38,100		40.2	7.25	1
06944	Antimony	7440-36-0	30.6		4.02	0.744	1
06935	Arsenic	7440-38-2	21.6		4.02	0.704	1
06946	Barium	7440-39-3	307		1.01	0.0332	1
06947	Beryllium	7440-41-7	5.94		1.01	0.0674	1
07914	Boron	7440-42-8	192		10.1	0.845	1
06949	Cadmium	7440-43-9	4.77		1.01	0.0764	1
01650	Calcium	7440-70-2	48,200		20.1	3.36	1
06951	Chromium	7440-47-3	56.6		3.02	0.161	1
06952	Cobalt	7440-48-4	54.5		1.01	0.0996	1
06953	Copper	7440-50-8	41.6		2.01	0.292	1
01654	Iron	7439-89-6	32,000		80.5	7.28	2
06955	Lead	7439-92-1	23.2		3.02	0.503	1
01656	Lithium	7439-93-2	129		4.0	0.34	1
01657	Magnesium	7439-95-4	7,280		10.1	1.68	1
06958	Manganese	7439-96-5	304		1.01	0.0835	1
06960	Molybdenum	7439-98-7	184		2.01	0.171	1
06961	Nickel	7440-02-0	62.8		2.01	0.131	1
10145	Phosphorus	7723-14-0	195		10.1	2.91	1
01662	Potassium	7440-09-7	3,620		101	8.39	1
01667	Sodium	7440-23-5	1,150		101	16.8	1
06969	Tin	7440-31-5	361		10.1	0.221	1
06970	Titanium	7440-32-6	1,370		1.01	0.171	1
06971	Vanadium	7440-62-2	120		1.01	0.131	1
06972	Zinc	7440-66-6	105		4.02	0.201	1
10146	Zirconium	7440-67-7	107		5.03	0.845	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	1.80		0.402	0.101	2
06142	Silver	7440-22-4	9.71		0.201	0.0262	2
06144	Strontium	7440-24-6	65.9		0.402	0.0684	2
06145	Thallium	7440-28-0	0.685		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.206		0.0168	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	4.4		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138012
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.6	B	1.04	0.0409	1
11031	12378-PeCDD	40321-76-4	98.3	B	5.20	0.0369	1
11031	123478-HxCDD	39227-28-6	102	B	5.20	0.0312	1
11031	123678-HxCDD	57653-85-7	101	B	5.20	0.0345	1
11031	123789-HxCDD	19408-74-3	101	B	5.20	0.0347	1
11031	1234678-HpCDD	35822-46-9	97.2	B	5.20	0.0396	1
11031	OCDD	3268-87-9	200	B	10.4	0.0288	1
11031	2378-TCDF	51207-31-9	19.2		1.04	0.0458	1
11031	12378-PeCDF	57117-41-6	97.3	B	5.20	0.0361	1
11031	23478-PeCDF	57117-31-4	100	B	5.20	0.0338	1
11031	123478-HxCDF	70648-26-9	102	B	5.20	0.0370	1
11031	123678-HxCDF	57117-44-9	100	B	5.20	0.0363	1
11031	123789-HxCDF	72918-21-9	101	B	5.20	0.0458	1
11031	234678-HxCDF	60851-34-5	102	B	5.20	0.0371	1
11031	1234678-HpCDF	67562-39-4	97.5	B	5.20	0.0288	1
11031	1234789-HpCDF	55673-89-7	99.6	B	5.20	0.0485	1
11031	OCDF	39001-02-0	186	B	10.4	0.0331	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	58	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138012
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13206SLD026	07/30/2013 08:29	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13206SLD026	07/26/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/25/2013 18:52	Laura M Krieger	21.51
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320531807	07/24/2013 17:47	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320531807	07/24/2013 17:47	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 20:20	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 12:11	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120018A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 11:11	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 13:22	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 14:03	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138012
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132060637001B	08/02/2013 06:38	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:22	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 11:22	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:22	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 13:05	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138013
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	34		1.7	0.70	1
12969	Acenaphthylene	208-96-8	32		1.7	0.35	1
12969	Anthracene	120-12-7	31		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	35		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	34		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	36		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	32		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	36		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	35		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	46		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	45		19	6.3	1
12969	Chrysene	218-01-9	35		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	38		1.7	0.70	1
12969	Diethylphthalate	84-66-2	39		19	6.3	1
12969	Dimethylphthalate	131-11-3	39		19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	49		19	6.3	1
12969	Fluoranthene	206-44-0	33		1.7	0.70	1
12969	Fluorene	86-73-7	37		1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	37		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	36		1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	35		1.7	0.70	1
12969	Naphthalene	91-20-3	33		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	26		1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	42		19	6.3	1
12969	Phenanthrene	85-01-8	35		1.7	0.70	1
12969	Pyrene	129-00-0	35		1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	6.7		0.9	0.2	20.97
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	120		18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	150		18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138013
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	19		5.2	2.1	1
12952	EFH (C21-C30)	n.a.	12		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	5.7	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	35,700		40.2	7.25	1
06944	Antimony	7440-36-0	33.3		4.02	0.744	1
06935	Arsenic	7440-38-2	21.5		4.02	0.704	1
06946	Barium	7440-39-3	313		1.01	0.0332	1
06947	Beryllium	7440-41-7	6.03		1.01	0.0674	1
07914	Boron	7440-42-8	194		10.1	0.845	1
06949	Cadmium	7440-43-9	4.88		1.01	0.0764	1
01650	Calcium	7440-70-2	42,600		20.1	3.36	1
06951	Chromium	7440-47-3	55.2		3.02	0.161	1
06952	Cobalt	7440-48-4	56.6		1.01	0.0996	1
06953	Copper	7440-50-8	42.1		2.01	0.292	1
01654	Iron	7439-89-6	30,900		80.5	7.28	2
06955	Lead	7439-92-1	24.2		3.02	0.503	1
01656	Lithium	7439-93-2	129		4.0	0.34	1
01657	Magnesium	7439-95-4	6,980		10.1	1.68	1
06958	Manganese	7439-96-5	297		1.01	0.0835	1
06960	Molybdenum	7439-98-7	185		2.01	0.171	1
06961	Nickel	7440-02-0	63.5		2.01	0.131	1
10145	Phosphorus	7723-14-0	186		10.1	2.91	1
01662	Potassium	7440-09-7	3,350		101	8.39	1
01667	Sodium	7440-23-5	1,160		101	16.8	1
06969	Tin	7440-31-5	364		10.1	0.221	1
06970	Titanium	7440-32-6	1,120		1.01	0.171	1
06971	Vanadium	7440-62-2	114		1.01	0.131	1
06972	Zinc	7440-66-6	104		4.02	0.201	1
10146	Zirconium	7440-67-7	106		5.03	0.845	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	1.79		0.402	0.101	2
06142	Silver	7440-22-4	10.9		0.201	0.0262	2
06144	Strontium	7440-24-6	87.6		0.402	0.0684	2
06145	Thallium	7440-28-0	0.806		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.209		0.0172	0.0103	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	4.4		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138013
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.2	B	1.02	0.0474	1
11031	12378-PeCDD	40321-76-4	94.7	B	5.09	0.0605	1
11031	123478-HxCDD	39227-28-6	105	B	5.09	0.0388	1
11031	123678-HxCDD	57653-85-7	97.9	B	5.09	0.0433	1
11031	123789-HxCDD	19408-74-3	100	B	5.09	0.0426	1
11031	1234678-HpCDD	35822-46-9	98.6	B	5.09	0.0551	1
11031	OCDD	3268-87-9	197	B	10.2	0.0378	1
11031	2378-TCDF	51207-31-9	18.8		1.02	0.0560	1
11031	12378-PeCDF	57117-41-6	94.0	B	5.09	0.0452	1
11031	23478-PeCDF	57117-31-4	95.8	B	5.09	0.0442	1
11031	123478-HxCDF	70648-26-9	99.8	B	5.09	0.0532	1
11031	123678-HxCDF	57117-44-9	98.2	B	5.09	0.0483	1
11031	123789-HxCDF	72918-21-9	99.1	B	5.09	0.0606	1
11031	234678-HxCDF	60851-34-5	98.9	B	5.09	0.0517	1
11031	1234678-HpCDF	67562-39-4	97.1	B	5.09	0.0343	1
11031	1234789-HpCDF	55673-89-7	98.1	B	5.09	0.0574	1
11031	OCDF	39001-02-0	183	B	10.2	0.0472	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138013
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13206SLD026	07/30/2013 09:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13206SLD026	07/26/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/25/2013 19:30	Laura M Krieger	20.97
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320531807	07/24/2013 17:49	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320531807	07/24/2013 17:50	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 20:39	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 12:31	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120018A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 12:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 13:26	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 14:07	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138013
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132060637001B	08/02/2013 06:40	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:24	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 11:24	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:24	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 13:07	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138014
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,200		40.2	7.25	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.744	1
06935	Arsenic	7440-38-2	6.94		4.02	0.704	1
06946	Barium	7440-39-3	114		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.937	J	1.01	0.0674	1
07914	Boron	7440-42-8	3.56	J	10.1	0.845	1
06949	Cadmium	7440-43-9	0.310	J	1.01	0.0764	1
01650	Calcium	7440-70-2	56,900		40.2	6.72	2
06951	Chromium	7440-47-3	35.5		3.02	0.161	1
06952	Cobalt	7440-48-4	9.51		1.01	0.0996	1
06953	Copper	7440-50-8	16.1		2.01	0.292	1
01654	Iron	7439-89-6	29,500		80.5	7.28	2
06955	Lead	7439-92-1	10.6		3.02	0.503	1
01656	Lithium	7439-93-2	25.8		4.0	0.34	1
01657	Magnesium	7439-95-4	6,550		10.1	1.68	1
06958	Manganese	7439-96-5	277		1.01	0.0835	1
06960	Molybdenum	7439-98-7	2.01	U	2.01	0.171	1
06961	Nickel	7440-02-0	16.6		2.01	0.131	1
10145	Phosphorus	7723-14-0	98.7		10.1	2.91	1
01662	Potassium	7440-09-7	2,200		101	8.39	1
01667	Sodium	7440-23-5	135		101	16.8	1
06969	Tin	7440-31-5	3.27	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,150		1.01	0.171	1
06971	Vanadium	7440-62-2	66.3		1.01	0.131	1
06972	Zinc	7440-66-6	55.8		4.02	0.201	1
10146	Zirconium	7440-67-7	8.19		5.03	0.845	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.402	U	0.402	0.101	2
06142	Silver	7440-22-4	0.0411	J	0.201	0.0262	2
06144	Strontium	7440-24-6	64.5		0.402	0.0684	2
06145	Thallium	7440-28-0	0.292		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.00		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	4.4		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	4.2		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138014
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55140 SDG#: PH073-02DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/30/2013 13:18	Joanne M Gates	2
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 13:18	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 13:59	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 11:19	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 11:19	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 11:19	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 11:19	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 13:03	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13205039401A	07/24/2013 20:40	Michelle L Lalli	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138015
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:15 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85140 SDG#: PH073-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.8	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	21	U	21	6.8	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.1	J	1.9	0.76	1
12969	Naphthalene	91-20-3	2.9		1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	20.39
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138015
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:15 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85140 SDG#: PH073-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,600		45.0	8.12	1
06944	Antimony	7440-36-0	4.50	U	4.50	0.833	1
06935	Arsenic	7440-38-2	7.88		4.50	0.788	1
06946	Barium	7440-39-3	107		1.13	0.0371	1
06947	Beryllium	7440-41-7	0.994	J	1.13	0.0754	1
07914	Boron	7440-42-8	3.64	J	11.3	0.945	1
06949	Cadmium	7440-43-9	0.278	J	1.13	0.0855	1
01650	Calcium	7440-70-2	85,800		45.0	7.52	2
06951	Chromium	7440-47-3	35.1		3.38	0.180	1
06952	Cobalt	7440-48-4	7.43		1.13	0.111	1
06953	Copper	7440-50-8	14.8		2.25	0.326	1
01654	Iron	7439-89-6	30,900		90.0	8.15	2
06955	Lead	7439-92-1	9.41		3.38	0.563	1
01656	Lithium	7439-93-2	25.6		4.5	0.38	1
01657	Magnesium	7439-95-4	7,130		11.3	1.88	1
06958	Manganese	7439-96-5	288		1.13	0.0934	1
06960	Molybdenum	7439-98-7	2.25	U	2.25	0.191	1
06961	Nickel	7440-02-0	17.8		2.25	0.146	1
10145	Phosphorus	7723-14-0	127		11.3	3.25	1
01662	Potassium	7440-09-7	2,190		113	9.39	1
01667	Sodium	7440-23-5	153		113	18.8	1
06969	Tin	7440-31-5	3.26	J	11.3	0.248	1
06970	Titanium	7440-32-6	1,330		1.13	0.191	1
06971	Vanadium	7440-62-2	68.9		1.13	0.146	1
06972	Zinc	7440-66-6	55.2		4.50	0.225	1
10146	Zirconium	7440-67-7	7.77		5.63	0.945	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.120	J	0.450	0.113	2
06142	Silver	7440-22-4	0.0716	J	0.225	0.0293	2
06144	Strontium	7440-24-6	98.3		1.13	0.191	5
06145	Thallium	7440-28-0	0.351		0.225	0.0338	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0180	U	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.97		0.0100	0.0100	1
	The pH was measured in water at 21.3 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138015
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:15 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85140 SDG#: PH073-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	12.9	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138015
LL Group # 1406357
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85140 SDG#: PH073-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0276 JBQ	1.14	0.0202	1
11031	12378-PeCDD	40321-76-4	0.0944 JB	5.71	0.0237	1
11031	123478-HxCDD	39227-28-6	0.0569 JBQ	5.71	0.0168	1
11031	123678-HxCDD	57653-85-7	0.0767 JB	5.71	0.0176	1
11031	123789-HxCDD	19408-74-3	0.0564 JBQ	5.71	0.0177	1
11031	1234678-HpCDD	35822-46-9	0.108 JB	5.71	0.0147	1
11031	OCDD	3268-87-9	0.361 JB	11.4	0.0166	1
11031	2378-TCDF	51207-31-9	1.14 U	1.14	0.0156	1
11031	12378-PeCDF	57117-41-6	0.0826 JBQ	5.71	0.0126	1
11031	23478-PeCDF	57117-31-4	0.0857 JBQ	5.71	0.0122	1
11031	123478-HxCDF	70648-26-9	0.0786 JBQ	5.71	0.00907	1
11031	123678-HxCDF	57117-44-9	0.0623 JB	5.71	0.00873	1
11031	123789-HxCDF	72918-21-9	0.118 JBQ	5.71	0.0103	1
11031	234678-HxCDF	60851-34-5	0.0578 JBQ	5.71	0.00896	1
11031	1234678-HpCDF	67562-39-4	0.0636 JB	5.71	0.00608	1
11031	1234789-HpCDF	55673-89-7	0.0608 JB	5.71	0.0102	1
11031	OCDF	39001-02-0	0.157 JB	11.4	0.0201	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.111			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138015
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:15 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85140 SDG#: PH073-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138015
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:15 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85140 SDG#: PH073-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13206SLD026	07/30/2013 10:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13206SLD026	07/26/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/26/2013 05:32	Laura M Krieger	20.39
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320531807	07/24/2013 17:51	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320531807	07/24/2013 17:52	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 20:57	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 12:52	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120018A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 13:04	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/30/2013 14:21	Joanne M Gates	2
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 14:21	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 15:04	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138015
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:15 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85140 SDG#: PH073-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 12:00	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 12:00	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	08/02/2013 06:42	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 12:00	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 13:09	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13205039401A	07/24/2013 20:40	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138016
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55190 SDG#: PH073-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.78	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.78	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.78	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.78	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.78	1
12969	2-Methylnaphthalene	91-57-6	2.0	U	2.0	0.78	1
12969	Naphthalene	91-20-3	2.0	U	2.0	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.78	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.32
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.2	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138016
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55190 SDG#: PH073-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.9	U	5.9	2.3	1
12952	EFH (C15-C20)	n.a.	5.9	U	5.9	2.3	1
12952	EFH (C21-C30)	n.a.	5.9	U	5.9	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.9	U	5.9	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,500		45.5	8.21	1
06944	Antimony	7440-36-0	4.55	U	4.55	0.842	1
06935	Arsenic	7440-38-2	3.52	J	4.55	0.797	1
06946	Barium	7440-39-3	86.2		1.14	0.0376	1
06947	Beryllium	7440-41-7	0.467	J	1.14	0.0763	1
07914	Boron	7440-42-8	4.04	J	11.4	0.956	1
06949	Cadmium	7440-43-9	0.508	J	1.14	0.0865	1
01650	Calcium	7440-70-2	255,000		114	19.0	5
06951	Chromium	7440-47-3	17.3		3.41	0.182	1
06952	Cobalt	7440-48-4	2.88		1.14	0.113	1
06953	Copper	7440-50-8	5.06	J	11.4	1.65	5
01654	Iron	7439-89-6	14,000		45.5	4.12	1
06955	Lead	7439-92-1	9.21	J	17.1	2.85	5
01656	Lithium	7439-93-2	10.4	J	22.8	1.9	5
	Reporting limits were raised due to interference from the sample matrix.						
01657	Magnesium	7439-95-4	4,890		11.4	1.90	1
06958	Manganese	7439-96-5	128		1.14	0.0945	1
06960	Molybdenum	7439-98-7	2.28	U	2.28	0.193	1
06961	Nickel	7440-02-0	7.97		2.28	0.148	1
10145	Phosphorus	7723-14-0	266		56.9	16.4	5
01662	Potassium	7440-09-7	1,480		114	9.49	1
01667	Sodium	7440-23-5	134		114	19.0	1
06969	Tin	7440-31-5	2.39	J	11.4	0.250	1
06970	Titanium	7440-32-6	676		1.14	0.193	1
06971	Vanadium	7440-62-2	31.6		1.14	0.148	1
06972	Zinc	7440-66-6	31.8		22.8	1.14	5
10146	Zirconium	7440-67-7	4.63	J	5.69	0.956	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.455	U	0.455	0.114	2
06142	Silver	7440-22-4	0.228	U	0.228	0.0296	2
06144	Strontium	7440-24-6	399		2.28	0.387	10
06145	Thallium	7440-28-0	0.196	J	0.228	0.0341	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0193	U	0.0193	0.0116	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.07		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138016
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55190 SDG#: PH073-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	14.7	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13206SLD026	07/30/2013 10:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13206SLD026	07/26/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/26/2013 06:10	Laura M Krieger	22.32
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320531807	07/24/2013 17:53	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320531807	07/24/2013 17:54	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 21:16	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 13:13	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120018A	08/01/2013 09:00	Olivia Arosemena	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/30/2013 14:25	Joanne M Gates	5
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/30/2013 14:25	Joanne M Gates	5
01654	Iron	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132060637001	07/30/2013 14:25	Joanne M Gates	5
01656	Lithium	SW-846 6010C	1	132060637001	07/30/2013 14:25	Joanne M Gates	5
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/30/2013 14:25	Joanne M Gates	5
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138016
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55190 SDG#: PH073-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/30/2013 14:25	Joanne M Gates	5
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 15:09	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 12:02	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 12:02	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	08/02/2013 06:49	Choon Y Tian	10
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 12:02	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 13:11	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13205039401A	07/24/2013 20:40	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138017
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:45 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55114 SDG#: PH073-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.78	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.78	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	0.63	J	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.78	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.78	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.78	1
12969	Naphthalene	91-20-3	0.80	J	1.9	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.78	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	21.85
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138017
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:45 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55114 SDG#: PH073-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,800		46.2	8.33	1
06944	Antimony	7440-36-0	4.62	U	4.62	0.855	1
06935	Arsenic	7440-38-2	5.89		4.62	0.809	1
06946	Barium	7440-39-3	116		1.16	0.0381	1
06947	Beryllium	7440-41-7	0.793	J	1.16	0.0774	1
07914	Boron	7440-42-8	5.28	J	11.6	0.970	1
06949	Cadmium	7440-43-9	0.402	J	1.16	0.0878	1
01650	Calcium	7440-70-2	114,000		116	19.3	5
06951	Chromium	7440-47-3	29.3		3.47	0.185	1
06952	Cobalt	7440-48-4	7.37		1.16	0.114	1
06953	Copper	7440-50-8	15.4		2.31	0.335	1
01654	Iron	7439-89-6	27,700		46.2	4.18	1
06955	Lead	7439-92-1	8.92		3.47	0.578	1
01656	Lithium	7439-93-2	21.6		4.6	0.39	1
01657	Magnesium	7439-95-4	6,910		11.6	1.93	1
06958	Manganese	7439-96-5	331		1.16	0.0959	1
06960	Molybdenum	7439-98-7	0.202	J	2.31	0.196	1
06961	Nickel	7440-02-0	16.0		2.31	0.150	1
10145	Phosphorus	7723-14-0	347		11.6	3.34	1
01662	Potassium	7440-09-7	3,950		116	9.64	1
01667	Sodium	7440-23-5	136		116	19.3	1
06969	Tin	7440-31-5	3.10	J	11.6	0.254	1
06970	Titanium	7440-32-6	1,150		1.16	0.196	1
06971	Vanadium	7440-62-2	56.9		1.16	0.150	1
06972	Zinc	7440-66-6	63.7		4.62	0.231	1
10146	Zirconium	7440-67-7	6.72		5.78	0.970	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.222	J	0.462	0.116	2
06142	Silver	7440-22-4	0.0493	J	0.231	0.0300	2
06144	Strontium	7440-24-6	197		1.16	0.196	5
06145	Thallium	7440-28-0	0.267		0.231	0.0347	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.05		0.0100	0.0100	1

The pH was measured in water at 21.1 C.

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138017
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:45 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55114 SDG#: PH073-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	14.3	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13206SLD026	07/30/2013 11:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13206SLD026	07/26/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/26/2013 06:48	Laura M Krieger	21.85
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320531807	07/24/2013 17:55	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320531807	07/24/2013 17:56	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 21:34	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 14:35	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120018A	08/01/2013 09:00	Olivia Arosemena	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/30/2013 14:33	Joanne M Gates	5
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138017
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:45 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55114 SDG#: PH073-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 15:20	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 12:10	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 12:10	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 12:51	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 12:10	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 13:13	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13205039401A	07/24/2013 20:40	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138018
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 09:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55119 SDG#: PH073-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.78	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.78	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.1	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.1	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.1	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.1	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.78	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.78	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.78	1
12969	2-Methylnaphthalene	91-57-6	2.0	U	2.0	0.78	1
12969	Naphthalene	91-20-3	2.0	U	2.0	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.1	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.78	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	22.81
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.2	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C15-C20)	n.a.	5.9	U	5.9	2.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138018
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 09:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55119 SDG#: PH073-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.9	U	5.9	2.4	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,100		45.2	8.16	1
06944	Antimony	7440-36-0	4.52	U	4.52	0.837	1
06935	Arsenic	7440-38-2	8.03		4.52	0.792	1
06946	Barium	7440-39-3	114		1.13	0.0373	1
06947	Beryllium	7440-41-7	0.876	J	1.13	0.0758	1
07914	Boron	7440-42-8	11.3	U	11.3	0.950	1
06949	Cadmium	7440-43-9	1.13	U	1.13	0.0860	1
01650	Calcium	7440-70-2	69,500		45.2	7.56	2
06951	Chromium	7440-47-3	29.3		3.39	0.181	1
06952	Cobalt	7440-48-4	7.63		1.13	0.112	1
06953	Copper	7440-50-8	14.3		2.26	0.328	1
01654	Iron	7439-89-6	48,400		90.5	8.19	2
06955	Lead	7439-92-1	11.7		3.39	0.566	1
01656	Lithium	7439-93-2	23.1		4.5	0.38	1
01657	Magnesium	7439-95-4	6,450		11.3	1.89	1
06958	Manganese	7439-96-5	344		1.13	0.0939	1
06960	Molybdenum	7439-98-7	2.26	U	2.26	0.192	1
06961	Nickel	7440-02-0	17.4		2.26	0.147	1
10145	Phosphorus	7723-14-0	347		11.3	3.27	1
01662	Potassium	7440-09-7	3,420		113	9.43	1
01667	Sodium	7440-23-5	196		113	18.9	1
06969	Tin	7440-31-5	3.18	J	11.3	0.249	1
06970	Titanium	7440-32-6	1,310		1.13	0.192	1
06971	Vanadium	7440-62-2	79.7		1.13	0.147	1
06972	Zinc	7440-66-6	59.1		4.52	0.226	1
10146	Zirconium	7440-67-7	8.40		5.66	0.950	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.156	J	0.452	0.113	2
06142	Silver	7440-22-4	0.0404	J	0.226	0.0294	2
06144	Strontium	7440-24-6	180		1.13	0.192	5
06145	Thallium	7440-28-0	0.327		0.226	0.0339	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183	U	0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.02		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	15.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138018
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 09:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55119 SDG#: PH073-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13206SLD026	07/30/2013 11:41	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13206SLD026	07/26/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/26/2013 07:26	Laura M Krieger	22.81
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320531807	07/24/2013 17:57	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320531807	07/24/2013 17:59	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 21:52	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 14:55	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120018A	08/01/2013 09:00	Olivia Arosemena	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/30/2013 14:44	Joanne M Gates	2
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 14:44	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-551-SA8-SB-19.0-20.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138018
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 09:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55119 SDG#: PH073-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 15:25	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 12:12	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 12:12	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 12:53	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 12:12	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 13:20	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13205039401A	07/24/2013 20:40	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138019
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH073-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	J	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	0.78	J	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	2.0		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.1	J	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.1	J	1.9	0.76	1
12969	Pyrene	129-00-0	0.77	J	1.9	0.76	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138019
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH073-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,200		44.2	7.97	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.818	1
06935	Arsenic	7440-38-2	6.64		4.42	0.774	1
06946	Barium	7440-39-3	134		1.11	0.0365	1
06947	Beryllium	7440-41-7	0.966	J	1.11	0.0740	1
07914	Boron	7440-42-8	1.72	J	11.1	0.928	1
06949	Cadmium	7440-43-9	0.311	J	1.11	0.0840	1
01650	Calcium	7440-70-2	15,000		22.1	3.69	1
06951	Chromium	7440-47-3	33.9		3.32	0.177	1
06952	Cobalt	7440-48-4	11.0		1.11	0.109	1
06953	Copper	7440-50-8	20.0		2.21	0.321	1
01654	Iron	7439-89-6	33,800		88.4	8.00	2
06955	Lead	7439-92-1	11.5		3.32	0.553	1
01656	Lithium	7439-93-2	24.2		4.4	0.38	1
01657	Magnesium	7439-95-4	8,080		11.1	1.85	1
06958	Manganese	7439-96-5	455		1.11	0.0917	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	21.8		2.21	0.144	1
10145	Phosphorus	7723-14-0	399		11.1	3.19	1
01662	Potassium	7440-09-7	5,500		111	9.22	1
01667	Sodium	7440-23-5	93.0	J	111	18.5	1
06969	Tin	7440-31-5	1.45	J	11.1	0.243	1
06970	Titanium	7440-32-6	749		1.11	0.188	1
06971	Vanadium	7440-62-2	57.2		1.11	0.144	1
06972	Zinc	7440-66-6	77.3		4.42	0.221	1
10146	Zirconium	7440-67-7	6.39		5.53	0.928	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.240	J	0.442	0.111	2
06142	Silver	7440-22-4	0.0303	J	0.221	0.0287	2
06144	Strontium	7440-24-6	54.7		0.442	0.0752	2
06145	Thallium	7440-28-0	0.389		0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183	U	0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.10		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138019
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH073-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0715 JBQ	1.15	0.0232	1
11031	12378-PeCDD	40321-76-4	0.124 JBQ	5.74	0.0277	1
11031	123478-HxCDD	39227-28-6	0.0711 JB	5.74	0.0244	1
11031	123678-HxCDD	57653-85-7	0.203 JB	5.74	0.0264	1
11031	123789-HxCDD	19408-74-3	0.231 JB	5.74	0.0266	1
11031	1234678-HpCDD	35822-46-9	3.42 JB	5.74	0.0359	1
11031	OCDD	3268-87-9	35.2 B	11.5	0.0201	1
11031	2378-TCDF	51207-31-9	0.0476 J	1.15	0.0324	1
11031	12378-PeCDF	57117-41-6	0.331 JB	5.74	0.0180	1
11031	23478-PeCDF	57117-31-4	0.228 JB	5.74	0.0183	1
11031	123478-HxCDF	70648-26-9	0.146 JBQ	5.74	0.0245	1
11031	123678-HxCDF	57117-44-9	0.135 JBQ	5.74	0.0224	1
11031	123789-HxCDF	72918-21-9	0.297 JB	5.74	0.0286	1
11031	234678-HxCDF	60851-34-5	0.158 JBQ	5.74	0.0226	1
11031	1234678-HpCDF	67562-39-4	2.35 JB	5.74	0.0140	1
11031	1234789-HpCDF	55673-89-7	0.144 JBQ	5.74	0.0222	1
11031	OCDF	39001-02-0	5.92 JB	11.5	0.0230	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.233			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	56	25 - 164
13C12-12378-PeCDD	58	25 - 181
13C12-123478-HxCDD	58	32 - 141
13C12-123678-HxCDD	63	28 - 130
13C12-123789-HxCDD	59	28 - 130
13C12-1234678-HpCDD	61	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	47	24 - 169
13C12-12378-PeCDF	57	24 - 185
13C12-23478-PeCDF	54	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	61	26 - 123
13C12-234678-HxCDF	57	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	55	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138019
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH073-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138019
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH073-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13206SLD026	07/30/2013 12:12	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13206SLD026	07/26/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 22:11	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 15:57	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120018A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 14:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 14:49	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 15:29	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 12:15	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 12:15	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 12:15	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 12:15	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138019
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:00 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55500 SDG#: PH073-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 13:22	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13205039401A	07/24/2013 20:40	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138020
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55540 SDG#: PH073-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.48
	The VOA soil weight is outside the acceptable weight range. See the VOA Prep Summary Sheet for the affected sample(s).						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138020
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55540 SDG#: PH073-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,900		44.3	7.99	1
06944	Antimony	7440-36-0	4.43	U	4.43	0.820	1
06935	Arsenic	7440-38-2	7.70		4.43	0.775	1
06946	Barium	7440-39-3	152		1.11	0.0366	1
06947	Beryllium	7440-41-7	1.03	J	1.11	0.0742	1
07914	Boron	7440-42-8	3.77	J	11.1	0.931	1
06949	Cadmium	7440-43-9	0.249	J	1.11	0.0842	1
01650	Calcium	7440-70-2	23,300		22.2	3.70	1
06951	Chromium	7440-47-3	38.3		3.32	0.177	1
06952	Cobalt	7440-48-4	10.4		1.11	0.110	1
06953	Copper	7440-50-8	19.3		2.22	0.321	1
01654	Iron	7439-89-6	35,500		88.6	8.02	2
06955	Lead	7439-92-1	10.8		3.32	0.554	1
01656	Lithium	7439-93-2	28.3		4.4	0.38	1
01657	Magnesium	7439-95-4	8,030		11.1	1.85	1
06958	Manganese	7439-96-5	427		1.11	0.0919	1
06960	Molybdenum	7439-98-7	2.22	U	2.22	0.188	1
06961	Nickel	7440-02-0	21.9		2.22	0.144	1
10145	Phosphorus	7723-14-0	292		11.1	3.20	1
01662	Potassium	7440-09-7	4,500		111	9.24	1
01667	Sodium	7440-23-5	163		111	18.5	1
06969	Tin	7440-31-5	3.50	J	11.1	0.244	1
06970	Titanium	7440-32-6	1,420		1.11	0.188	1
06971	Vanadium	7440-62-2	73.1		1.11	0.144	1
06972	Zinc	7440-66-6	75.4		4.43	0.222	1
10146	Zirconium	7440-67-7	8.25		5.54	0.931	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.186	J	0.443	0.111	2
06142	Silver	7440-22-4	0.0508	J	0.222	0.0288	2
06144	Strontium	7440-24-6	69.2		0.443	0.0753	2
06145	Thallium	7440-28-0	0.364		0.222	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0198		0.0181	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.85		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138020
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55540 SDG#: PH073-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	11.5	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138020
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55540 SDG#: PH073-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0226 JB	1.10	0.0216	1
11031	12378-PeCDD	40321-76-4	0.140 JB	5.51	0.0219	1
11031	123478-HxCDD	39227-28-6	0.0685 JBQ	5.51	0.0200	1
11031	123678-HxCDD	57653-85-7	0.149 JBQ	5.51	0.0210	1
11031	123789-HxCDD	19408-74-3	0.243 JB	5.51	0.0210	1
11031	1234678-HpCDD	35822-46-9	0.221 JB	5.51	0.0182	1
11031	OCDD	3268-87-9	0.717 JB	11.0	0.0169	1
11031	2378-TCDF	51207-31-9	0.0630 JQ	1.10	0.0189	1
11031	12378-PeCDF	57117-41-6	0.222 JB	5.51	0.0131	1
11031	23478-PeCDF	57117-31-4	0.139 JB	5.51	0.0125	1
11031	123478-HxCDF	70648-26-9	0.103 JB	5.51	0.00994	1
11031	123678-HxCDF	57117-44-9	0.0871 JB	5.51	0.00904	1
11031	123789-HxCDF	72918-21-9	0.350 JB	5.51	0.0122	1
11031	234678-HxCDF	60851-34-5	0.0786 JB	5.51	0.00960	1
11031	1234678-HpCDF	67562-39-4	0.0681 JB	5.51	0.00508	1
11031	1234789-HpCDF	55673-89-7	0.0406 JBQ	5.51	0.00927	1
11031	OCDF	39001-02-0	0.175 JB	11.0	0.0235	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.300			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138020
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55540 SDG#: PH073-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138020
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55540 SDG#: PH073-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13206SLD026	07/30/2013 12:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13206SLD026	07/26/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13206A16A	07/26/2013 08:04	Laura M Krieger	21.48
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320531807	07/24/2013 18:01	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320531807	07/24/2013 18:01	Lois E Hiltz	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 22:29	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 13:53	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132120018A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13210001	07/31/2013 14:57	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13210001	07/29/2013 10:15	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132060637001	07/30/2013 14:52	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132060637001	07/29/2013 15:33	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-555-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138020
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 12:30 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55540 SDG#: PH073-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132060637001B	07/30/2013 12:17	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132060637001A	07/30/2013 12:17	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132060637001A	07/30/2013 12:17	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132060637001A	07/30/2013 12:17	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132060638001	07/27/2013 13:24	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132060637001	07/25/2013 23:32	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132060638001	07/26/2013 04:15	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13205039401A	07/24/2013 20:40	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13207162401B	07/26/2013 21:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-557A-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138021
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 13:40 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

557A- SDG#: PH073-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.6		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 22:48	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401B	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-557B-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138022
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 13:45 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

557B- SDG#: PH073-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	56		18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.3		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 23:06	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401B	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-557C-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138023
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 13:50 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

557C- SDG#: PH073-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	31		18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.8		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 23:25	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401B	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-557D-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7138024
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 13:55 by VC

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

557D- SDG#: PH073-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.6		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090001A	07/30/2013 23:43	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090001A	07/29/2013 19:00	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13206162401B	07/25/2013 22:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-072313 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7138025
LL Group # 1406357
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/23/2013 08:00

Submitted: 07/24/2013 09:20
Reported: 08/05/2013 15:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB723 SDG#: PH073-13TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13204A20B	07/25/2013 10:28	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13204A20B	07/25/2013 10:28	Laura M Krieger	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406357
Reported: 08/05/13 at 03:14 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13206SLD026	Sample number(s): 7138010-7138013,7138015-7138020									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	106		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	95		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	101		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	108		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	106		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	117		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	101		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	109		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	105		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	125		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	131		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	104		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	111		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	130*		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	110		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	123		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	109		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	105		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	111		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	108		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	98		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	81		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	122		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	102		71-120		
Batch number: 13204A20B	Sample number(s): 7138025									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	104	99	75-135	5	30
Batch number: 13206A16A	Sample number(s): 7138011-7138013,7138015-7138018,7138020									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	76		67-119		
Batch number: 132090001A	Sample number(s): 7138010-7138013,7138015-7138024									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	74	72	36-106	2	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	102		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406357
Reported: 08/05/13 at 03:14 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	107		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132120018A	Sample number(s): 7138010-7138013,7138015-7138020									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	108		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	114		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	116		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	119		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	90		49-107		
Batch number: 132060637001	Sample number(s): 7138010-7138020									
Aluminum	40.0	U	40.0	7.21	mg/kg	108		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	105		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	102		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	106		80-120		
Calcium	5.04	J	20.0	3.34	mg/kg	108		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	104		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	108		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	108		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	106		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	109		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	107		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	107		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	109		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	108		80-120		
Potassium	100 U		100.	8.34	mg/kg	108		80-120		
Sodium	100 U		100.	16.7	mg/kg	108		80-120		
Tin	1.80	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	103		80-120		
Zinc	0.449	J	4.00	0.200	mg/kg	107		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	107		80-120		
Batch number: 132060637001A	Sample number(s): 7138010-7138020									
Silver	0.200	U	0.200	0.0260	mg/kg	108		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	118		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	111		80-120		
Batch number: 132060637001B	Sample number(s): 7138010-7138020									
Selenium	0.400	U	0.400	0.100	mg/kg	110		80-120		
Batch number: 132060638001	Sample number(s): 7138010-7138020									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	107		85-120		
Batch number: 13205039401A	Sample number(s): 7138010-7138011,7138014-7138020									
15a pH by 9045D						99		95-105		
Batch number: 13206162401B	Sample number(s): 7138021-7138024									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406357
Reported: 08/05/13 at 03:14 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3					100		80-120		
Batch number: 13207162401B	Sample number(s): 7138010-7138020								
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13210001	Sample number(s): 7138010-7138013,7138015,7138019-7138020								
2378-TCDD	0.0257 J	1.00	0.0190	ng/kg	94		67-158		
12378-PeCDD	0.0311 J	5.00	0.0215	ng/kg	96		70-142		
123478-HxCDD	0.0355 J	5.00	0.0137	ng/kg	102		70-164		
123678-HxCDD	0.0248 J	5.00	0.0146	ng/kg	100		76-134		
123789-HxCDD	0.0327 J	5.00	0.0146	ng/kg	99		64-162		
1234678-HpCDD	0.0567 J	5.00	0.0155	ng/kg	98		70-140		
OCDD	0.283 J	10.0	0.0177	ng/kg	99		78-144		
2378-TCDF	1.00 U	1.00	0.0191	ng/kg	94		75-158		
12378-PeCDF	0.0578 J	5.00	0.0121	ng/kg	95		80-134		
23478-PeCDF	0.0367 J	5.00	0.0116	ng/kg	97		68-160		
123478-HxCDF	0.0517 J	5.00	0.00770	ng/kg	102		72-134		
123678-HxCDF	0.0377 J	5.00	0.00710	ng/kg	97		84-130		
123789-HxCDF	0.0544 J	5.00	0.00860	ng/kg	99		78-130		
234678-HxCDF	0.0342 J	5.00	0.00710	ng/kg	99		70-156		
1234678-HpCDF	0.0332 J	5.00	0.00590	ng/kg	95		82-122		
1234789-HpCDF	0.0325 J	5.00	0.0102	ng/kg	98		78-138		
OCDF	0.0947 J	10.0	0.0213	ng/kg	91		63-170		
TEQ WHO 2005 - EDLx0.0	0.0278			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13206SLD026	Sample number(s): 7138010-7138013,7138015-7138020 UNSPK: 7138011								
Acenaphthene	108	96	48-127	11	30				
Acenaphthylene	91	91	49-121	1	30				
Anthracene	96	89	52-126	7	30				
Benzo(a)anthracene	99	101	32-135	2	30				
Benzo(a)pyrene	97	98	36-138	1	30				
Benzo(b)fluoranthene	105	105	26-142	0	30				
Benzo(e)pyrene	93	93	70-130	1	30				
Benzo(g,h,i)perylene	103	103	33-141	1	30				
Benzo(k)fluoranthene	97	99	47-129	2	30				
Butylbenzylphthalate	125	133	59-153	6	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406357
Reported: 08/05/13 at 03:14 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Di-n-butylphthalate	123	130	62-154	6	30				
Chrysene	98	100	29-148	2	30				
Dibenz(a,h)anthracene	107	108	34-125	2	30				
Diethylphthalate	124	112	76-127	9	30				
Dimethylphthalate	104	111	62-136	8	30				
Bis(2-Ethylhexyl)phthalate	121	141	39-167	16	30				
Fluoranthene	101	94	47-135	7	30				
Fluorene	95	106	50-129	11	30				
Indeno(1,2,3-cd)pyrene	106	107	17-136	2	30				
1-Methylnaphthalene	98	104	50-131	7	30				
2-Methylnaphthalene	96	100	28-144	4	30				
Naphthalene	92	95	31-148	4	30				
N-Nitrosodimethylamine	72	76	48-113	5	30				
Di-n-octylphthalate	117	121	52-162	4	30				
Phenanthrene	93	101	29-142	8	30				
Pyrene	95	101	26-143	6	30				
Batch number: 13206A16A	Sample number(s): 7138011-7138013,7138015-7138018,7138020 UNSPK: 7138011								
11a TPH by EPA 8015B GRO	87	69	39-118	25	30				
Batch number: 132090001A	Sample number(s): 7138010-7138013,7138015-7138024 UNSPK: 7138011								
PCB-1016	94	71	16-146	28	50				
PCB-1260	97	85	40-134	13	50				
Batch number: 132120018A	Sample number(s): 7138010-7138013,7138015-7138020 UNSPK: 7138011								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	114	726*	49-123	146*	20				
EFH (C21-C30)	115	263*	49-123	78*	20				
EFH (C30-C40)	101	108	49-123	7	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 132060637001	Sample number(s): 7138010-7138020 UNSPK: 7138011 BKG: 7138011								
Aluminum	2431 (2)	1232 (2)	75-125	7	20	31,800	31,800	0	20
Antimony	61*	66*	75-125	8	20	3.85 U	3.85 U	0 (1)	20
Arsenic	95	94	75-125	1	20	7.03	6.63	6 (1)	20
Barium	91	93	75-125	2	20	119	109	9	20
Beryllium	99	101	75-125	2	20	0.896 J	0.896 J	0 (1)	20
Boron	94	95	75-125	1	20	2.25 J	3.40 J	41* (1)	20
Cadmium	92	94	75-125	2	20	0.151 J	0.296 J	65* (1)	20
Calcium	1129 (2)	-272 (2)	75-125	12	20	41,700	54,400	26*	20
Chromium	108	101	75-125	3	20	33.4	34.0	2	20
Cobalt	78	82	75-125	4	20	14.4	9.10	45*	20
Copper	100	102	75-125	1	20	15.7	15.4	2	20
Iron	804 (2)	-214 (2)	75-125	3	20	29,800	28,200	5	20
Lead	85	91	75-125	4	20	10.0	10.1	1 (1)	20
Lithium	102	102	75-125	0	20	25.2	24.7	2	20
Magnesium	292 (2)	145 (2)	75-125	4	20	6,400	6,260	2	20
Manganese	-280 (2)	-294 (2)	75-125	2	20	426	264	47*	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406357
Reported: 08/05/13 at 03:14 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Molybdenum	91	92	75-125	0	20	1.92	U	1.92	U	0 (1)	20
Nickel	89	90	75-125	1	20	17.4		15.9		9	20
Phosphorus	103	94	75-125	5	20	87.6		94.4		7	20
Potassium	131*	104	75-125	8	20	2,210		2,100		5	20
Sodium	101	101	75-125	0	20	133		129		3 (1)	20
Tin	89	90	75-125	1	20	3.16	J	3.13	J	1 (1)	20
Titanium	226 (2)	-22 (2)	75-125	20	20	1,090		1,100		1	20
Vanadium	104	92	75-125	5	20	64.7		63.4		2	20
Zinc	98	96	75-125	1	20	53.1		53.4		1	20
Zirconium	100	99	75-125	1	20	6.46		7.83		19 (1)	20
Batch number: 132060637001A	Sample number(s): 7138010-7138020 UNSPK: 7138011 BKG: 7138011										
Silver	96	108	75-125	12	20	0.0504	J	0.0393	J	25* (1)	20
Strontium	58 (2)	328 (2)	75-125	28*	20	58.5		61.6		5	20
Thallium	101	131*	75-125	16	20	0.266		0.279		5 (1)	20
Batch number: 132060637001B	Sample number(s): 7138010-7138020 UNSPK: 7138011 BKG: 7138011										
Selenium	90	89	75-125	1	20	0.385	U	0.385	U	0 (1)	20
Batch number: 132060638001	Sample number(s): 7138010-7138020 UNSPK: 7138011 BKG: 7138011										
3a Mercury 7471A	123	122	65-135	1	20	0.0160	U	0.0161	U	0 (1)	20
Batch number: 13205039401A	Sample number(s): 7138010-7138011,7138014-7138020 BKG: 7138011										
15a pH by 9045D						7.42		8.00		8*	3
Batch number: 13206162401B	Sample number(s): 7138021-7138024 BKG: 7138024										
14a Moisture Content by 160.3						7.6		7.3		3	20
Batch number: 13207162401B	Sample number(s): 7138010-7138020 BKG: 7138011										
14a Moisture Content by 160.3						4.4		4.2		3	20
14a Moisture Content by 160.3						4.4		4.2		3	20
14a Moisture Content by 160.3						4.4		4.2		3	20
Batch number: 13210001	Sample number(s): 7138010-7138013,7138015,7138019-7138020 UNSPK: 7138011										
2378-TCDD	89	90	40-135	2	20						
12378-PeCDD	94	93	40-135	4	20						
123478-HxCDD	98	103	40-135	2	20						
123678-HxCDD	97	96	40-135	3	20						
123789-HxCDD	97	98	40-135	1	20						
1234678-HpCDD	93	97	40-135	1	20						
OCDD	96	96	40-135	1	20						
2378-TCDF	92	92	40-135	2	20						
12378-PeCDF	93	92	40-135	3	20						
23478-PeCDF	96	94	40-135	5	20						
123478-HxCDF	98	98	40-135	2	20						
123678-HxCDF	96	96	40-135	2	20						
123789-HxCDF	97	97	40-135	2	20						
234678-HxCDF	97	97	40-135	3	20						
1234678-HpCDF	94	95	40-135	0	20						
1234789-HpCDF	96	96	40-135	2	20						
OCDF	89	90	40-135	1	20						

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406357
Reported: 08/05/13 at 03:14 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13206SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7138010	84	88	95
7138011	83	89	96
7138012	84	89	95
7138013	83	91	102
7138015	82	88	91
7138016	84	88	91
7138017	76	81	86
7138018	82	88	93
7138019	85	89	100
7138020	84	88	97
Blank	88	93	102
LCS	93	97	105
MS	84	89	95
MSD	83	91	102
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13204A20B

	Trifluorotoluene-F
7138025	87
Blank	85
LCS	118
LCSD	118
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13206A16A

	Trifluorotoluene-F
7138011	74
7138012	75
7138013	69
7138015	72
7138016	63
7138017	67
7138018	70
7138020	69
Blank	76
LCS	75
MS	75
MSD	69

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406357
Reported: 08/05/13 at 03:14 PM

Surrogate Quality Control

Limits: 61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132090001A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7138010	96	92
7138011	95	89
7138012	100	94
7138013	76	96
7138015	100	95
7138016	108	100
7138017	102	92
7138018	102	92
7138019	95	93
7138020	103	94
7138021	102	95
7138022	94	89
7138023	76	73
7138024	91	87
Blank	115	101
LCS	111	109
LCSD	111	109
MS	100	94
MSD	76	96
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132120018A

	Chlorobenzene	Orthoterphenyl
7138010	94	95
7138011	102	98
7138012	108	101
7138013	102	104
7138015	98	93
7138016	99	99
7138017	100	100
7138018	71	73
7138019	98	99
7138020	93	90
Blank	104	105
LCS	108	110
MS	108	101
MSD	102	104
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13210001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7138010	59	58	61	67	62	63
7138011	44	46	48	52	48	47
7138012	65	66	69	73	65	66

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406357
Reported: 08/05/13 at 03:14 PM

Surrogate Quality Control

7138013	66	66	68	72	67	67
7138015	67	66	69	76	69	71
7138019	56	54	56	61	57	55
7138020	62	64	64	72	65	61
Blank	62	65	70	76	72	73
MS	65	66	69	73	65	66
MSD	66	66	68	72	67	67
OPR	60	68	67	73	70	67
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7138010	77	61	61	63	65	69
7138011	61	47	46	49	49	54
7138012	85	60	58	69	72	72
7138013	86	62	60	71	70	74
7138015	91	65	62	70	72	77
7138019	73	57	55	58	58	63
7138020	91	60	56	68	66	71
Blank	93	67	69	69	76	77
MS	85	60	58	69	72	72
MSD	86	62	60	71	70	74
OPR	91	65	65	72	71	74
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7138010	65	68	69	49	59	
7138011	49	51	52	37	46	
7138012	67	70	70	52	65	
7138013	68	70	71	53	67	
7138015	72	75	75	55	69	
7138019	59	61	64	47	57	
7138020	67	69	73	54	66	
Blank	73	77	79	50	66	
MS	67	70	70	52	65	
MSD	68	70	71	53	67	
OPR	69	75	77	51	67	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Op# 1406357 Sample# 7138010-25

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/23/2013
CarrierName: FedEx
AirbillNo: 796297539913

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130723-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-551-SA8-SB-0.0-0.5	7/23/13 07:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-551-SA8-SB-0.0-0.5	7/23/13 07:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-551-SA8-SB-4.0-5.0MS	7/23/13 08:00	SO	None	6 - 16 oz glass	10 day	X	X					X		X	X			X								X										MS/MSD
SL-851-SA8-SB-4.0-5.0	7/23/13 08:15	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-551-SA8-SB-9.0-10.0	7/23/13 08:30	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-551-SA8-SB-14.0-15.0	7/23/13 08:45	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										
SL-551-SA8-SB-19.0-20.0	7/23/13 09:00	SO	None	2 - 16 oz glass	10 day	X	X					X			X			X								X										

Special Instructions:

Sampler: V. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stefan Myse	07/23/2013	1600									
									Patch	7/24/13	0920

Acct# 13013 Ap# 1406357 Sample# 7138010-25

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/23/2013
CarrierName: FedEx
AirbillNo: 796297539913

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130723-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-551-SA8-SB-4.0-5.0MS	7/23/13 08:00	SO	None	6 - Encore	10 day																			X												MS/MSD
SL-851-SA8-SB-4.0-5.0	7/23/13 08:15	SO	None	2 - Encore	10 day																			X												
SL-551-SA8-SB-9.0-10.0	7/23/13 08:30	SO	None	2 - Encore	10 day																			X												
SL-551-SA8-SB-14.0-15.0	7/23/13 08:45	SO	None	2 - Encore	10 day																			X												
SL-551-SA8-SB-19.0-20.0	7/23/13 09:00	SO	None	2 - Encore	10 day																			X												
SL-555-SA8-SB-0.0-0.5	7/23/13 12:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-555-SA8-SB-0.0-0.5	7/23/13 12:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-555-SA8-SB-4.0-5.0	7/23/13 12:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X							X											
SL-555-SA8-SB-4.0-5.0	7/23/13 12:30	SO	None	2 - Encore	10 day																			X												
SL-557A-SA8-SB-0.0-0.5	7/23/13 13:40	SO	None	1 - SS-Sleeve	10 day										X																					
SL-557B-SA8-SB-0.0-0.5	7/23/13 13:45	SO	None	1 - SS-Sleeve	10 day										X																					
SL-557C-SA8-SB-0.0-0.5	7/23/13 13:50	SO	None	1 - SS-Sleeve	10 day										X																					
SL-557D-SA8-SB-0.0-0.5	7/23/13 13:55	SO	None	1 - SS-Sleeve	10 day										X																					
TB-072313	7/23/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												

Special Instructions:

Sampler: V. Coelen

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	07/23/2013	1600									
										7/24/13	0920

COC Rev 2

COC: 20130723-02, Page 1 of 1

1 of 1

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C# 1406357

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 7/24/13

Time of Receipt: 0920

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121 ~~DT13~~ 7/24/13	1.2	TB	WI	Y	B	
2	↓	1.0	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 7/24/13 1010

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH074

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 06, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/25/2013
Group Number: 1406760
SDG: PH074
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-527-SA8-SB-0.0-0.5 Soil	7139498
SL-527-SA8-SB-4.0-5.0 Soil	7139499
SL-528-SA8-SB-4.0-5.0 Soil	7139500
TB-072413 Water	7139501
SL-528-SA8-SB-0.0-0.5-dtsc Soil	7139502
SL-538-SA8-SB-0.0-0.5-dtsc Soil	7139503
SL-522-SA8-SB-0.0-0.5-dtsc Soil	7139504
SL-536-SA8-SB-0.0-0.5-dtsc Soil	7139505

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,



Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-527-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139498
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 08:50 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH074-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	0.77	J	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.5	J	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	0.77	J	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.6	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.5	J	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	0.82	J	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	0.97	J	1.8	0.74	1
12969	Pyrene	129-00-0	1.3	J	1.8	0.74	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.2	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139498
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 08:50 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH074-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,600		43.4	7.83	1
06944	Antimony	7440-36-0	4.34	U	4.34	0.803	1
06935	Arsenic	7440-38-2	3.56	J	4.34	0.760	1
06946	Barium	7440-39-3	133		1.09	0.0358	1
06947	Beryllium	7440-41-7	0.978	J	1.09	0.0727	1
07914	Boron	7440-42-8	2.08	J	10.9	0.912	1
06949	Cadmium	7440-43-9	0.382	J	1.09	0.0825	1
01650	Calcium	7440-70-2	11,400		21.7	3.63	1
06951	Chromium	7440-47-3	36.5		3.26	0.174	1
06952	Cobalt	7440-48-4	10.1		1.09	0.107	1
06953	Copper	7440-50-8	21.3		2.17	0.315	1
01654	Iron	7439-89-6	36,300		86.9	7.86	2
06955	Lead	7439-92-1	11.4		3.26	0.543	1
01656	Lithium	7439-93-2	23.9		4.3	0.37	1
01657	Magnesium	7439-95-4	7,320		10.9	1.81	1
06958	Manganese	7439-96-5	442		1.09	0.0901	1
06960	Molybdenum	7439-98-7	2.17	U	2.17	0.185	1
06961	Nickel	7440-02-0	20.7		2.17	0.141	1
10145	Phosphorus	7723-14-0	381		10.9	3.14	1
01662	Potassium	7440-09-7	4,180		109	9.05	1
01667	Sodium	7440-23-5	123		109	18.1	1
06969	Tin	7440-31-5	2.66	J	10.9	0.239	1
06970	Titanium	7440-32-6	895		1.09	0.185	1
06971	Vanadium	7440-62-2	58.9		1.09	0.141	1
06972	Zinc	7440-66-6	74.8		4.34	0.217	1
10146	Zirconium	7440-67-7	3.55	J	5.43	0.912	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.223	J	0.434	0.109	2
06142	Silver	7440-22-4	0.0489	J	0.217	0.0282	2
06144	Strontium	7440-24-6	33.3		0.434	0.0738	2
06145	Thallium	7440-28-0	0.312		0.217	0.0326	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0178	U	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.15		0.0100	0.0100	1
	The pH was measured in water at 20.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139498
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 08:50 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH074-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0403	1
11031	12378-PeCDD	40321-76-4	0.119	J	5.36	0.0547	1
11031	123478-HxCDD	39227-28-6	0.0857	JBQ	5.36	0.0477	1
11031	123678-HxCDD	57653-85-7	0.285	JQ	5.36	0.0535	1
11031	123789-HxCDD	19408-74-3	0.266	JBQ	5.36	0.0532	1
11031	1234678-HpCDD	35822-46-9	4.53	JB	5.36	0.0626	1
11031	OCDD	3268-87-9	35.1	B	10.7	0.0378	1
11031	2378-TCDF	51207-31-9	0.141	JQ	1.07	0.0813	1
11031	12378-PeCDF	57117-41-6	0.0777	JB	5.36	0.0461	1
11031	23478-PeCDF	57117-31-4	0.0959	JQ	5.36	0.0411	1
11031	123478-HxCDF	70648-26-9	0.0863	JQ	5.36	0.0293	1
11031	123678-HxCDF	57117-44-9	0.0617	JB	5.36	0.0297	1
11031	123789-HxCDF	72918-21-9	0.192	J	5.36	0.0358	1
11031	234678-HxCDF	60851-34-5	0.0731	JBQ	5.36	0.0280	1
11031	1234678-HpCDF	67562-39-4	0.507	J	5.36	0.0247	1
11031	1234789-HpCDF	55673-89-7	0.0490	JQ	5.36	0.0289	1
11031	OCDF	39001-02-0	0.656	JB	10.7	0.0359	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.208				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	66	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139498
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 08:50 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH074-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139498
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 08:50 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH074-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13207SLA026	07/27/2013 05:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13207SLA026	07/26/2013 18:45	Sally L Appleyard	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132080013A	07/30/2013 03:12	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132080013A	07/29/2013 08:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 22:37	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212007	08/03/2013 12:32	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13212007	08/01/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 07:42	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 13:30	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:32	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:32	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:32	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:32	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139498
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 08:50 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52700 SDG#: PH074-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 09:33	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13206039401A	07/25/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139499
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 09:20 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52740 SDG#: PH074-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.78	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.78	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.1	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.1	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.1	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.1	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.78	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.78	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.78	1
12969	2-Methylnaphthalene	91-57-6	2.0	U	2.0	0.78	1
12969	Naphthalene	91-20-3	2.0	U	2.0	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.1	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.78	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	24.56
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C15-C20)	n.a.	5.9	U	5.9	2.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139499
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 09:20 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52740 SDG#: PH074-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.9	U	5.9	2.4	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,100		46.5	8.39	1
06944	Antimony	7440-36-0	4.65	U	4.65	0.861	1
06935	Arsenic	7440-38-2	3.24	J	4.65	0.814	1
06946	Barium	7440-39-3	134		1.16	0.0384	1
06947	Beryllium	7440-41-7	1.07	J	1.16	0.0780	1
07914	Boron	7440-42-8	11.6	U	11.6	0.977	1
06949	Cadmium	7440-43-9	0.137	J	1.16	0.0884	1
01650	Calcium	7440-70-2	8,790		23.3	3.89	1
06951	Chromium	7440-47-3	38.1		3.49	0.186	1
06952	Cobalt	7440-48-4	8.81		1.16	0.115	1
06953	Copper	7440-50-8	19.3		2.33	0.337	1
01654	Iron	7439-89-6	30,800		93.1	8.42	2
06955	Lead	7439-92-1	10.7		3.49	0.582	1
01656	Lithium	7439-93-2	26.3		4.7	0.40	1
01657	Magnesium	7439-95-4	7,120		11.6	1.94	1
06958	Manganese	7439-96-5	340		1.16	0.0966	1
06960	Molybdenum	7439-98-7	2.33	U	2.33	0.198	1
06961	Nickel	7440-02-0	18.1		2.33	0.151	1
10145	Phosphorus	7723-14-0	220		11.6	3.36	1
01662	Potassium	7440-09-7	3,030		116	9.70	1
01667	Sodium	7440-23-5	230		116	19.4	1
06969	Tin	7440-31-5	3.06	J	11.6	0.256	1
06970	Titanium	7440-32-6	826		1.16	0.198	1
06971	Vanadium	7440-62-2	60.7		1.16	0.151	1
06972	Zinc	7440-66-6	63.2		4.65	0.233	1
10146	Zirconium	7440-67-7	3.16	J	5.82	0.977	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.121	J	0.465	0.116	2
06142	Silver	7440-22-4	0.0482	J	0.233	0.0302	2
06144	Strontium	7440-24-6	34.1		0.465	0.0791	2
06145	Thallium	7440-28-0	0.313		0.233	0.0349	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0128	J	0.0196	0.0117	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.8 C.	n.a.	8.32		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139499
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 09:20 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52740 SDG#: PH074-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139499
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 09:20 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52740 SDG#: PH074-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.17 U	1.17	0.0545	1
11031	12378-PeCDD	40321-76-4	0.0807 JQ	5.87	0.0562	1
11031	123478-HxCDD	39227-28-6	0.0300 JBQ	5.87	0.0256	1
11031	123678-HxCDD	57653-85-7	0.0426 JQ	5.87	0.0274	1
11031	123789-HxCDD	19408-74-3	0.0298 JBQ	5.87	0.0288	1
11031	1234678-HpCDD	35822-46-9	0.271 JB	5.87	0.0423	1
11031	OCDD	3268-87-9	1.77 JB	11.7	0.0378	1
11031	2378-TCDF	51207-31-9	1.17 U	1.17	0.0511	1
11031	12378-PeCDF	57117-41-6	0.0592 JBQ	5.87	0.0321	1
11031	23478-PeCDF	57117-31-4	5.87 U	5.87	0.0311	1
11031	123478-HxCDF	70648-26-9	5.87 U	5.87	0.0173	1
11031	123678-HxCDF	57117-44-9	0.0254 JBQ	5.87	0.0186	1
11031	123789-HxCDF	72918-21-9	5.87 U	5.87	0.0244	1
11031	234678-HxCDF	60851-34-5	0.0309 JBQ	5.87	0.0179	1
11031	1234678-HpCDF	67562-39-4	0.0161 J	5.87	0.00952	1
11031	1234789-HpCDF	55673-89-7	5.87 U	5.87	0.0170	1
11031	OCDF	39001-02-0	0.102 JBQ	11.7	0.0442	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00341			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	50	25 - 164
13C12-12378-PeCDD	63	25 - 181
13C12-123478-HxCDD	63	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	43	24 - 169
13C12-12378-PeCDF	59	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	52	26 - 152
13C12-123678-HxCDF	57	26 - 123
13C12-234678-HxCDF	55	28 - 136
13C12-123789-HxCDF	52	29 - 147
13C12-1234678-HpCDF	69	28 - 143
13C12-1234789-HpCDF	51	26 - 138
13C12-OCDF	45	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139499
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 09:20 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52740 SDG#: PH074-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139499
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 09:20 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52740 SDG#: PH074-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13207SLA026	07/27/2013	08:34	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13207SLA026	07/26/2013	18:45	Sally L Appleyard	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/30/2013	17:15	Laura M Krieger	24.56
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320631816	07/25/2013	14:55	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320631816	07/25/2013	14:55	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132080013A	07/30/2013	03:30	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132080013A	07/29/2013	08:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013	17:47	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013	08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212007	08/03/2013	13:29	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13212007	08/01/2013	14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013	06:27	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013	13:34	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-527-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139499
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 09:20 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52740 SDG#: PH074-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:34	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:34	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:34	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:34	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 09:35	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13206039401A	07/25/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-528-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139500
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 13:55 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52840 SDG#: PH074-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.4	J	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.1	J	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	J	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	0.79	J	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.6	J	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9		1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	2.1		1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.77
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-528-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139500
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 13:55 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52840 SDG#: PH074-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,600		45.1	8.13	1
06944	Antimony	7440-36-0	4.51	U	4.51	0.835	1
06935	Arsenic	7440-38-2	5.55		4.51	0.790	1
06946	Barium	7440-39-3	131		1.13	0.0372	1
06947	Beryllium	7440-41-7	1.02	J	1.13	0.0756	1
07914	Boron	7440-42-8	1.79	J	11.3	0.948	1
06949	Cadmium	7440-43-9	0.346	J	1.13	0.0857	1
01650	Calcium	7440-70-2	15,600		22.6	3.77	1
06951	Chromium	7440-47-3	38.4		3.38	0.181	1
06952	Cobalt	7440-48-4	10.1		1.13	0.112	1
06953	Copper	7440-50-8	21.4		2.26	0.327	1
01654	Iron	7439-89-6	29,200		90.3	8.17	2
06955	Lead	7439-92-1	10.3		3.38	0.564	1
01656	Lithium	7439-93-2	27.9		4.5	0.38	1
01657	Magnesium	7439-95-4	7,560		11.3	1.88	1
06958	Manganese	7439-96-5	435		1.13	0.0936	1
06960	Molybdenum	7439-98-7	2.26	U	2.26	0.192	1
06961	Nickel	7440-02-0	20.7		2.26	0.147	1
10145	Phosphorus	7723-14-0	339		11.3	3.26	1
01662	Potassium	7440-09-7	2,970		113	9.41	1
01667	Sodium	7440-23-5	119		113	18.8	1
06969	Tin	7440-31-5	3.13	J	11.3	0.248	1
06970	Titanium	7440-32-6	1,100		1.13	0.192	1
06971	Vanadium	7440-62-2	68.0		1.13	0.147	1
06972	Zinc	7440-66-6	64.2		4.51	0.226	1
10146	Zirconium	7440-67-7	4.34	J	5.64	0.948	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.153	J	0.451	0.113	2
06142	Silver	7440-22-4	0.0607	J	0.226	0.0293	2
06144	Strontium	7440-24-6	37.2		0.451	0.0767	2
06145	Thallium	7440-28-0	0.294		0.226	0.0338	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0189	U	0.0189	0.0113	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.06		0.0100	0.0100	1
	The pH was measured in water at 20.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-528-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139500
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 13:55 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52840 SDG#: PH074-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-528-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139500
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 13:55 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52840 SDG#: PH074-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.14	U	1.14	0.0436	1
11031	12378-PeCDD	40321-76-4	5.69	U	5.69	0.0503	1
11031	123478-HxCDD	39227-28-6	0.0440	JBQ	5.69	0.0235	1
11031	123678-HxCDD	57653-85-7	0.0345	J	5.69	0.0254	1
11031	123789-HxCDD	19408-74-3	0.0388	JBQ	5.69	0.0252	1
11031	1234678-HpCDD	35822-46-9	0.190	JBQ	5.69	0.0305	1
11031	OCDD	3268-87-9	1.01	JB	11.4	0.0297	1
11031	2378-TCDF	51207-31-9	1.14	U	1.14	0.0353	1
11031	12378-PeCDF	57117-41-6	5.69	U	5.69	0.0259	1
11031	23478-PeCDF	57117-31-4	0.0274	JQ	5.69	0.0238	1
11031	123478-HxCDF	70648-26-9	0.0252	JQ	5.69	0.0132	1
11031	123678-HxCDF	57117-44-9	0.0368	JBQ	5.69	0.0127	1
11031	123789-HxCDF	72918-21-9	0.0345	JQ	5.69	0.0197	1
11031	234678-HxCDF	60851-34-5	0.0446	JBQ	5.69	0.0143	1
11031	1234678-HpCDF	67562-39-4	0.0360	JQ	5.69	0.0105	1
11031	1234789-HpCDF	55673-89-7	0.0220	JQ	5.69	0.0159	1
11031	OCDF	39001-02-0	0.0872	JB	11.4	0.0379	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00380				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	55	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	63	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	50	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	62	26 - 123
13C12-234678-HxCDF	55	28 - 136
13C12-123789-HxCDF	53	29 - 147
13C12-1234678-HpCDF	68	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	48	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-528-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139500
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 13:55 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52840 SDG#: PH074-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-528-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139500
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 13:55 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52840 SDG#: PH074-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13207SLA026	07/27/2013 09:06	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13207SLA026	07/26/2013 18:45	Sally L Appleyard	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/30/2013 17:53	Laura M Krieger	22.77
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320631816	07/25/2013 14:56	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320631816	07/25/2013 14:56	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132080013A	07/30/2013 03:48	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132080013A	07/29/2013 08:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 18:07	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212007	08/03/2013 14:26	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13212007	08/01/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 06:31	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 13:45	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-528-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139500
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 13:55 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52840 SDG#: PH074-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:41	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:41	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:41	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:41	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 09:37	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13206039401A	07/25/2013 20:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-072413 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7139501
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 08:00

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TR724 SDG#: PH074-04TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13210A94A	07/29/2013 12:07	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13210A94A	07/29/2013 12:07	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-528-SA8-SB-0.0-0.5-dtsc Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139502
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 10:30 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL528 SDG#: PH074-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,700		41.4	7.46	1
06944	Antimony	7440-36-0	4.14	U	4.14	0.765	1
06935	Arsenic	7440-38-2	3.37	J	4.14	0.724	1
06946	Barium	7440-39-3	117		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.963	J	1.03	0.0693	1
07914	Boron	7440-42-8	2.78	J	10.3	0.869	1
06949	Cadmium	7440-43-9	0.446	J	1.03	0.0786	1
01650	Calcium	7440-70-2	7,450		20.7	3.45	1
06951	Chromium	7440-47-3	34.9		3.10	0.165	1
06952	Cobalt	7440-48-4	9.80		1.03	0.102	1
06953	Copper	7440-50-8	23.4		2.07	0.300	1
01654	Iron	7439-89-6	28,400		82.7	7.49	2
06955	Lead	7439-92-1	10.4		3.10	0.517	1
01656	Lithium	7439-93-2	21.7		4.1	0.35	1
01657	Magnesium	7439-95-4	7,050		10.3	1.73	1
06958	Manganese	7439-96-5	484		1.03	0.0858	1
06960	Molybdenum	7439-98-7	2.07	U	2.07	0.176	1
06961	Nickel	7440-02-0	19.8		2.07	0.134	1
10145	Phosphorus	7723-14-0	468		10.3	2.99	1
01662	Potassium	7440-09-7	6,280		103	8.62	1
01667	Sodium	7440-23-5	82.7	J	103	17.3	1
06969	Tin	7440-31-5	2.67	J	10.3	0.228	1
06970	Titanium	7440-32-6	1,040		1.03	0.176	1
06971	Vanadium	7440-62-2	60.4		1.03	0.134	1
06972	Zinc	7440-66-6	73.1		4.14	0.207	1
10146	Zirconium	7440-67-7	4.45	J	5.17	0.869	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.299	J	0.414	0.103	2
06142	Silver	7440-22-4	0.0410	J	0.207	0.0269	2
06144	Strontium	7440-24-6	27.5		0.414	0.0703	2
06145	Thallium	7440-28-0	0.356		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0126	J	0.0166	0.010	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.2		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-528-SA8-SB-0.0-0.5-dtsc Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139502
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 10:30 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL528 SDG#: PH074-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 06:34	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 13:49	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:43	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:43	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:43	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:43	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 09:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-0.0-0.5-dtsc Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139503
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 11:00 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL538 SDG#: PH074-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,800		42.3	7.62	1
06944	Antimony	7440-36-0	4.23	U	4.23	0.782	1
06935	Arsenic	7440-38-2	4.25		4.23	0.740	1
06946	Barium	7440-39-3	108		1.06	0.0349	1
06947	Beryllium	7440-41-7	0.870	J	1.06	0.0708	1
07914	Boron	7440-42-8	3.86	J	10.6	0.888	1
06949	Cadmium	7440-43-9	0.464	J	1.06	0.0803	1
01650	Calcium	7440-70-2	18,700		21.1	3.53	1
06951	Chromium	7440-47-3	33.8		3.17	0.169	1
06952	Cobalt	7440-48-4	9.13		1.06	0.105	1
06953	Copper	7440-50-8	21.4		2.11	0.307	1
01654	Iron	7439-89-6	28,300		84.6	7.65	2
06955	Lead	7439-92-1	15.0		3.17	0.529	1
01656	Lithium	7439-93-2	23.4		4.2	0.36	1
01657	Magnesium	7439-95-4	7,330		10.6	1.77	1
06958	Manganese	7439-96-5	429		1.06	0.0877	1
06960	Molybdenum	7439-98-7	2.11	U	2.11	0.180	1
06961	Nickel	7440-02-0	19.0		2.11	0.137	1
10145	Phosphorus	7723-14-0	548		10.6	3.05	1
01662	Potassium	7440-09-7	5,650		106	8.82	1
01667	Sodium	7440-23-5	92.6	J	106	17.7	1
06969	Tin	7440-31-5	2.93	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,120		1.06	0.180	1
06971	Vanadium	7440-62-2	60.7		1.06	0.137	1
06972	Zinc	7440-66-6	75.3		4.23	0.211	1
10146	Zirconium	7440-67-7	3.43	J	5.29	0.888	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.301	J	0.423	0.106	2
06142	Silver	7440-22-4	0.0554	J	0.211	0.0275	2
06144	Strontium	7440-24-6	40.6		0.423	0.0719	2
06145	Thallium	7440-28-0	0.325		0.211	0.0317	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164	J	0.0173	0.0104	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.4		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-0.0-0.5-dtsc Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139503
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 11:00 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL538 SDG#: PH074-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 06:45	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 13:53	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:46	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:46	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:46	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:46	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 09:41	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-0.0-0.5-dtsc Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139504
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 11:20 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL522 SDG#: PH074-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,800		40.7	7.33	1
06944	Antimony	7440-36-0	4.07	U	4.07	0.753	1
06935	Arsenic	7440-38-2	2.55	J	4.07	0.712	1
06946	Barium	7440-39-3	67.2		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.450	J	1.02	0.0681	1
07914	Boron	7440-42-8	3.44	J	10.2	0.854	1
06949	Cadmium	7440-43-9	0.439	J	1.02	0.0773	1
01650	Calcium	7440-70-2	25,800		20.3	3.40	1
06951	Chromium	7440-47-3	22.5		3.05	0.163	1
06952	Cobalt	7440-48-4	6.11		1.02	0.101	1
06953	Copper	7440-50-8	14.4		2.03	0.295	1
01654	Iron	7439-89-6	19,000		40.7	3.68	1
06955	Lead	7439-92-1	5.84		3.05	0.509	1
01656	Lithium	7439-93-2	13.0		4.1	0.35	1
01657	Magnesium	7439-95-4	4,440		10.2	1.70	1
06958	Manganese	7439-96-5	255		1.02	0.0844	1
06960	Molybdenum	7439-98-7	0.596	J	2.03	0.173	1
06961	Nickel	7440-02-0	14.0		2.03	0.132	1
10145	Phosphorus	7723-14-0	614		10.2	2.94	1
01662	Potassium	7440-09-7	3,510		102	8.48	1
01667	Sodium	7440-23-5	128		102	17.0	1
06969	Tin	7440-31-5	1.83	J	10.2	0.224	1
06970	Titanium	7440-32-6	616		1.02	0.173	1
06971	Vanadium	7440-62-2	38.2		1.02	0.132	1
06972	Zinc	7440-66-6	44.7		4.07	0.203	1
10146	Zirconium	7440-67-7	1.97	J	5.09	0.854	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.781		0.407	0.102	2
06142	Silver	7440-22-4	0.0307	J	0.203	0.0264	2
06144	Strontium	7440-24-6	47.7		0.407	0.0692	2
06145	Thallium	7440-28-0	0.179	J	0.203	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.6		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-0.0-0.5-dtsc Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139504
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 11:20 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL522 SDG#: PH074-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 13:56	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:48	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:48	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:48	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:48	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 09:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-0.0-0.5-dtsc Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139505
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 11:40 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL536 SDG#: PH074-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,100		42.1	7.59	1
06944	Antimony	7440-36-0	4.21	U	4.21	0.779	1
06935	Arsenic	7440-38-2	3.12	J	4.21	0.737	1
06946	Barium	7440-39-3	118		1.05	0.0347	1
06947	Beryllium	7440-41-7	0.987	J	1.05	0.0705	1
07914	Boron	7440-42-8	1.99	J	10.5	0.884	1
06949	Cadmium	7440-43-9	0.456	J	1.05	0.0800	1
01650	Calcium	7440-70-2	9,260		21.1	3.52	1
06951	Chromium	7440-47-3	34.4		3.16	0.168	1
06952	Cobalt	7440-48-4	9.96		1.05	0.104	1
06953	Copper	7440-50-8	21.4		2.11	0.305	1
01654	Iron	7439-89-6	27,000		84.2	7.62	2
06955	Lead	7439-92-1	12.9		3.16	0.526	1
01656	Lithium	7439-93-2	23.8		4.2	0.36	1
01657	Magnesium	7439-95-4	7,050		10.5	1.76	1
06958	Manganese	7439-96-5	477		1.05	0.0874	1
06960	Molybdenum	7439-98-7	2.11	U	2.11	0.179	1
06961	Nickel	7440-02-0	19.9		2.11	0.137	1
10145	Phosphorus	7723-14-0	410		10.5	3.04	1
01662	Potassium	7440-09-7	4,450		105	8.78	1
01667	Sodium	7440-23-5	82.3	J	105	17.6	1
06969	Tin	7440-31-5	2.71	J	10.5	0.232	1
06970	Titanium	7440-32-6	1,000		1.05	0.179	1
06971	Vanadium	7440-62-2	58.5		1.05	0.137	1
06972	Zinc	7440-66-6	69.1		4.21	0.211	1
10146	Zirconium	7440-67-7	4.71	J	5.26	0.884	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.205	J	0.421	0.105	2
06142	Silver	7440-22-4	0.0421	J	0.211	0.0274	2
06144	Strontium	7440-24-6	28.2		0.421	0.0716	2
06145	Thallium	7440-28-0	0.314		0.211	0.0316	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0156	J	0.0165	0.0099	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.0		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-0.0-0.5-dtsc Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7139505
LL Group # 1406760
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/24/2013 11:40 by TB

Submitted: 07/25/2013 09:15
Reported: 08/06/2013 11:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL536 SDG#: PH074-08*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 06:49	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 14:00	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:50	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:50	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:50	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:50	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 09:46	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406760
Reported: 08/06/13 at 11:07 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13207SLA026	Sample number(s): 7139498-7139500									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	106		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	95		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	95		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	99		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	98		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	113		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	98		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	95		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	122		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	123		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	98		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	101		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	125		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	121		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	100		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	96		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	79		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	119		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	93		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Batch number: 13210A94A	Sample number(s): 7139501									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	105	108	75-135	3	30
Batch number: 13210B16A	Sample number(s): 7139499-7139500									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	77		67-119		
Batch number: 132080013A	Sample number(s): 7139498-7139500									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	69	72	36-106	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	92		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406760
Reported: 08/06/13 at 11:07 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	94		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132110023A	Sample number(s): 7139498-7139500									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	107		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	114		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	113		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	116		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	89		49-107		
Batch number: 132100637001	Sample number(s): 7139498-7139500,7139502-7139505									
Aluminum	40.0	U	40.0	7.21	mg/kg	103		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	114		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	99		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	103		80-120		
Calcium	9.96	J	20.0	3.34	mg/kg	104		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	99		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	106		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	105		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	101		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	104		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.28	J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	101		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	100		80-120		
Zinc	0.614	J	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	101		80-120		
Batch number: 132100637001A	Sample number(s): 7139498-7139500,7139502-7139505									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	97		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	90		80-120		
Batch number: 132100637001B	Sample number(s): 7139498-7139500,7139502-7139505									
Selenium	0.400	U	0.400	0.100	mg/kg	98		80-120		
Batch number: 132100638001	Sample number(s): 7139498-7139500,7139502-7139505									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	104		85-120		
Batch number: 13206039401A	Sample number(s): 7139498-7139500									
15a pH by 9045D						100		95-105		
Batch number: 13211162401A	Sample number(s): 7139498-7139500,7139502-7139505									

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406760
Reported: 08/06/13 at 11:07 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13212007	Sample number(s): 7139498-7139500								
2378-TCDD	1.00 U	1.00	0.0453	ng/kg	91		67-158		
12378-PeCDD	5.00 U	5.00	0.0506	ng/kg	92		70-142		
123478-HxCDD	0.0314 J	5.00	0.0238	ng/kg	96		70-164		
123678-HxCDD	5.00 U	5.00	0.0263	ng/kg	86		76-134		
123789-HxCDD	0.0370 J	5.00	0.0270	ng/kg	91		64-162		
1234678-HpCDD	0.0840 J	5.00	0.0287	ng/kg	88		70-140		
OCDD	0.248 J	10.0	0.0272	ng/kg	89		78-144		
2378-TCDF	1.00 U	1.00	0.0456	ng/kg	92		75-158		
12378-PeCDF	0.0452 J	5.00	0.0284	ng/kg	87		80-134		
23478-PeCDF	5.00 U	5.00	0.0279	ng/kg	87		68-160		
123478-HxCDF	5.00 U	5.00	0.0161	ng/kg	92		72-134		
123678-HxCDF	0.0274 J	5.00	0.0155	ng/kg	92		84-130		
123789-HxCDF	5.00 U	5.00	0.0210	ng/kg	89		78-130		
234678-HxCDF	0.0162 J	5.00	0.0149	ng/kg	89		70-156		
1234678-HpCDF	5.00 U	5.00	0.00950	ng/kg	89		82-122		
1234789-HpCDF	5.00 U	5.00	0.0170	ng/kg	89		78-138		
OCDF	0.0744 J	10.0	0.0441	ng/kg	86		63-170		
TEQ WHO 2005 - EDLx0.0	U			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13207SLA026	Sample number(s): 7139498-7139500 UNSPK: 7139498								
Acenaphthene	99	95	48-127	5	30				
Acenaphthylene	90	86	49-121	5	30				
Anthracene	92	86	52-126	7	30				
Benzo(a)anthracene	97	88	32-135	9	30				
Benzo(a)pyrene	96	89	36-138	7	30				
Benzo(b)fluoranthene	104	97	26-142	7	30				
Benzo(e)pyrene	93	86	70-130	7	30				
Benzo(g,h,i)perylene	95	79	33-141	18	30				
Benzo(k)fluoranthene	94	86	47-129	9	30				
Butylbenzylphthalate	121	111	59-153	8	30				
Di-n-butylphthalate	116	111	62-154	4	30				
Chrysene	97	86	29-148	11	30				
Dibenz(a,h)anthracene	101	89	34-125	13	30				
Diethylphthalate	121	115	76-127	6	30				
Dimethylphthalate	100	97	62-136	4	30				

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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406760
Reported: 08/06/13 at 11:07 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Bis(2-Ethylhexyl)phthalate	130	128	39-167	2	30						
Fluoranthene	97	89	47-135	8	30						
Fluorene	94	88	50-129	6	30						
Indeno(1,2,3-cd)pyrene	101	88	17-136	14	30						
1-Methylnaphthalene	99	95	50-131	4	30						
2-Methylnaphthalene	95	91	28-144	4	30						
Naphthalene	93	90	31-148	3	30						
N-Nitrosodimethylamine	74	70	48-113	5	30						
Di-n-octylphthalate	112	104	52-162	8	30						
Phenanthrene	91	84	29-142	7	30						
Pyrene	96	86	26-143	11	30						
Batch number: 13210B16A	Sample number(s): 7139499-7139500 UNSPK: P141113										
11a TPH by EPA 8015B GRO	75	75	39-118	15	30						
Batch number: 132080013A	Sample number(s): 7139498-7139500 UNSPK: P141113										
PCB-1016	88	86	16-146	2	50						
PCB-1260	88	88	40-134	0	50						
Batch number: 132110023A	Sample number(s): 7139498-7139500 UNSPK: P141113										
EFH (C12-C14)	86	89	49-123	4	20						
EFH (C15-C20)	90	90	49-123	1	20						
EFH (C21-C30)	93	94	49-123	1	20						
EFH (C30-C40)	94	92	49-123	2	20						
EFH (C8-C11)	85	90	49-123	5	20						
Batch number: 132100637001	Sample number(s): 7139498-7139500,7139502-7139505 UNSPK: P141113 BKG: P141113										
Aluminum	4133 (2)	3286 (2)	75-125	5	20	24,900		25,600		3	20
Antimony	40*	40*	75-125	2	20	3.92	U	3.92	U	0 (1)	20
Arsenic	100	99	75-125	2	20	2.69	J	2.62	J	3 (1)	20
Barium	101	99	75-125	2	20	122		124		2	20
Beryllium	103	102	75-125	1	20	0.895	J	0.923	J	3 (1)	20
Boron	96	95	75-125	2	20	1.67	J	1.50	J	11 (1)	20
Cadmium	94	95	75-125	1	20	0.324	J	0.352	J	8 (1)	20
Calcium	179 (2)	107 (2)	75-125	4	20	6,390		6,410		0	20
Chromium	124	116	75-125	3	20	32.1		33.6		5	20
Cobalt	93	93	75-125	1	20	9.12		9.02		1	20
Copper	113	107	75-125	4	20	18.6		19.2		3	20
Iron	6514 (2)	7090 (2)	75-125	2	20	22,700		26,000		14	20
Lead	90	87	75-125	2	20	9.68		8.77		10 (1)	20
Lithium	103	102	75-125	1	20	20.7		21.3		3	20
Magnesium	428 (2)	336 (2)	75-125	3	20	6,280		6,400		2	20
Manganese	111 (2)	120 (2)	75-125	1	20	418		403		3	20
Molybdenum	91	90	75-125	2	20	1.96	U	1.96	U	0 (1)	20
Nickel	95	95	75-125	1	20	18.1		18.0		0	20
Phosphorus	110	104	75-125	2	20	257		263		2	20
Potassium	169*	141*	75-125	6	20	3,600		3,580		1	20
Sodium	97	96	75-125	1	20	139		148		7 (1)	20
Tin	87	87	75-125	1	20	2.61	J	2.88	J	10 (1)	20
Titanium	568 (2)	424 (2)	75-125	11	20	867		913		5	20

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406760
Reported: 08/06/13 at 11:07 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Vanadium	124	118	75-125	3	20	54.2	56.6	4	20
Zinc	102	99	75-125	2	20	61.5	62.0	1	20
Zirconium	95	94	75-125	1	20	3.95 J	4.63 J	16 (1)	20
Batch number: 132100637001A	Sample number(s): 7139498-7139500,7139502-7139505 UNSPK: P141113 BKG: P141113								
Silver	99	95	75-125	4	20	0.0422 J	0.0427 J	1 (1)	20
Strontium	109	90	75-125	4	20	30.3	30.8	2	20
Thallium	105	106	75-125	0	20	0.296	0.275	7 (1)	20
Batch number: 132100637001B	Sample number(s): 7139498-7139500,7139502-7139505 UNSPK: P141113 BKG: P141113								
Selenium	91	91	75-125	1	20	0.167 J	0.190 J	13 (1)	20
Batch number: 132100638001	Sample number(s): 7139498-7139500,7139502-7139505 UNSPK: P141113 BKG: P141113								
3a Mercury 7471A	113	110	65-135	4	20	0.0165 U	0.0165 U	0 (1)	20
Batch number: 13206039401A	Sample number(s): 7139498-7139500 BKG: 7139499								
15a pH by 9045D						8.32	8.29	0	3
Batch number: 13211162401A	Sample number(s): 7139498-7139500,7139502-7139505 BKG: P141113								
14a Moisture Content by 160.3						12.9	15.0	15	20
Batch number: 13212007	Sample number(s): 7139498-7139500 UNSPK: P141113								
2378-TCDD	96	94	40-135	6	20				
12378-PeCDD	98	90	40-135	12	20				
123478-HxCDD	91	89	40-135	7	20				
123678-HxCDD	91	89	40-135	6	20				
123789-HxCDD	88	86	40-135	6	20				
1234678-HpCDD	88	84	40-135	8	20				
OCDD	86	84	40-135	6	20				
2378-TCDF	95	91	40-135	8	20				
12378-PeCDF	91	86	40-135	9	20				
23478-PeCDF	93	92	40-135	6	20				
123478-HxCDF	89	89	40-135	4	20				
123678-HxCDF	87	88	40-135	2	20				
123789-HxCDF	86	85	40-135	6	20				
234678-HxCDF	88	89	40-135	3	20				
1234678-HpCDF	87	87	40-135	3	20				
1234789-HpCDF	84	85	40-135	4	20				
OCDF	80	79	40-135	5	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13207SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406760
Reported: 08/06/13 at 11:07 AM

Surrogate Quality Control

7139498	79	83	96
7139499	82	87	95
7139500	80	85	95
Blank	88	93	104
LCS	83	90	101
MS	83	88	98
MSD	76	80	92
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13210A94A

	Trifluorotoluene-F
7139501	72
Blank	72
LCS	76
LCSD	78
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13210B16A

	Trifluorotoluene-F
7139499	69
7139500	72
Blank	78
LCS	78
MS	69
MSD	68
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132080013A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7139498	93	89
7139499	95	93
7139500	94	89
Blank	101	103
LCS	103	96
LCSD	104	108
MS	99	92
MSD	95	89
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132110023A

	Chlorobenzene	Orthoterphenyl
7139498	97	83
7139499	109	92

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1406760
Reported: 08/06/13 at 11:07 AM

Surrogate Quality Control

7139500	96	91
Blank	105	104
LCS	109	111
MS	102	81
MSD	100	84
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13212007

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7139498	67	73	61	66	64	65
7139499	50	58	52	57	55	52
7139500	55	63	57	62	55	53
Blank	63	66	60	72	67	65
MS	55	67	58	61	57	52
MSD	57	64	54	60	60	60
OPR	55	60	56	65	61	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7139498	66	66	65	76	70	72
7139499	69	51	45	63	63	66
7139500	68	57	48	70	63	69
Blank	86	62	60	77	81	84
MS	71	61	49	72	64	67
MSD	72	55	50	73	69	71
OPR	76	60	58	68	68	74
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7139498	71	76	78	62	72
7139499	65	67	64	43	59
7139500	67	68	65	50	65
Blank	84	86	84	53	68
MS	68	70	70	48	68
MSD	72	74	72	49	66
OPR	73	76	77	45	60
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Gp#1406760 Sample#7139498-505

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/24/2013
CarrierName: FedEx
AirbillNo: 796309414454

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130724-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-527-SA8-SB-0.0-0.5	7/24/13 08:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-527-SA8-SB-0.0-0.5	7/24/13 08:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-527-SA8-SB-4.0-5.0	7/24/13 09:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-528-SA8-SB-4.0-5.0	7/24/13 13:55	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										

Special Instructions:

Sampler: JBennett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stacy Murphy	07/24/2013	1600									
									Patsy	7/25/13	0915

COC Rev 2

COC: 20130724-01, Page 1 of 1

Acct#13013 Cap#14067760 sample#7139498-505

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/24/2013
CarrierName: FedEx
AirbillNo: 796309414454

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130724-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-072413	7/24/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-527-SA8-SB-4.0-5.0	7/24/13 09:20	SO	None	2 - Encore	10 day																			X												
SL-528-SA8-SB-4.0-5.0	7/24/13 13:55	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: A Bennett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Mike	07/24/2013	1600									
									Patch	7/25/13	0915

COC Rev 2

COC: 20130724-02, Page 1 of 1

1 of 1

acct#13013 Ap#14067760 Sample#7139498-505

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/24/2013

CarrierName: FedEx

AirbillNo: 796309414454

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20130724-03

Cooler #: 3

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-528-SA8-SB-0.0-0.5-dtsc	7/24/13 10:30	SO	None	1 - 8 oz glass	10 day	X	X																													
SL-538-SA8-SB-0.0-0.5-dtsc	7/24/13 11:00	SO	None	1 - 8 oz glass	10 day	X	X																													
SL-522-SA8-SB-0.0-0.5-dtsc	7/24/13 11:20	SO	None	1 - 8 oz glass	10 day	X	X																													
SL-536-SA8-SB-0.0-0.5-dtsc	7/24/13 11:40	SO	None	1 - 8 oz glass	10 day	X	X																													

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	7/24/2013	1600									
									Patty	7/25/13	0915

COC Rev 2

COC: 20130724-03, Page 1 of 1

1 of 1

eurofins | Lancaster Laboratories

G# 1406760

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 7/25/13

Time of Receipt: 0915

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.1	TB	WI	y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat Gh 3472 **Date/Time:** 7/25/13 0935

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH075

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 13, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/26/2013
Group Number: 1407089
SDG: PH075
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB1-072513 Water	7141111
EB2-072513 Water	7141112
SL-523-SA8-SB-4.0-5.0 Soil	7141113
SL-523-SA8-SB-4.0-5.0MS Soil	7141114
SL-523-SA8-SB-4.0-5.0MSD Soil	7141115
SL-523-SA8-SB-4.0-5.0DUP Soil	7141116
SL-823-SA8-SB-4.0-5.0 Soil	7141117
SL-524-SA8-SB-4.0-5.0 Soil	7141118
SL-525-SA8-SB-0.0-0.5 Soil	7141119
SL-525-SA8-SB-4.0-5.0 Soil	7141120
TB-072513 Water	7141121

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: EB1-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141111
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 15:00 by PH

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

E1725 SDG#: PH075-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		ug/l		ug/l	ug/l	
10461	Aniline	62-53-3	1	U	1	0.5	1
10461	Benzidine	92-87-5	63	U	63	21	1
10461	Benzoic acid	65-85-0	16	U	16	6	1
10461	Benzyl alcohol	100-51-6	16	U	16	5	1
10461	1,1'-Biphenyl	92-52-4	1	U	1	0.5	1
10461	4-Bromophenyl-phenylether	101-55-3	1	U	1	0.5	1
10461	Carbazole	86-74-8	1	U	1	0.5	1
10461	4-Chloro-3-methylphenol	59-50-7	1	U	1	0.5	1
10461	4-Chloroaniline	106-47-8	1	U	1	0.5	1
10461	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	0.5	1
10461	bis(2-Chloroethyl)ether	111-44-4	1	U	1	0.5	1
10461	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10461	2-Chloronaphthalene	91-58-7	1	U	1	0.4	1
10461	2-Chlorophenol	95-57-8	1	U	1	0.5	1
10461	4-Chlorophenyl-phenylether	7005-72-3	1	U	1	0.5	1
10461	Dibenzofuran	132-64-9	1	U	1	0.5	1
10461	1,2-Dichlorobenzene	95-50-1	1	U	1	0.5	1
10461	1,3-Dichlorobenzene	541-73-1	1	U	1	0.5	1
10461	1,4-Dichlorobenzene	106-46-7	1	U	1	0.5	1
10461	3,3'-Dichlorobenzidine	91-94-1	5	U	5	2	1
10461	2,4-Dichlorophenol	120-83-2	1	U	1	0.5	1
10461	2,6-Dichlorophenol	87-65-0	1	U	1	0.5	1
10461	2,4-Dimethylphenol	105-67-9	1	U	1	0.5	1
10461	3,5-Dimethylphenol	108-68-9	10	U	10	3	1
10461	4,6-Dinitro-2-methylphenol	534-52-1	16	U	16	5	1
10461	2,4-Dinitrophenol	51-28-5	31	U	31	10	1
10461	1,2-Diphenylhydrazine	122-66-7	1	U	1	0.5	1
10461	Hexachlorobenzene	118-74-1	0.5	U	0.5	0.1	1
10461	Hexachlorobutadiene	87-68-3	1	U	1	0.5	1
10461	Hexachlorocyclopentadiene	77-47-4	16	U	16	5	1
10461	Hexachloroethane	67-72-1	5	U	5	1	1
10461	Isophorone	78-59-1	1	U	1	0.5	1
10461	2-Methylphenol	95-48-7	1	U	1	0.5	1
10461	4-Methylphenol	106-44-5	1	U	1	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10461	NDPA as diphenylamine	n.a.	5	U	5	2	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10461	2-Nitroaniline	88-74-4	1	U	1	0.5	1
10461	3-Nitroaniline	99-09-2	1	U	1	0.5	1
10461	4-Nitroaniline	100-01-6	1	U	1	0.5	1
10461	Nitrobenzene	98-95-3	1	U	1	0.5	1
10461	2-Nitrophenol	88-75-5	1	U	1	0.5	1
10461	4-Nitrophenol	100-02-7	31	U	31	10	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141111
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 15:00 by PH

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

E1725 SDG#: PH075-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		ug/l		ug/l	ug/l	
10461	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	0.5	1
10461	N-Nitrosodiphenylamine	86-30-6	1	U	1	0.5	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10461	Pentachlorophenol	87-86-5	5	U	5	1	1
10461	Phenol	108-95-2	1	U	1	0.5	1
10461	Pyridine	110-86-1	5	U	5	2	1
10461	1,2,4-Trichlorobenzene	120-82-1	1	U	1	0.5	1
10461	2,4,5-Trichlorophenol	95-95-4	1	U	1	0.5	1
10461	2,4,6-Trichlorophenol	88-06-2	1	U	1	0.5	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.052	U	0.052	0.010	1
12971	Acenaphthylene	208-96-8	0.052	U	0.052	0.010	1
12971	Anthracene	120-12-7	0.052	U	0.052	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.052	U	0.052	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.052	U	0.052	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.052	U	0.052	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.052	U	0.052	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.052	U	0.052	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.052	U	0.052	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.052	1
12971	Di-n-butylphthalate	84-74-2	0.14	J	1.0	0.052	1
12971	Chrysene	218-01-9	0.052	U	0.052	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.052	U	0.052	0.010	1
12971	Diethylphthalate	84-66-2	0.24	J	1.0	0.052	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.052	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	1.0	U	1.0	0.052	1
12971	Fluoranthene	206-44-0	0.052	U	0.052	0.010	1
12971	Fluorene	86-73-7	0.052	U	0.052	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.052	U	0.052	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.052	U	0.052	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.052	U	0.052	0.010	1
12971	Naphthalene	91-20-3	0.037	J	0.052	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.052	U	0.052	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.052	1
12971	Phenanthrene	85-01-8	0.052	U	0.052	0.031	1
12971	Pyrene	129-00-0	0.052	U	0.052	0.010	1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Pesticides/PCBs	**SW-846 8082A**		ug/l		ug/l	ug/l	
10591	Aroclor 5432	63496-31-1	0.41	U	0.41	0.082	1
10591	Aroclor 5442	12642-23-8	0.41	U	0.41	0.082	1
10591	Aroclor 5460	11126-42-4	0.41	U	0.41	0.090	1
10591	PCB-1016	12674-11-2	0.41	U	0.41	0.082	1
10591	PCB-1221	11104-28-2	0.41	U	0.41	0.082	1
10591	PCB-1232	11141-16-5	0.41	U	0.41	0.16	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141111
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 15:00 by PH

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

E1725 SDG#: PH075-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	PCB-1242	53469-21-9	0.41	U	0.41	0.082	1
10591	PCB-1248	12672-29-6	0.41	U	0.41	0.082	1
10591	PCB-1254	11097-69-1	0.41	U	0.41	0.082	1
10591	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
10591	PCB-1262	37324-23-5	0.41	U	0.41	0.16	1
10591	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.095	U	0.095	0.047	1
10365	EFH (C15-C20)	n.a.	0.095	U	0.095	0.047	1
10365	EFH (C21-C30)	n.a.	0.095	U	0.095	0.047	1
10365	EFH (C30 - C40)	n.a.	0.47	U	0.47	0.095	1
10365	EFH (C8-C11)	n.a.	0.095	U	0.095	0.047	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100	U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400	U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300	U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100	U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200	U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400	U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300	U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400	U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200	U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100	U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0067	J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200	U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200	U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00	U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00	U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400	U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200	U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100	U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400	U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100	U	0.100	0.0084	1
	SW-846 6020A		**mg/l**		**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040	U	0.0040	0.00050	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141111
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 15:00 by PH

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

E1725 SDG#: PH075-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/l**	**mg/l**	**mg/l**	
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 9012B**		**mg/l**	**mg/l**	**mg/l**	
08255	16b Cyanide by EPA 9012B	57-12-5	0.010 U	0.010	0.0050	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.9	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141111
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 15:00 by PH

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

E1725 SDG#: PH075-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.99	U	1.99	0.228	1
10915	12378-PeCDD	40321-76-4	0.743	JBQ	9.93	0.239	1
10915	123478-HxCDD	39227-28-6	0.949	JBQ	9.93	0.188	1
10915	123678-HxCDD	57653-85-7	0.718	JBQ	9.93	0.189	1
10915	123789-HxCDD	19408-74-3	0.603	JBQ	9.93	0.200	1
10915	1234678-HpCDD	35822-46-9	0.912	JBQ	9.93	0.191	1
10915	OCDD	3268-87-9	2.11	JB	19.9	0.191	1
10915	2378-TCDF	51207-31-9	1.99	U	1.99	0.168	1
10915	12378-PeCDF	57117-41-6	0.527	JBQ	9.93	0.129	1
10915	23478-PeCDF	57117-31-4	0.912	JBQ	9.93	0.116	1
10915	123478-HxCDF	70648-26-9	0.696	JBQ	9.93	0.106	1
10915	123678-HxCDF	57117-44-9	0.867	JBQ	9.93	0.121	1
10915	123789-HxCDF	72918-21-9	0.755	JB	9.93	0.118	1
10915	234678-HxCDF	60851-34-5	0.921	JBQ	9.93	0.104	1
10915	1234678-HpCDF	67562-39-4	0.794	JBQ	9.93	0.0833	1
10915	1234789-HpCDF	55673-89-7	0.466	JB	9.93	0.0989	1
10915	OCDF	39001-02-0	1.86	JB	19.9	0.229	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0814				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	63	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	67	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB1-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141111
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 15:00 by PH

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

E1725 SDG#: PH075-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB1-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141111
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 15:00 by PH

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

E1725 SDG#: PH075-01EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10461	8b SVOCs by EPA 8270D	SW-846 8270D	1	13212WAD026	08/12/2013 14:56	Joseph M Gambler	1
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13212WAC026	08/03/2013 08:41	Brian K Graham	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13212WAC026	07/31/2013 14:30	David S Schrum	1
11010	8270D BNA Extraction	SW-846 3510C	1	13212WAD026	07/31/2013 14:30	David S Schrum	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13210A94A	07/29/2013 12:32	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13210A94A	07/29/2013 12:32	Catherine J Schwarz	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	132120025A	08/02/2013 02:04	Jessica L Miller	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	132120025A	08/01/2013 09:00	William H Saadeh	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132090023A	07/30/2013 19:49	Tracy A Cole	1
11203	EFH Waters Extraction	SW-846 3510C	1	132090023A	07/30/2013 03:00	Sherry L Morrow	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212005	08/05/2013 18:06	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13212005	08/01/2013 13:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07052	Cobalt	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	132110635001	08/07/2013 05:06	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07060	Molybdenum	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07061	Nickel	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
10143	Phosphorus	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141111
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 15:00 by PH

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

E1725 SDG#: PH075-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07072	Zinc	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	132110635001	08/05/2013 19:56	Katlin N Cataldi	1
06041	Selenium	SW-846 6020A	1	132110639001B	08/06/2013 15:29	David K Beck	1
06042	Silver	SW-846 6020A	1	132110639001A	08/06/2013 15:29	David K Beck	1
06044	Strontium	SW-846 6020A	1	132110639001A	08/06/2013 15:29	David K Beck	1
06045	Thallium	SW-846 6020A	1	132110639001A	08/06/2013 15:29	David K Beck	1
00259	3b Mercury 7470A	SW-846 7470A	1	132145713001	08/04/2013 11:50	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132110635001	07/31/2013 10:17	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132110639001	07/31/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132145713001	08/03/2013 09:25	Damary Valentin	1
08255	16b Cyanide by EPA 9012B	SW-846 9012B	2	13219117101A	08/07/2013 14:35	Joseph E McKenzie	1
08256	Cyanide Water Distillation	SW-846 9012B	2	13219117101A	08/07/2013 11:30	Carolyn M Mastropietro	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13208004101A	07/27/2013 14:33	Clayton C Litchmore	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141112
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 15:30 by PH

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

E2725 SDG#: PH075-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.48	U	0.48	0.15	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.96	U	0.96	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.076	1
10407	Dinoseb	88-85-7	0.48	U	0.48	0.11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.48	U	0.48	0.15	1
10407	MCPA	94-74-6	190	U	190	48	1
10407	MCPP	93-65-2	190	U	190	48	1
10407	2,4,5-T	93-76-5	0.048	U	0.048	0.014	1
10407	2,4,5-TP	93-72-1	0.048	U	0.048	0.0096	1
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0083	U	0.0083	0.0017	1
10589	Alpha BHC	319-84-6	0.0083	U	0.0083	0.0025	1
10589	Beta BHC	319-85-7	0.0083	U	0.0083	0.0028	1
10589	Gamma BHC - Lindane	58-89-9	0.0083	U	0.0083	0.0017	1
10589	Chlordane	57-74-9	0.41	U	0.41	0.13	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0041	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0041	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0043	1
10589	Delta BHC	319-86-8	0.0083	U	0.0083	0.0028	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0044	1
10589	Endosulfan I	959-98-8	0.0083	U	0.0083	0.0036	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.012	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0048	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0067	1
10589	Endrin Aldehyde	7421-93-4	0.083	U	0.083	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0041	1
10589	Heptachlor	76-44-8	0.0083	U	0.0083	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0083	U	0.0083	0.0019	1
10589	Methoxychlor	72-43-5	0.083	U	0.083	0.025	1
10589	Mirex	2385-85-5	0.21	U	0.21	0.070	1
10589	Toxaphene	8001-35-2	2.5	U	2.5	0.83	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: gamma-BHC						
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.41	U	0.41	0.083	1
10591	Aroclor 5442	12642-23-8	0.41	U	0.41	0.083	1
10591	Aroclor 5460	11126-42-4	0.41	U	0.41	0.091	1
10591	PCB-1016	12674-11-2	0.41	U	0.41	0.083	1
10591	PCB-1221	11104-28-2	0.41	U	0.41	0.083	1
10591	PCB-1232	11141-16-5	0.41	U	0.41	0.17	1
10591	PCB-1242	53469-21-9	0.41	U	0.41	0.083	1
10591	PCB-1248	12672-29-6	0.41	U	0.41	0.083	1
10591	PCB-1254	11097-69-1	0.41	U	0.41	0.083	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141112
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 15:30 by PH

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

E2725 SDG#: PH075-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/l**	**ug/l**	**ug/l**	
10591	PCB-1260	11096-82-5	0.41 U	0.41	0.12	1
10591	PCB-1262	37324-23-5	0.41 U	0.41	0.17	1
10591	PCB-1268	11100-14-4	0.41 U	0.41	0.13	1
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0028 J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: EB2-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141112
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 15:30 by PH

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

E2725 SDG#: PH075-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132090030A	08/01/2013 06:33	Melissa McDermott	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132120024A	08/02/2013 15:35	Lisa A Reinert	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	132120025A	08/02/2013 02:22	Jessica L Miller	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	132120025A	08/01/2013 09:00	William H Saadeh	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132120024A	08/01/2013 09:00	William H Saadeh	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132090030A	07/30/2013 08:15	Katheryne V Sponheimer	1
01743	Aluminum	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07052	Cobalt	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	132110635001	08/07/2013 05:09	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07060	Molybdenum	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07061	Nickel	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
10143	Phosphorus	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
07072	Zinc	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	132110635001	08/05/2013 20:00	Katlin N Cataldi	1
06041	Selenium	SW-846 6020A	1	132110639001B	08/06/2013 15:31	David K Beck	1
06042	Silver	SW-846 6020A	1	132110639001A	08/06/2013 15:31	David K Beck	1
06044	Strontium	SW-846 6020A	1	132110639001A	08/06/2013 15:31	David K Beck	1
06045	Thallium	SW-846 6020A	1	132110639001A	08/06/2013 15:31	David K Beck	1
00259	3b Mercury 7470A	SW-846 7470A	1	132145713001	08/04/2013 11:52	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132110635001	07/31/2013 10:17	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132110639001	07/31/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132145713001	08/03/2013 09:25	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141113
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	380	U	380	190	1
10726	Benzidine	92-87-5	1,900	U	1,900	800	1
10726	Benzoic acid	65-85-0	570	U	570	190	1
10726	Benzyl alcohol	100-51-6	380	U	380	190	1
10726	1,1'-Biphenyl	92-52-4	38	U	38	19	1
10726	4-Bromophenyl-phenylether	101-55-3	38	U	38	19	1
10726	Carbazole	86-74-8	38	U	38	19	1
10726	4-Chloro-3-methylphenol	59-50-7	38	U	38	19	1
10726	4-Chloroaniline	106-47-8	38	U	38	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	38	U	38	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	38	U	38	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	38	U	38	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	38	U	38	8	1
10726	2-Chlorophenol	95-57-8	38	U	38	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	19	1
10726	Dibenzofuran	132-64-9	38	U	38	19	1
10726	1,2-Dichlorobenzene	95-50-1	38	U	38	19	1
10726	1,3-Dichlorobenzene	541-73-1	38	U	38	19	1
10726	1,4-Dichlorobenzene	106-46-7	38	U	38	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	380	U	380	110	1
10726	2,4-Dichlorophenol	120-83-2	38	U	38	19	1
10726	2,6-Dichlorophenol	87-65-0	38	U	38	19	1
10726	2,4-Dimethylphenol	105-67-9	38	U	38	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	38	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	570	U	570	190	1
10726	2,4-Dinitrophenol	51-28-5	760	U	760	340	1
10726	1,2-Diphenylhydrazine	122-66-7	38	U	38	19	1
10726	Hexachlorobenzene	118-74-1	20	U	20	4	1
10726	Hexachlorobutadiene	87-68-3	38	U	38	19	1
10726	Hexachlorocyclopentadiene	77-47-4	570	U	570	190	1
10726	Hexachloroethane	67-72-1	190	U	190	38	1
10726	Isophorone	78-59-1	38	U	38	19	1
10726	2-Methylphenol	95-48-7	38	U	38	19	1
10726	4-Methylphenol	106-44-5	38	U	38	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	190	U	190	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	38	U	38	19	1
10726	3-Nitroaniline	99-09-2	190	U	190	77	1
10726	4-Nitroaniline	100-01-6	190	U	190	77	1
10726	Nitrobenzene	98-95-3	38	U	38	19	1
10726	2-Nitrophenol	88-75-5	38	U	38	19	1
10726	4-Nitrophenol	100-02-7	570	U	570	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141113
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	N-Nitroso-di-n-propylamine	621-64-7	38	U	38	19	1
10726	N-Nitrosodiphenylamine	86-30-6	38	U	38	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	200	U	200	38	1
10726	Phenol	108-95-2	38	U	38	19	1
10726	Pyridine	110-86-1	190	U	190	77	1
10726	1,2,4-Trichlorobenzene	120-82-1	38	U	38	19	1
10726	2,4,5-Trichlorophenol	95-95-4	38	U	38	19	1
10726	2,4,6-Trichlorophenol	88-06-2	38	U	38	19	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	26.82
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141113
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,600		45.0	8.12	1
06944	Antimony	7440-36-0	4.50	U	4.50	0.833	1
06935	Arsenic	7440-38-2	3.09	J	4.50	0.788	1
06946	Barium	7440-39-3	140		1.13	0.0371	1
06947	Beryllium	7440-41-7	1.03	J	1.13	0.0754	1
07914	Boron	7440-42-8	1.92	J	11.3	0.945	1
06949	Cadmium	7440-43-9	0.371	J	1.13	0.0855	1
01650	Calcium	7440-70-2	7,340		22.5	3.76	1
06951	Chromium	7440-47-3	36.8		3.38	0.180	1
06952	Cobalt	7440-48-4	10.5		1.13	0.111	1
06953	Copper	7440-50-8	21.4		2.25	0.326	1
01654	Iron	7439-89-6	26,100		90.0	8.15	2
06955	Lead	7439-92-1	11.1		3.38	0.563	1
01656	Lithium	7439-93-2	23.7		4.5	0.38	1
01657	Magnesium	7439-95-4	7,210		11.3	1.88	1
06958	Manganese	7439-96-5	479		1.13	0.0934	1
06960	Molybdenum	7439-98-7	2.25	U	2.25	0.191	1
06961	Nickel	7440-02-0	20.7		2.25	0.146	1
10145	Phosphorus	7723-14-0	295		11.3	3.25	1
01662	Potassium	7440-09-7	4,140		113	9.39	1
01667	Sodium	7440-23-5	159		113	18.8	1
06969	Tin	7440-31-5	2.99	J	11.3	0.248	1
06970	Titanium	7440-32-6	996		1.13	0.191	1
06971	Vanadium	7440-62-2	62.2		1.13	0.146	1
06972	Zinc	7440-66-6	70.6		4.50	0.225	1
10146	Zirconium	7440-67-7	4.53	J	5.63	0.945	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.192	J	0.450	0.113	2
06142	Silver	7440-22-4	0.0484	J	0.225	0.0293	2
06144	Strontium	7440-24-6	34.8		0.450	0.0765	2
06145	Thallium	7440-28-0	0.339		0.225	0.0338	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141113
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0189 U	0.0189	0.0113	1
Wet Chemistry	**SW-846 9012B**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	18a Cyanide by EPA 9012B	57-12-5	0.57 U	0.57	0.21	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.8 C.	n.a.	8.01	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	12.9	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141113
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.14	U	1.14	0.0577	1
11031	12378-PeCDD	40321-76-4	5.69	U	5.69	0.0642	1
11031	123478-HxCDD	39227-28-6	5.69	U	5.69	0.0312	1
11031	123678-HxCDD	57653-85-7	0.0765	JQ	5.69	0.0354	1
11031	123789-HxCDD	19408-74-3	0.189	JB	5.69	0.0362	1
11031	1234678-HpCDD	35822-46-9	0.193	JBQ	5.69	0.0386	1
11031	OCDD	3268-87-9	0.661	JB	11.4	0.0320	1
11031	2378-TCDF	51207-31-9	1.14	U	1.14	0.0417	1
11031	12378-PeCDF	57117-41-6	0.0434	JBQ	5.69	0.0380	1
11031	23478-PeCDF	57117-31-4	5.69	U	5.69	0.0346	1
11031	123478-HxCDF	70648-26-9	0.0376	JQ	5.69	0.0180	1
11031	123678-HxCDF	57117-44-9	0.0338	JBQ	5.69	0.0176	1
11031	123789-HxCDF	72918-21-9	0.215	J	5.69	0.0263	1
11031	234678-HxCDF	60851-34-5	0.0229	JBQ	5.69	0.0164	1
11031	1234678-HpCDF	67562-39-4	0.0361	JQ	5.69	0.00941	1
11031	1234789-HpCDF	55673-89-7	0.0426	J	5.69	0.0188	1
11031	OCDF	39001-02-0	0.102	JB	11.4	0.0434	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0411				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	44	25 - 164
13C12-12378-PeCDD	53	25 - 181
13C12-123478-HxCDD	59	32 - 141
13C12-123678-HxCDD	62	28 - 130
13C12-123789-HxCDD	62	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	40	24 - 169
13C12-12378-PeCDF	50	24 - 185
13C12-23478-PeCDF	51	21 - 178
13C12-123478-HxCDF	48	26 - 152
13C12-123678-HxCDF	55	26 - 123
13C12-234678-HxCDF	53	28 - 136
13C12-123789-HxCDF	50	29 - 147
13C12-1234678-HpCDF	69	28 - 143
13C12-1234789-HpCDF	48	26 - 138
13C12-OCDF	45	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141113
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141113
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13209SLB026	07/30/2013 12:05	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/30/2013 13:16	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13209SLB026	07/29/2013 14:00	David S Schrum	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/30/2013 22:57	Laura M Krieger	26.82
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320731835	07/26/2013 14:28	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320731835	07/26/2013 14:29	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132080013A	07/30/2013 04:07	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132080013A	07/29/2013 08:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 18:28	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212007	08/03/2013 15:23	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13212007	08/01/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 06:00	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141113
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 13:07	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:18	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:18	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:18	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:18	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 09:48	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
05895	18a Cyanide by EPA 9012B	SW-846 9012B	1	13211102201A	07/31/2013 07:49	K Robert Caulfeild-James	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	13211102201A	07/30/2013 10:00	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13207039402A	07/26/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141114
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	1,800		20	4	1
10726	Acenaphthylene	208-96-8	1,900		20	4	1
10726	Aniline	62-53-3	1,200		380	190	1
10726	Anthracene	120-12-7	1,800		20	4	1
10726	Benzidine	92-87-5	1,900	U	1,900	800	1
10726	Benzo(a)anthracene	56-55-3	1,700		20	4	1
10726	Benzo(a)pyrene	50-32-8	1,800		20	4	1
10726	Benzo(b)fluoranthene	205-99-2	1,900		20	4	1
10726	Benzo(g,h,i)perylene	191-24-2	1,800		20	4	1
10726	Benzo(k)fluoranthene	207-08-9	1,800		20	4	1
10726	Benzoic acid	65-85-0	1,800		570	190	1
10726	Benzyl alcohol	100-51-6	1,700		380	190	1
10726	1,1'-Biphenyl	92-52-4	1,700		38	19	1
10726	4-Bromophenyl-phenylether	101-55-3	1,900		38	19	1
10726	Butylbenzylphthalate	85-68-7	1,800		190	77	1
10726	Di-n-butylphthalate	84-74-2	1,800		190	77	1
10726	Carbazole	86-74-8	1,700		38	19	1
10726	4-Chloro-3-methylphenol	59-50-7	1,700		38	19	1
10726	4-Chloroaniline	106-47-8	1,300		38	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,900		38	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,800		38	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,600		38	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	1,800		38	8	1
10726	2-Chlorophenol	95-57-8	1,800		38	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,800		38	19	1
10726	Chrysene	218-01-9	1,600		20	4	1
10726	Dibenz(a,h)anthracene	53-70-3	1,700		20	4	1
10726	Dibenzofuran	132-64-9	1,800		38	19	1
10726	1,2-Dichlorobenzene	95-50-1	1,800		38	19	1
10726	1,3-Dichlorobenzene	541-73-1	1,800		38	19	1
10726	1,4-Dichlorobenzene	106-46-7	1,700		38	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	1,300		380	110	1
10726	2,4-Dichlorophenol	120-83-2	1,800		38	19	1
10726	2,6-Dichlorophenol	87-65-0	1,700		38	19	1
10726	Diethylphthalate	84-66-2	1,700		190	77	1
10726	2,4-Dimethylphenol	105-67-9	1,600		38	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	38	1
10726	Dimethylphthalate	131-11-3	1,700		190	77	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,700		570	190	1
10726	2,4-Dinitrophenol	51-28-5	3,500		760	340	1
10726	1,2-Diphenylhydrazine	122-66-7	1,900		38	19	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,700		200	77	1
10726	Fluoranthene	206-44-0	1,700		20	4	1
10726	Fluorene	86-73-7	1,800		20	4	1
10726	Hexachlorobenzene	118-74-1	1,900		20	4	1
10726	Hexachlorobutadiene	87-68-3	1,800		38	19	1
10726	Hexachlorocyclopentadiene	77-47-4	4,300		570	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141114
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg	ug/kg	ug/kg	
10726	Hexachloroethane	67-72-1	1,800	190	38	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,800	20	4	1
10726	Isophorone	78-59-1	1,800	38	19	1
10726	1-Methylnaphthalene	90-12-0	1,800	20	4	1
10726	2-Methylnaphthalene	91-57-6	1,600	20	4	1
10726	2-Methylphenol	95-48-7	1,600	38	19	1
10726	4-Methylphenol	106-44-5	1,600	38	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10726	Naphthalene	91-20-3	1,800	20	4	1
10726	NDPA as diphenylamine	n.a.	1,600	190	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	2-Nitroaniline	88-74-4	1,800	38	19	1
10726	3-Nitroaniline	99-09-2	1,800	190	77	1
10726	4-Nitroaniline	100-01-6	1,600	190	77	1
10726	Nitrobenzene	98-95-3	1,700	38	19	1
10726	2-Nitrophenol	88-75-5	1,800	38	19	1
10726	4-Nitrophenol	100-02-7	1,600	570	190	1
10726	N-Nitrosodimethylamine	62-75-9	1,600	190	77	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,600	38	19	1
10726	N-Nitrosodiphenylamine	86-30-6	1,700	38	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	Di-n-octylphthalate	117-84-0	1,900	190	77	1
10726	Pentachlorophenol	87-86-5	1,700	200	38	1
10726	Phenanthrene	85-01-8	1,700	20	4	1
10726	Phenol	108-95-2	1,600	38	19	1
10726	Pyrene	129-00-0	1,700	20	4	1
10726	Pyridine	110-86-1	1,400	190	77	1
10726	1,2,4-Trichlorobenzene	120-82-1	1,900	38	19	1
10726	2,4,5-Trichlorophenol	95-95-4	1,900	38	19	1
10726	2,4,6-Trichlorophenol	88-06-2	1,800	38	19	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	38	1.9	0.77	1
12969	Acenaphthylene	208-96-8	35	1.9	0.38	1
12969	Anthracene	120-12-7	35	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	37	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	36	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	39	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	35	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	35	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	37	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	46	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	46	21	6.9	1
12969	Chrysene	218-01-9	37	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	38	1.9	0.77	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141114
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	47		21	6.9	1
12969	Dimethylphthalate	131-11-3	38		21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	46		21	6.9	1
12969	Fluoranthene	206-44-0	38		1.9	0.77	1
12969	Fluorene	86-73-7	36		1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	38		1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	39		1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	38		1.9	0.77	1
12969	Naphthalene	91-20-3	37		1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	30		1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	44		21	6.9	1
12969	Phenanthrene	85-01-8	36		1.9	0.77	1
12969	Pyrene	129-00-0	36		1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.9		1.1	0.2	23.41
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	170		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	170		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	2.6	J	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	4.5	J	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	5.4	J	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	37,900		45.0	8.12	1
06944	Antimony	7440-36-0	22.4		4.50	0.833	1
06935	Arsenic	7440-38-2	20.0		4.50	0.788	1
06946	Barium	7440-39-3	368		1.13	0.0371	1
06947	Beryllium	7440-41-7	6.80		1.13	0.0754	1
07914	Boron	7440-42-8	219		11.3	0.945	1
06949	Cadmium	7440-43-9	5.68		1.13	0.0855	1
01650	Calcium	7440-70-2	8,150		22.5	3.76	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141114
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06951	Chromium	7440-47-3	64.8	3.38	0.180	1
06952	Cobalt	7440-48-4	63.0	1.13	0.111	1
06953	Copper	7440-50-8	53.3	2.25	0.326	1
01654	Iron	7439-89-6	33,400	90.0	8.15	2
06955	Lead	7439-92-1	26.3	3.38	0.563	1
01656	Lithium	7439-93-2	140	4.5	0.38	1
01657	Magnesium	7439-95-4	8,180	11.3	1.88	1
06958	Manganese	7439-96-5	542	1.13	0.0934	1
06960	Molybdenum	7439-98-7	205	2.25	0.191	1
06961	Nickel	7440-02-0	74.4	2.25	0.146	1
10145	Phosphorus	7723-14-0	418	11.3	3.25	1
01662	Potassium	7440-09-7	6,040	113	9.39	1
01667	Sodium	7440-23-5	1,250	113	18.8	1
06969	Tin	7440-31-5	395	11.3	0.248	1
06970	Titanium	7440-32-6	1,630	1.13	0.191	1
06971	Vanadium	7440-62-2	132	1.13	0.146	1
06972	Zinc	7440-66-6	128	4.50	0.225	1
10146	Zirconium	7440-67-7	111	5.63	0.945	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.25	0.450	0.113	2
06142	Silver	7440-22-4	11.1	0.225	0.0293	2
06144	Strontium	7440-24-6	44.7	0.450	0.0765	2
06145	Thallium	7440-28-0	0.813	0.225	0.0338	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.213	0.0189	0.0113	1
Wet Chemistry	**SW-846 9012B**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	18a Cyanide by EPA 9012B	57-12-5	5.4	0.57	0.20	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	12.9	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141114
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.9		1.14	0.0908	1
11031	12378-PeCDD	40321-76-4	112		5.71	0.131	1
11031	123478-HxCDD	39227-28-6	104	B	5.71	0.0707	1
11031	123678-HxCDD	57653-85-7	104		5.71	0.0753	1
11031	123789-HxCDD	19408-74-3	101	B	5.71	0.0747	1
11031	1234678-HpCDD	35822-46-9	100	B	5.71	0.0848	1
11031	OCDD	3268-87-9	197	B	11.4	0.0618	1
11031	2378-TCDF	51207-31-9	21.7		1.14	0.0946	1
11031	12378-PeCDF	57117-41-6	104	B	5.71	0.0839	1
11031	23478-PeCDF	57117-31-4	107		5.71	0.0834	1
11031	123478-HxCDF	70648-26-9	101		5.71	0.0884	1
11031	123678-HxCDF	57117-44-9	99.2	B	5.71	0.0835	1
11031	123789-HxCDF	72918-21-9	98.4		5.71	0.121	1
11031	234678-HxCDF	60851-34-5	101	B	5.71	0.0840	1
11031	1234678-HpCDF	67562-39-4	99.3		5.71	0.0692	1
11031	1234789-HpCDF	55673-89-7	96.2		5.71	0.102	1
11031	OCDF	39001-02-0	182	B	11.4	0.0904	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	55	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	48	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	61	26 - 123
13C12-234678-HxCDF	57	28 - 136
13C12-123789-HxCDF	52	29 - 147
13C12-1234678-HpCDF	71	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141114
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13209SLB026	07/30/2013 12:29	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/30/2013 13:48	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13209SLB026	07/29/2013 14:00	David S Schrum	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/30/2013 23:36	Laura M Krieger	23.41
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320731835	07/26/2013 14:29	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320731835	07/26/2013 14:29	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132080013A	07/30/2013 04:25	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132080013A	07/29/2013 08:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 18:49	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212007	08/03/2013 16:19	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13212007	08/01/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 07:38	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141114
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 13:18	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:25	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:25	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:25	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:25	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 09:58	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
05895	18a Cyanide by EPA 9012B	SW-846 9012B	1	13211102201A	07/31/2013 07:50	K Robert Caulfeild-James	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	13211102201A	07/30/2013 10:00	Nancy J Shoop	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141115
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	1,800		20	4	1
10726	Acenaphthylene	208-96-8	1,900		20	4	1
10726	Aniline	62-53-3	1,000		380	190	1
10726	Anthracene	120-12-7	1,900		20	4	1
10726	Benzidine	92-87-5	1,900	U	1,900	800	1
10726	Benzo(a)anthracene	56-55-3	1,700		20	4	1
10726	Benzo(a)pyrene	50-32-8	1,800		20	4	1
10726	Benzo(b)fluoranthene	205-99-2	1,900		20	4	1
10726	Benzo(g,h,i)perylene	191-24-2	1,800		20	4	1
10726	Benzo(k)fluoranthene	207-08-9	1,700		20	4	1
10726	Benzoic acid	65-85-0	1,900		570	190	1
10726	Benzyl alcohol	100-51-6	1,700		380	190	1
10726	1,1'-Biphenyl	92-52-4	1,700		38	19	1
10726	4-Bromophenyl-phenylether	101-55-3	2,000		38	19	1
10726	Butylbenzylphthalate	85-68-7	1,800		190	77	1
10726	Di-n-butylphthalate	84-74-2	1,900		190	77	1
10726	Carbazole	86-74-8	1,800		38	19	1
10726	4-Chloro-3-methylphenol	59-50-7	1,700		38	19	1
10726	4-Chloroaniline	106-47-8	910		38	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,800		38	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,800		38	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,700		38	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	1,600		38	8	1
10726	2-Chlorophenol	95-57-8	1,800		38	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,800		38	19	1
10726	Chrysene	218-01-9	1,600		20	4	1
10726	Dibenz(a,h)anthracene	53-70-3	1,800		20	4	1
10726	Dibenzofuran	132-64-9	1,800		38	19	1
10726	1,2-Dichlorobenzene	95-50-1	1,900		38	19	1
10726	1,3-Dichlorobenzene	541-73-1	1,900		38	19	1
10726	1,4-Dichlorobenzene	106-46-7	1,800		38	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	1,300		380	110	1
10726	2,4-Dichlorophenol	120-83-2	1,800		38	19	1
10726	2,6-Dichlorophenol	87-65-0	1,700		38	19	1
10726	Diethylphthalate	84-66-2	1,700		190	77	1
10726	2,4-Dimethylphenol	105-67-9	1,500		38	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	38	1
10726	Dimethylphthalate	131-11-3	1,800		190	77	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,900		570	190	1
10726	2,4-Dinitrophenol	51-28-5	3,600		760	340	1
10726	1,2-Diphenylhydrazine	122-66-7	2,000		38	19	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,700		200	77	1
10726	Fluoranthene	206-44-0	1,700		20	4	1
10726	Fluorene	86-73-7	1,800		20	4	1
10726	Hexachlorobenzene	118-74-1	2,000		20	4	1
10726	Hexachlorobutadiene	87-68-3	1,800		38	19	1
10726	Hexachlorocyclopentadiene	77-47-4	4,100		570	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141115
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg	ug/kg	ug/kg	
10726	Hexachloroethane	67-72-1	1,800	190	38	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,900	20	4	1
10726	Isophorone	78-59-1	1,700	38	19	1
10726	1-Methylnaphthalene	90-12-0	1,700	20	4	1
10726	2-Methylnaphthalene	91-57-6	1,600	20	4	1
10726	2-Methylphenol	95-48-7	1,700	38	19	1
10726	4-Methylphenol	106-44-5	1,600	38	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10726	Naphthalene	91-20-3	1,800	20	4	1
10726	NDPA as diphenylamine	n.a.	1,700	190	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	2-Nitroaniline	88-74-4	1,900	38	19	1
10726	3-Nitroaniline	99-09-2	1,800	190	77	1
10726	4-Nitroaniline	100-01-6	1,600	190	77	1
10726	Nitrobenzene	98-95-3	1,700	38	19	1
10726	2-Nitrophenol	88-75-5	1,900	38	19	1
10726	4-Nitrophenol	100-02-7	1,700	570	190	1
10726	N-Nitrosodimethylamine	62-75-9	1,700	190	77	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,600	38	19	1
10726	N-Nitrosodiphenylamine	86-30-6	1,700	38	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	Di-n-octylphthalate	117-84-0	1,900	190	77	1
10726	Pentachlorophenol	87-86-5	1,800	200	38	1
10726	Phenanthrene	85-01-8	1,800	20	4	1
10726	Phenol	108-95-2	1,700	38	19	1
10726	Pyrene	129-00-0	1,700	20	4	1
10726	Pyridine	110-86-1	1,500	190	77	1
10726	1,2,4-Trichlorobenzene	120-82-1	1,900	38	19	1
10726	2,4,5-Trichlorophenol	95-95-4	1,900	38	19	1
10726	2,4,6-Trichlorophenol	88-06-2	1,800	38	19	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	38	1.9	0.77	1
12969	Acenaphthylene	208-96-8	34	1.9	0.38	1
12969	Anthracene	120-12-7	36	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	37	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	36	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	39	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	35	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	34	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	37	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	45	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	46	21	6.9	1
12969	Chrysene	218-01-9	36	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	38	1.9	0.77	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141115
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	47		21	6.9	1
12969	Dimethylphthalate	131-11-3	38		21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	48		21	6.9	1
12969	Fluoranthene	206-44-0	37		1.9	0.77	1
12969	Fluorene	86-73-7	36		1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	37		1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	38		1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	37		1.9	0.77	1
12969	Naphthalene	91-20-3	36		1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	29		1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	43		21	6.9	1
12969	Phenanthrene	85-01-8	36		1.9	0.77	1
12969	Pyrene	129-00-0	36		1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	10		1.2	0.2	27
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	160		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	160		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	2.6	J	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	4.5	J	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	5.3	J	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	35,900		44.6	8.04	1
06944	Antimony	7440-36-0	22.1		4.46	0.825	1
06935	Arsenic	7440-38-2	19.6		4.46	0.780	1
06946	Barium	7440-39-3	361		1.11	0.0368	1
06947	Beryllium	7440-41-7	6.71		1.11	0.0747	1
07914	Boron	7440-42-8	214		11.1	0.936	1
06949	Cadmium	7440-43-9	5.65		1.11	0.0847	1
01650	Calcium	7440-70-2	7,820		22.3	3.72	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141115
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06951	Chromium	7440-47-3	62.6	3.34	0.178	1
06952	Cobalt	7440-48-4	62.3	1.11	0.110	1
06953	Copper	7440-50-8	51.3	2.23	0.323	1
01654	Iron	7439-89-6	34,000	89.2	8.07	2
06955	Lead	7439-92-1	25.7	3.34	0.557	1
01656	Lithium	7439-93-2	138	4.5	0.38	1
01657	Magnesium	7439-95-4	7,960	11.1	1.86	1
06958	Manganese	7439-96-5	546	1.11	0.0925	1
06960	Molybdenum	7439-98-7	201	2.23	0.189	1
06961	Nickel	7440-02-0	73.6	2.23	0.145	1
10145	Phosphorus	7723-14-0	411	11.1	3.22	1
01662	Potassium	7440-09-7	5,700	111	9.30	1
01667	Sodium	7440-23-5	1,230	111	18.6	1
06969	Tin	7440-31-5	390	11.1	0.245	1
06970	Titanium	7440-32-6	1,470	1.11	0.189	1
06971	Vanadium	7440-62-2	128	1.11	0.145	1
06972	Zinc	7440-66-6	126	4.46	0.223	1
10146	Zirconium	7440-67-7	109	5.57	0.936	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.23	0.446	0.111	2
06142	Silver	7440-22-4	10.7	0.223	0.0290	2
06144	Strontium	7440-24-6	42.9	0.446	0.0758	2
06145	Thallium	7440-28-0	0.814	0.223	0.0334	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.205	0.0186	0.0112	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	12.9	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141115
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.6		1.10	0.0907	1
11031	12378-PeCDD	40321-76-4	99.1		5.49	0.0987	1
11031	123478-HxCDD	39227-28-6	97.4	B	5.49	0.0692	1
11031	123678-HxCDD	57653-85-7	97.4		5.49	0.0739	1
11031	123789-HxCDD	19408-74-3	94.9	B	5.49	0.0738	1
11031	1234678-HpCDD	35822-46-9	92.6	B	5.49	0.0803	1
11031	OCDD	3268-87-9	186	B	11.0	0.0596	1
11031	2378-TCDF	51207-31-9	20.0		1.10	0.0775	1
11031	12378-PeCDF	57117-41-6	94.5	B	5.49	0.0623	1
11031	23478-PeCDF	57117-31-4	101		5.49	0.0620	1
11031	123478-HxCDF	70648-26-9	97.3		5.49	0.0844	1
11031	123678-HxCDF	57117-44-9	96.8	B	5.49	0.0772	1
11031	123789-HxCDF	72918-21-9	93.1		5.49	0.0992	1
11031	234678-HxCDF	60851-34-5	97.4	B	5.49	0.0724	1
11031	1234678-HpCDF	67562-39-4	96.1		5.49	0.0598	1
11031	1234789-HpCDF	55673-89-7	92.9		5.49	0.0980	1
11031	OCDF	39001-02-0	173	B	11.0	0.0747	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	49	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	54	26 - 152
13C12-123678-HxCDF	60	26 - 123
13C12-234678-HxCDF	60	28 - 136
13C12-123789-HxCDF	60	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141115
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13209SLB026	07/30/2013 12:53	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/30/2013 14:19	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13209SLB026	07/29/2013 14:00	David S Schrum	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/31/2013 00:14	Laura M Krieger	27
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320731835	07/26/2013 14:29	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320731835	07/26/2013 14:30	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132080013A	07/30/2013 04:44	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132080013A	07/29/2013 08:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 19:10	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212007	08/03/2013 20:14	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13212007	08/01/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 06:15	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141115
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 13:22	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:27	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:27	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:27	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:27	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 10:00	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141116
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,400		45.0	8.12	1
06944	Antimony	7440-36-0	4.50	U	4.50	0.833	1
06935	Arsenic	7440-38-2	3.01	J	4.50	0.788	1
06946	Barium	7440-39-3	142		1.13	0.0371	1
06947	Beryllium	7440-41-7	1.06	J	1.13	0.0754	1
07914	Boron	7440-42-8	1.73	J	11.3	0.945	1
06949	Cadmium	7440-43-9	0.404	J	1.13	0.0855	1
01650	Calcium	7440-70-2	7,360		22.5	3.76	1
06951	Chromium	7440-47-3	38.6		3.38	0.180	1
06952	Cobalt	7440-48-4	10.4		1.13	0.111	1
06953	Copper	7440-50-8	22.1		2.25	0.326	1
01654	Iron	7439-89-6	29,900		90.0	8.15	2
06955	Lead	7439-92-1	10.1		3.38	0.563	1
01656	Lithium	7439-93-2	24.4		4.5	0.38	1
01657	Magnesium	7439-95-4	7,350		11.3	1.88	1
06958	Manganese	7439-96-5	463		1.13	0.0934	1
06960	Molybdenum	7439-98-7	2.25	U	2.25	0.191	1
06961	Nickel	7440-02-0	20.7		2.25	0.146	1
10145	Phosphorus	7723-14-0	302		11.3	3.25	1
01662	Potassium	7440-09-7	4,110		113	9.39	1
01667	Sodium	7440-23-5	170		113	18.8	1
06969	Tin	7440-31-5	3.31	J	11.3	0.248	1
06970	Titanium	7440-32-6	1,050		1.13	0.191	1
06971	Vanadium	7440-62-2	65.0		1.13	0.146	1
06972	Zinc	7440-66-6	71.2		4.50	0.225	1
10146	Zirconium	7440-67-7	5.32	J	5.63	0.945	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.218	J	0.450	0.113	2
06142	Silver	7440-22-4	0.0491	J	0.225	0.0293	2
06144	Strontium	7440-24-6	35.4		0.450	0.0765	2
06145	Thallium	7440-28-0	0.316		0.225	0.0338	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0190	U	0.0190	0.0114	1
Wet Chemistry	**SW-846 9012B**		**mg/kg**		**mg/kg**	**mg/kg**	
05895	18a Cyanide by EPA 9012B	57-12-5	0.56	U	0.56	0.20	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.04		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	12.9		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	15.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141116
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 06:08	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 13:14	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:23	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:23	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:23	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:23	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 09:56	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-523-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141116
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:20 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL523 SDG#: PH075-03DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
05895	18a Cyanide by EPA 9012B	SW-846 9012B	1	13211102201A	07/31/2013 07:51	K Robert Caulfeild-James	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	13211102201A	07/30/2013 10:00	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13207039402A	07/26/2013 19:35	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141117
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:50 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL823 SDG#: PH075-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	380	U	380	190	1
10726	Benzidine	92-87-5	1,900	U	1,900	800	1
10726	Benzoic acid	65-85-0	570	U	570	190	1
10726	Benzyl alcohol	100-51-6	380	U	380	190	1
10726	1,1'-Biphenyl	92-52-4	38	U	38	19	1
10726	4-Bromophenyl-phenylether	101-55-3	38	U	38	19	1
10726	Carbazole	86-74-8	38	U	38	19	1
10726	4-Chloro-3-methylphenol	59-50-7	38	U	38	19	1
10726	4-Chloroaniline	106-47-8	38	U	38	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	38	U	38	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	38	U	38	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	38	U	38	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	38	U	38	8	1
10726	2-Chlorophenol	95-57-8	38	U	38	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	19	1
10726	Dibenzofuran	132-64-9	38	U	38	19	1
10726	1,2-Dichlorobenzene	95-50-1	38	U	38	19	1
10726	1,3-Dichlorobenzene	541-73-1	38	U	38	19	1
10726	1,4-Dichlorobenzene	106-46-7	38	U	38	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	380	U	380	110	1
10726	2,4-Dichlorophenol	120-83-2	38	U	38	19	1
10726	2,6-Dichlorophenol	87-65-0	38	U	38	19	1
10726	2,4-Dimethylphenol	105-67-9	38	U	38	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	38	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	570	U	570	190	1
10726	2,4-Dinitrophenol	51-28-5	750	U	750	340	1
10726	1,2-Diphenylhydrazine	122-66-7	38	U	38	19	1
10726	Hexachlorobenzene	118-74-1	19	U	19	4	1
10726	Hexachlorobutadiene	87-68-3	38	U	38	19	1
10726	Hexachlorocyclopentadiene	77-47-4	570	U	570	190	1
10726	Hexachloroethane	67-72-1	190	U	190	38	1
10726	Isophorone	78-59-1	38	U	38	19	1
10726	2-Methylphenol	95-48-7	38	U	38	19	1
10726	4-Methylphenol	106-44-5	38	U	38	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	190	U	190	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	38	U	38	19	1
10726	3-Nitroaniline	99-09-2	190	U	190	76	1
10726	4-Nitroaniline	100-01-6	190	U	190	76	1
10726	Nitrobenzene	98-95-3	38	U	38	19	1
10726	2-Nitrophenol	88-75-5	38	U	38	19	1
10726	4-Nitrophenol	100-02-7	570	U	570	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141117
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:50 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL823 SDG#: PH075-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	N-Nitroso-di-n-propylamine	621-64-7	38	U	38	19	1
10726	N-Nitrosodiphenylamine	86-30-6	38	U	38	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	190	U	190	38	1
10726	Phenol	108-95-2	38	U	38	19	1
10726	Pyridine	110-86-1	190	U	190	76	1
10726	1,2,4-Trichlorobenzene	120-82-1	38	U	38	19	1
10726	2,4,5-Trichlorophenol	95-95-4	38	U	38	19	1
10726	2,4,6-Trichlorophenol	88-06-2	38	U	38	19	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.8	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	21	U	21	6.8	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.05
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141117
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:50 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL823 SDG#: PH075-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,300		43.9	7.91	1
06944	Antimony	7440-36-0	4.39	U	4.39	0.811	1
06935	Arsenic	7440-38-2	3.25	J	4.39	0.767	1
06946	Barium	7440-39-3	148		1.10	0.0362	1
06947	Beryllium	7440-41-7	1.06	J	1.10	0.0735	1
07914	Boron	7440-42-8	1.62	J	11.0	0.921	1
06949	Cadmium	7440-43-9	0.356	J	1.10	0.0833	1
01650	Calcium	7440-70-2	7,400		21.9	3.66	1
06951	Chromium	7440-47-3	39.4		3.29	0.175	1
06952	Cobalt	7440-48-4	10.3		1.10	0.109	1
06953	Copper	7440-50-8	22.4		2.19	0.318	1
01654	Iron	7439-89-6	31,600		87.7	7.94	2
06955	Lead	7439-92-1	10.2		3.29	0.548	1
01656	Lithium	7439-93-2	26.3		4.4	0.37	1
01657	Magnesium	7439-95-4	7,680		11.0	1.83	1
06958	Manganese	7439-96-5	456		1.10	0.0910	1
06960	Molybdenum	7439-98-7	2.19	U	2.19	0.186	1
06961	Nickel	7440-02-0	20.9		2.19	0.143	1
10145	Phosphorus	7723-14-0	300		11.0	3.17	1
01662	Potassium	7440-09-7	4,010		110	9.14	1
01667	Sodium	7440-23-5	179		110	18.3	1
06969	Tin	7440-31-5	2.84	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,210		1.10	0.186	1
06971	Vanadium	7440-62-2	67.8		1.10	0.143	1
06972	Zinc	7440-66-6	71.7		4.39	0.219	1
10146	Zirconium	7440-67-7	4.85	J	5.48	0.921	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.176	J	0.439	0.110	2
06142	Silver	7440-22-4	0.0417	J	0.219	0.0285	2
06144	Strontium	7440-24-6	35.8		0.439	0.0746	2
06145	Thallium	7440-28-0	0.355		0.219	0.0329	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141117
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:50 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL823 SDG#: PH075-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0186 U	0.0186	0.0112	1
Wet Chemistry	**SW-846 9012B**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	18a Cyanide by EPA 9012B	57-12-5	0.56 U	0.56	0.20	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.2 C.	n.a.	8.10	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	12.3	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141117
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:50 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL823 SDG#: PH075-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.13	U	1.13	0.0455	1
11031	12378-PeCDD	40321-76-4	5.67	U	5.67	0.0746	1
11031	123478-HxCDD	39227-28-6	0.0831	JBQ	5.67	0.0344	1
11031	123678-HxCDD	57653-85-7	0.109	JQ	5.67	0.0387	1
11031	123789-HxCDD	19408-74-3	0.188	JB	5.67	0.0385	1
11031	1234678-HpCDD	35822-46-9	0.303	JB	5.67	0.0429	1
11031	OCDD	3268-87-9	0.931	JB	11.3	0.0417	1
11031	2378-TCDF	51207-31-9	1.13	U	1.13	0.0464	1
11031	12378-PeCDF	57117-41-6	0.0583	JBQ	5.67	0.0359	1
11031	23478-PeCDF	57117-31-4	0.0762	JQ	5.67	0.0353	1
11031	123478-HxCDF	70648-26-9	0.114	JQ	5.67	0.0202	1
11031	123678-HxCDF	57117-44-9	0.0665	JBQ	5.67	0.0209	1
11031	123789-HxCDF	72918-21-9	0.139	JQ	5.67	0.0323	1
11031	234678-HxCDF	60851-34-5	0.0896	JBQ	5.67	0.0217	1
11031	1234678-HpCDF	67562-39-4	0.0755	JQ	5.67	0.0147	1
11031	1234789-HpCDF	55673-89-7	0.126	J	5.67	0.0265	1
11031	OCDF	39001-02-0	0.270	JB	11.3	0.0603	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0235				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	56	25 - 164
13C12-12378-PeCDD	61	25 - 181
13C12-123478-HxCDD	55	32 - 141
13C12-123678-HxCDD	59	28 - 130
13C12-123789-HxCDD	57	28 - 130
13C12-1234678-HpCDD	57	23 - 140
13C12-OCDD	55	17 - 157
13C12-2378-TCDF	46	24 - 169
13C12-12378-PeCDF	58	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	49	26 - 152
13C12-123678-HxCDF	53	26 - 123
13C12-234678-HxCDF	47	28 - 136
13C12-123789-HxCDF	44	29 - 147
13C12-1234678-HpCDF	59	28 - 143
13C12-1234789-HpCDF	44	26 - 138
13C12-OCDF	37	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141117
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:50 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL823 SDG#: PH075-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141117
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:50 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL823 SDG#: PH075-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13209SLB026	07/30/2013 13:17	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/30/2013 14:51	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13209SLB026	07/29/2013 14:00	David S Schrum	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/30/2013 18:31	Laura M Krieger	25.05
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320731835	07/26/2013 14:31	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320731835	07/26/2013 14:31	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132080013A	07/30/2013 05:02	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132080013A	07/29/2013 08:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 19:30	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212007	08/03/2013 21:10	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13212007	08/01/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 06:53	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141117
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:50 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL823 SDG#: PH075-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 14:04	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:53	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:53	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:53	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:53	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 10:02	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
05895	18a Cyanide by EPA 9012B	SW-846 9012B	1	13211102201A	07/31/2013 07:52	K Robert Caulfeild-James	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	13211102201A	07/30/2013 10:00	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13207039402A	07/26/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-524-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141118
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 10:00 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL524 SDG#: PH075-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	380	U	380	190	1
10726	Benzidine	92-87-5	1,900	U	1,900	810	1
10726	Benzoic acid	65-85-0	580	U	580	190	1
10726	Benzyl alcohol	100-51-6	380	U	380	190	1
10726	1,1'-Biphenyl	92-52-4	38	U	38	19	1
10726	4-Bromophenyl-phenylether	101-55-3	38	U	38	19	1
10726	Carbazole	86-74-8	38	U	38	19	1
10726	4-Chloro-3-methylphenol	59-50-7	38	U	38	19	1
10726	4-Chloroaniline	106-47-8	38	U	38	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	38	U	38	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	38	U	38	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	38	U	38	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	38	U	38	8	1
10726	2-Chlorophenol	95-57-8	38	U	38	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	19	1
10726	Dibenzofuran	132-64-9	38	U	38	19	1
10726	1,2-Dichlorobenzene	95-50-1	38	U	38	19	1
10726	1,3-Dichlorobenzene	541-73-1	38	U	38	19	1
10726	1,4-Dichlorobenzene	106-46-7	38	U	38	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	380	U	380	120	1
10726	2,4-Dichlorophenol	120-83-2	38	U	38	19	1
10726	2,6-Dichlorophenol	87-65-0	38	U	38	19	1
10726	2,4-Dimethylphenol	105-67-9	38	U	38	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	38	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	580	U	580	190	1
10726	2,4-Dinitrophenol	51-28-5	760	U	760	350	1
10726	1,2-Diphenylhydrazine	122-66-7	38	U	38	19	1
10726	Hexachlorobenzene	118-74-1	20	U	20	4	1
10726	Hexachlorobutadiene	87-68-3	38	U	38	19	1
10726	Hexachlorocyclopentadiene	77-47-4	580	U	580	190	1
10726	Hexachloroethane	67-72-1	190	U	190	38	1
10726	Isophorone	78-59-1	38	U	38	19	1
10726	2-Methylphenol	95-48-7	38	U	38	19	1
10726	4-Methylphenol	106-44-5	38	U	38	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	190	U	190	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	38	U	38	19	1
10726	3-Nitroaniline	99-09-2	190	U	190	77	1
10726	4-Nitroaniline	100-01-6	190	U	190	77	1
10726	Nitrobenzene	98-95-3	38	U	38	19	1
10726	2-Nitrophenol	88-75-5	38	U	38	19	1
10726	4-Nitrophenol	100-02-7	580	U	580	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-524-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141118
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 10:00 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL524 SDG#: PH075-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	N-Nitroso-di-n-propylamine	621-64-7	38	U	38	19	1
10726	N-Nitrosodiphenylamine	86-30-6	38	U	38	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	200	U	200	38	1
10726	Phenol	108-95-2	38	U	38	19	1
10726	Pyridine	110-86-1	190	U	190	77	1
10726	1,2,4-Trichlorobenzene	120-82-1	38	U	38	19	1
10726	2,4,5-Trichlorophenol	95-95-4	38	U	38	19	1
10726	2,4,6-Trichlorophenol	88-06-2	38	U	38	19	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.3	U	1.3	0.3	27.9
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-524-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141118
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 10:00 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL524 SDG#: PH075-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,600		46.1	8.32	1
06944	Antimony	7440-36-0	4.61	U	4.61	0.854	1
06935	Arsenic	7440-38-2	4.06	J	4.61	0.807	1
06946	Barium	7440-39-3	154		1.15	0.0381	1
06947	Beryllium	7440-41-7	1.10	J	1.15	0.0773	1
07914	Boron	7440-42-8	1.25	J	11.5	0.969	1
06949	Cadmium	7440-43-9	0.306	J	1.15	0.0877	1
01650	Calcium	7440-70-2	7,520		23.1	3.85	1
06951	Chromium	7440-47-3	39.4		3.46	0.185	1
06952	Cobalt	7440-48-4	12.1		1.15	0.114	1
06953	Copper	7440-50-8	20.8		2.31	0.334	1
01654	Iron	7439-89-6	32,900		92.3	8.35	2
06955	Lead	7439-92-1	10.6		3.46	0.577	1
01656	Lithium	7439-93-2	26.0		4.6	0.39	1
01657	Magnesium	7439-95-4	7,620		11.5	1.93	1
06958	Manganese	7439-96-5	513		1.15	0.0957	1
06960	Molybdenum	7439-98-7	2.31	U	2.31	0.196	1
06961	Nickel	7440-02-0	22.0		2.31	0.150	1
10145	Phosphorus	7723-14-0	291		11.5	3.33	1
01662	Potassium	7440-09-7	3,980		115	9.62	1
01667	Sodium	7440-23-5	169		115	19.3	1
06969	Tin	7440-31-5	2.65	J	11.5	0.254	1
06970	Titanium	7440-32-6	1,030		1.15	0.196	1
06971	Vanadium	7440-62-2	67.2		1.15	0.150	1
06972	Zinc	7440-66-6	72.0		4.61	0.231	1
10146	Zirconium	7440-67-7	4.36	J	5.77	0.969	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.208	J	0.461	0.115	2
06142	Silver	7440-22-4	0.0549	J	0.231	0.0300	2
06144	Strontium	7440-24-6	34.3		0.461	0.0784	2
06145	Thallium	7440-28-0	0.327		0.231	0.0346	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-524-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141118
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 10:00 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL524 SDG#: PH075-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182 U	0.0182	0.0109	1
Wet Chemistry	**SW-846 9012B**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	18a Cyanide by EPA 9012B	57-12-5	0.55 U	0.55	0.20	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.2 C.	n.a.	7.91	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	13.3	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-524-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141118
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 10:00 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL524 SDG#: PH075-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0425 JQ	1.13	0.0399	1
11031	12378-PeCDD	40321-76-4	5.65 U	5.65	0.0572	1
11031	123478-HxCDD	39227-28-6	0.0482 JBQ	5.65	0.0302	1
11031	123678-HxCDD	57653-85-7	0.112 JQ	5.65	0.0331	1
11031	123789-HxCDD	19408-74-3	0.121 JBQ	5.65	0.0333	1
11031	1234678-HpCDD	35822-46-9	0.135 JBQ	5.65	0.0337	1
11031	OCDD	3268-87-9	0.492 JB	11.3	0.0429	1
11031	2378-TCDF	51207-31-9	0.0557 JQ	1.13	0.0405	1
11031	12378-PeCDF	57117-41-6	0.158 JBQ	5.65	0.0311	1
11031	23478-PeCDF	57117-31-4	0.0594 JQ	5.65	0.0330	1
11031	123478-HxCDF	70648-26-9	0.0921 JQ	5.65	0.0150	1
11031	123678-HxCDF	57117-44-9	0.0533 JB	5.65	0.0149	1
11031	123789-HxCDF	72918-21-9	0.116 JQ	5.65	0.0234	1
11031	234678-HxCDF	60851-34-5	0.0187 JBQ	5.65	0.0163	1
11031	1234678-HpCDF	67562-39-4	0.0430 JQ	5.65	0.0115	1
11031	1234789-HpCDF	55673-89-7	0.0282 JQ	5.65	0.0240	1
11031	OCDF	39001-02-0	0.0691 JB	11.3	0.0577	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00542			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	59	32 - 141
13C12-123678-HxCDD	65	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	53	26 - 152
13C12-123678-HxCDF	56	26 - 123
13C12-234678-HxCDF	50	28 - 136
13C12-123789-HxCDF	46	29 - 147
13C12-1234678-HpCDF	66	28 - 143
13C12-1234789-HpCDF	41	26 - 138
13C12-OCDF	31	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-524-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141118
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 10:00 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL524 SDG#: PH075-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-524-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141118
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 10:00 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL524 SDG#: PH075-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13209SLB026	07/30/2013 13:41	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/30/2013 15:23	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13209SLB026	07/29/2013 14:00	David S Schrum	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/30/2013 19:09	Laura M Krieger	27.9
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320731835	07/26/2013 14:32	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320731835	07/26/2013 14:32	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132080013A	07/30/2013 05:21	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132080013A	07/29/2013 08:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 19:51	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212007	08/03/2013 22:07	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13212007	08/01/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 06:57	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-524-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141118
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 10:00 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL524 SDG#: PH075-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 14:08	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:55	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:55	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:55	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:55	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 10:04	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
05895	18a Cyanide by EPA 9012B	SW-846 9012B	1	13211102201A	07/31/2013 07:53	K Robert Caulfeild-James	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	13211102201A	07/30/2013 10:00	Nancy J Shoop	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13207039402A	07/26/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141119
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:05 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH075-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.5	J	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.9		1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	10		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	19	6.4	1
12969	Fluoranthene	206-44-0	1.2	J	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	0.93	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	0.96	J	1.8	0.71	1
12969	Pyrene	129-00-0	1.8		1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	2.5	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	11		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	24		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141119
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:05 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH075-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,200		41.9	7.56	1
06944	Antimony	7440-36-0	4.19	U	4.19	0.776	1
06935	Arsenic	7440-38-2	3.30	J	4.19	0.734	1
06946	Barium	7440-39-3	109		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.854	J	1.05	0.0703	1
07914	Boron	7440-42-8	4.06	J	10.5	0.881	1
06949	Cadmium	7440-43-9	0.479	J	1.05	0.0797	1
01650	Calcium	7440-70-2	16,300		21.0	3.50	1
06951	Chromium	7440-47-3	32.8		3.15	0.168	1
06952	Cobalt	7440-48-4	9.66		1.05	0.104	1
06953	Copper	7440-50-8	22.4		2.10	0.304	1
01654	Iron	7439-89-6	25,700		83.9	7.59	2
06955	Lead	7439-92-1	11.3		3.15	0.524	1
01656	Lithium	7439-93-2	21.0		4.2	0.36	1
01657	Magnesium	7439-95-4	7,080		10.5	1.75	1
06958	Manganese	7439-96-5	452		1.05	0.0870	1
06960	Molybdenum	7439-98-7	2.10	U	2.10	0.178	1
06961	Nickel	7440-02-0	19.6		2.10	0.136	1
10145	Phosphorus	7723-14-0	549		10.5	3.03	1
01662	Potassium	7440-09-7	6,170		105	8.74	1
01667	Sodium	7440-23-5	85.6	J	105	17.5	1
06969	Tin	7440-31-5	4.04	J	10.5	0.231	1
06970	Titanium	7440-32-6	961		1.05	0.178	1
06971	Vanadium	7440-62-2	55.8		1.05	0.136	1
06972	Zinc	7440-66-6	75.4		4.19	0.210	1
10146	Zirconium	7440-67-7	3.58	J	5.24	0.881	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.325	J	0.419	0.105	2
06142	Silver	7440-22-4	0.0386	J	0.210	0.0273	2
06144	Strontium	7440-24-6	37.9		0.419	0.0713	2
06145	Thallium	7440-28-0	0.325		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0133	J	0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.60		0.0100	0.0100	1
	The pH was measured in water at 21 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141119
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:05 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH075-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0374	1
11031	12378-PeCDD	40321-76-4	0.346	J	5.23	0.0545	1
11031	123478-HxCDD	39227-28-6	0.126	JBQ	5.23	0.0306	1
11031	123678-HxCDD	57653-85-7	0.229	J	5.23	0.0337	1
11031	123789-HxCDD	19408-74-3	0.312	JBQ	5.23	0.0340	1
11031	1234678-HpCDD	35822-46-9	1.33	JB	5.23	0.0579	1
11031	OCDD	3268-87-9	10.5	B	10.5	0.0512	1
11031	2378-TCDF	51207-31-9	0.153	JQ	1.05	0.0865	1
11031	12378-PeCDF	57117-41-6	1.81	JB	5.23	0.0399	1
11031	23478-PeCDF	57117-31-4	0.198	JQ	5.23	0.0415	1
11031	123478-HxCDF	70648-26-9	0.242	J	5.23	0.0266	1
11031	123678-HxCDF	57117-44-9	0.227	JBQ	5.23	0.0259	1
11031	123789-HxCDF	72918-21-9	0.357	JQ	5.23	0.0444	1
11031	234678-HxCDF	60851-34-5	0.132	JB	5.23	0.0277	1
11031	1234678-HpCDF	67562-39-4	0.433	JQ	5.23	0.0169	1
11031	1234789-HpCDF	55673-89-7	0.0566	JQ	5.23	0.0351	1
11031	OCDF	39001-02-0	0.759	JB	10.5	0.0517	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.478				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	65	26 - 123
13C12-234678-HxCDF	56	28 - 136
13C12-123789-HxCDF	49	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	47	26 - 138
13C12-OCDF	39	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141119
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:05 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH075-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141119
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:05 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH075-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/30/2013 15:55	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132080013A	07/30/2013 05:39	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132080013A	07/29/2013 08:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 22:16	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212007	08/03/2013 23:04	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13212007	08/01/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 07:00	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 14:12	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 17:57	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 17:57	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 17:57	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 17:57	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141119
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:05 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52500 SDG#: PH075-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 10:06	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13207039402A	07/26/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141120
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:38 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52540 SDG#: PH075-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	0.67	J	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	5.3		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	6.2		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	13		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	6.5	J	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	4.0		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	5.6		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	12		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.6	J	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	14		1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	4.0		1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	5.8		1.9	0.75	1
12969	Pyrene	129-00-0	11		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.27
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141120
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:38 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52540 SDG#: PH075-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,300		44.2	7.96	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.817	1
06935	Arsenic	7440-38-2	3.39	J	4.42	0.773	1
06946	Barium	7440-39-3	141		1.10	0.0364	1
06947	Beryllium	7440-41-7	1.03	J	1.10	0.0740	1
07914	Boron	7440-42-8	1.51	J	11.0	0.927	1
06949	Cadmium	7440-43-9	0.368	J	1.10	0.0839	1
01650	Calcium	7440-70-2	9,480		22.1	3.69	1
06951	Chromium	7440-47-3	39.0		3.31	0.177	1
06952	Cobalt	7440-48-4	10.4		1.10	0.109	1
06953	Copper	7440-50-8	20.8		2.21	0.320	1
01654	Iron	7439-89-6	28,600		88.3	7.99	2
06955	Lead	7439-92-1	10.2		3.31	0.552	1
01656	Lithium	7439-93-2	24.3		4.4	0.38	1
01657	Magnesium	7439-95-4	7,520		11.0	1.84	1
06958	Manganese	7439-96-5	399		1.10	0.0916	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	20.6		2.21	0.144	1
10145	Phosphorus	7723-14-0	316		11.0	3.19	1
01662	Potassium	7440-09-7	4,010		110	9.21	1
01667	Sodium	7440-23-5	127		110	18.4	1
06969	Tin	7440-31-5	3.05	J	11.0	0.243	1
06970	Titanium	7440-32-6	1,060		1.10	0.188	1
06971	Vanadium	7440-62-2	66.0		1.10	0.144	1
06972	Zinc	7440-66-6	73.5		4.42	0.221	1
10146	Zirconium	7440-67-7	4.28	J	5.52	0.927	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.254	J	0.442	0.110	2
06142	Silver	7440-22-4	0.0380	J	0.221	0.0287	2
06144	Strontium	7440-24-6	36.1		0.442	0.0751	2
06145	Thallium	7440-28-0	0.339		0.221	0.0331	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.94		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141120
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:38 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52540 SDG#: PH075-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141120
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:38 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52540 SDG#: PH075-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0360	1
11031	12378-PeCDD	40321-76-4	0.501	JQ	5.47	0.0620	1
11031	123478-HxCDD	39227-28-6	0.104	JB	5.47	0.0291	1
11031	123678-HxCDD	57653-85-7	0.107	JQ	5.47	0.0315	1
11031	123789-HxCDD	19408-74-3	0.227	JB	5.47	0.0318	1
11031	1234678-HpCDD	35822-46-9	0.138	JB	5.47	0.0364	1
11031	OCDD	3268-87-9	0.557	JB	10.9	0.0398	1
11031	2378-TCDF	51207-31-9	0.0966	J	1.09	0.0387	1
11031	12378-PeCDF	57117-41-6	0.505	JB	5.47	0.0288	1
11031	23478-PeCDF	57117-31-4	0.413	J	5.47	0.0292	1
11031	123478-HxCDF	70648-26-9	0.260	J	5.47	0.0163	1
11031	123678-HxCDF	57117-44-9	0.185	JBQ	5.47	0.0173	1
11031	123789-HxCDF	72918-21-9	0.261	J	5.47	0.0278	1
11031	234678-HxCDF	60851-34-5	0.197	JBQ	5.47	0.0199	1
11031	1234678-HpCDF	67562-39-4	0.0576	JQ	5.47	0.00856	1
11031	1234789-HpCDF	55673-89-7	0.109	JQ	5.47	0.0186	1
11031	OCDF	39001-02-0	0.131	JB	10.9	0.0597	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.235				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	53	32 - 141
13C12-123678-HxCDD	54	28 - 130
13C12-123789-HxCDD	54	28 - 130
13C12-1234678-HpCDD	53	23 - 140
13C12-OCDD	51	17 - 157
13C12-2378-TCDF	50	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	59	21 - 178
13C12-123478-HxCDF	50	26 - 152
13C12-123678-HxCDF	53	26 - 123
13C12-234678-HxCDF	43	28 - 136
13C12-123789-HxCDF	41	29 - 147
13C12-1234678-HpCDF	60	28 - 143
13C12-1234789-HpCDF	38	26 - 138
13C12-OCDF	28	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141120
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:38 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52540 SDG#: PH075-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141120
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:38 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52540 SDG#: PH075-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/30/2013 16:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/30/2013 19:47	Laura M Krieger	24.27
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320731835	07/26/2013 14:33	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320731835	07/26/2013 14:33	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132080013A	07/30/2013 05:57	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132080013A	07/29/2013 08:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 20:12	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212007	08/04/2013 00:01	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13212007	08/01/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 07:04	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 14:15	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-525-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7141120
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 13:38 by TB

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52540 SDG#: PH075-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 18:00	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 18:00	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 18:00	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 18:00	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 10:08	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13207039402A	07/26/2013 19:35	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401A	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-072513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7141121
LL Group # 1407089
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/25/2013 08:00

Submitted: 07/26/2013 09:15
Reported: 08/13/2013 11:39

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

T1725 SDG#: PH075-08TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13210A94A	07/29/2013 12:57	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13210A94A	07/29/2013 12:57	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13209SLA026	Sample number(s): 7141113-7141115,7141117-7141120									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	93		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	95		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	101		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	99		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	119		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	123		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	97		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	125		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	117		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	101		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	104		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	79		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	116		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	93		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	98		71-120		
Batch number: 13209SLB026	Sample number(s): 7141113-7141115,7141117-7141118									
Acenaphthene	17	U	17.	3	ug/kg	100		83-111		
Acenaphthylene	17	U	17.	3	ug/kg	105		83-127		
Aniline	330 U		330.	170	ug/kg	65		44-103		
Anthracene	17	U	17.	3	ug/kg	100		82-118		
Benzidine	1,700 U		1,700.	700	ug/kg	32		25-94		
Benzo(a)anthracene	17	U	17.	3	ug/kg	93		73-123		
Benzo(a)pyrene	17	U	17.	3	ug/kg	100		80-123		
Benzo(b)fluoranthene	17	U	17.	3	ug/kg	102		76-124		
Benzo(g,h,i)perylene	17	U	17.	3	ug/kg	99		77-122		
Benzo(k)fluoranthene	17	U	17.	3	ug/kg	96		75-123		
Benzoic acid	500 U		500.	170	ug/kg	82		41-122		
Benzyl alcohol	330		330.	170	ug/kg	85		78-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1'-Biphenyl	33	U	33.	17	ug/kg	96		77-111		
4-Bromophenyl-phenylether	33	U	33.	17	ug/kg	101		79-117		
Butylbenzylphthalate	170	U	170.	67	ug/kg	98		80-118		
Di-n-butylphthalate	170	U	170.	67	ug/kg	99		79-112		
Carbazole	33	U	33.	17	ug/kg	98		79-118		
4-Chloro-3-methylphenol	33	U	33.	17	ug/kg	97		80-124		
4-Chloroaniline	33	U	33.	17	ug/kg	28		10-97		
bis(2-Chloroethoxy)methane	33	U	33.	17	ug/kg	93		77-112		
bis(2-Chloroethyl)ether	33	U	33.	17	ug/kg	91		77-115		
bis(2-Chloroisopropyl)ether	33	U	33.	17	ug/kg	84		64-114		
2-Chloronaphthalene	33	U	33.	7	ug/kg	86		56-144		
2-Chlorophenol	33	U	33.	17	ug/kg	98		80-122		
4-Chlorophenyl-phenylether	33	U	33.	17	ug/kg	98		79-110		
Chrysene	17	U	17.	3	ug/kg	87		69-119		
Dibenz(a,h)anthracene	17	U	17.	3	ug/kg	97		77-125		
Dibenzofuran	33	U	33.	17	ug/kg	103		78-116		
1,2-Dichlorobenzene	33	U	33.	17	ug/kg	96		79-112		
1,3-Dichlorobenzene	33	U	33.	17	ug/kg	97		79-113		
1,4-Dichlorobenzene	33	U	33.	17	ug/kg	92		79-112		
3,3'-Dichlorobenzidine	330	U	330.	100	ug/kg	89		20-111		
2,4-Dichlorophenol	33	U	33.	17	ug/kg	103		81-123		
2,6-Dichlorophenol	33	U	33.	17	ug/kg	100		77-113		
Diethylphthalate	170	U	170.	67	ug/kg	99		82-113		
2,4-Dimethylphenol	33	U	33.	17	ug/kg	102		83-120		
3,5-Dimethylphenol	170	U	170.	33	ug/kg	101	106	70-130	5	30
Dimethylphthalate	170	U	170.	67	ug/kg	99		82-113		
4,6-Dinitro-2-methylphenol	500	U	500.	170	ug/kg	108		56-132		
2,4-Dinitrophenol	660	U	660.	300	ug/kg	98		26-145		
1,2-Diphenylhydrazine	33	U	33.	17	ug/kg	105		77-111		
bis(2-Ethylhexyl)phthalate	170	U	170.	67	ug/kg	97		75-124		
Fluoranthene	17	U	17.	3	ug/kg	88		79-123		
Fluorene	17	U	17.	3	ug/kg	98		81-117		
Hexachlorobenzene	17	U	17.	3	ug/kg	105		74-118		
Hexachlorobutadiene	33	U	33.	17	ug/kg	98		76-115		
Hexachlorocyclopentadiene	500	U	500.	170	ug/kg	128		66-135		
Hexachloroethane	170	U	170.	33	ug/kg	90		76-109		
Indeno(1,2,3-cd)pyrene	17	U	17.	3	ug/kg	101		77-122		
Isophorone	33	U	33.	17	ug/kg	94		76-112		
1-Methylnaphthalene	17	U	17.	3	ug/kg	92		77-115		
2-Methylnaphthalene	17	U	17.	3	ug/kg	86		82-120		
2-Methylphenol	33	U	33.	17	ug/kg	94		75-126		
4-Methylphenol	33	U	33.	17	ug/kg	89		73-124		
Naphthalene	17	U	17.	3	ug/kg	94		77-115		
NDPA as diphenylamine	170		170.	33	ug/kg	100		70-130		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2-Nitroaniline	33 U	U	33.	17	ug/kg	101		83-118		
3-Nitroaniline	170 U		170.	67	ug/kg	95		69-122		
4-Nitroaniline	170 U		170.	67	ug/kg	85		51-107		
Nitrobenzene	33 U	U	33.	17	ug/kg	95		73-118		
2-Nitrophenol	33 U	U	33.	17	ug/kg	98		81-114		
4-Nitrophenol	500 U		500.	170	ug/kg	81		49-136		
N-Nitroso-di-n-propylamine	33 U	U	33.	17	ug/kg	85		70-113		
N-Nitrosodimethylamine	170 U		170.	67	ug/kg	85		67-116		
N-Nitrosodiphenylamine	33 U	U	33.	17	ug/kg	100		83-118		
Di-n-octylphthalate	170 U		170.	67	ug/kg	105		75-136		
Pentachlorophenol	170 U		170.	33	ug/kg	103		56-132		
Phenanthrene	17 U	U	17.	3	ug/kg	95		77-119		
Phenol	33 U	U	33.	17	ug/kg	91		69-126		
Pyrene	17 U	U	17.	3	ug/kg	91		81-114		
Pyridine	170 U		170.	67	ug/kg	86		48-99		
1,2,4-Trichlorobenzene	33 U	U	33.	17	ug/kg	99		80-109		
2,4,5-Trichlorophenol	33 U	U	33.	17	ug/kg	114		80-117		
2,4,6-Trichlorophenol	33 U	U	33.	17	ug/kg	105		81-123		
Batch number: 13212WAC026	Sample number(s): 7141111									
Acenaphthene	0.050 U	U	0.050	0.010	ug/l	97	102	65-124	5	30
Acenaphthylene	0.050 U	U	0.050	0.010	ug/l	105	110	72-113	4	30
Anthracene	0.050 U	U	0.050	0.010	ug/l	105	110	70-117	4	30
Benzo(a)anthracene	0.050 U	U	0.050	0.010	ug/l	91	95	75-115	5	30
Benzo(a)pyrene	0.050 U	U	0.050	0.010	ug/l	94	97	72-120	3	30
Benzo(b)fluoranthene	0.050 U	U	0.050	0.010	ug/l	88	92	74-130	5	30
Benzo(e)pyrene	0.050 U	U	0.050	0.010	ug/l	85	88	70-130	4	30
Benzo(g,h,i)perylene	0.050 U	U	0.050	0.010	ug/l	91	94	63-121	3	30
Benzo(k)fluoranthene	0.050 U	U	0.050	0.010	ug/l	106	109	74-118	3	30
Butylbenzylphthalate	1.0 U	U	1.0	0.050	ug/l	160*	163*	40-138	2	30
Di-n-butylphthalate	1.0 U	U	1.0	0.050	ug/l	96	100	70-145	4	30
Chrysene	0.050 U	U	0.050	0.010	ug/l	92	96	75-112	4	30
Dibenz(a,h)anthracene	0.050 U	U	0.050	0.010	ug/l	90	91	66-122	1	30
Diethylphthalate	1.0 U	U	1.0	0.050	ug/l	101	104	74-129	2	30
Dimethylphthalate	1.0 U	U	1.0	0.050	ug/l	85	91	40-119	7	30
Bis(2-Ethylhexyl)phthalate	1.3		1.0	0.050	ug/l	167*	165*	70-143	1	30
Fluoranthene	0.050 U	U	0.050	0.010	ug/l	104	110	73-116	5	30
Fluorene	0.050 U	U	0.050	0.010	ug/l	95	100	74-115	5	30
Indeno(1,2,3-cd)pyrene	0.050 U	U	0.050	0.010	ug/l	88	90	66-122	1	30
1-Methylnaphthalene	0.050 U	U	0.050	0.010	ug/l	105	110	71-120	4	30
2-Methylnaphthalene	0.050 U	U	0.050	0.010	ug/l	105	110	74-119	5	30
Naphthalene	0.050 U	U	0.050	0.030	ug/l	94	99	67-118	5	30
N-Nitrosodimethylamine	0.050 U	U	0.050	0.010	ug/l	70	73	36-120	4	30
Di-n-octylphthalate	1.0 U	U	1.0	0.050	ug/l	158*	155*	57-145	2	30
Phenanthrene	0.050 U	U	0.050	0.030	ug/l	94	97	72-109	3	30
Pyrene	0.050 U	U	0.050	0.010	ug/l	87	91	71-116	5	30
Batch number: 13212WAD026	Sample number(s): 7141111									

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aniline	1	U	1.	0.5	ug/l	61	55	44-101	11	30
Benzidine	60	U	60.	20	ug/l	30	28	20-82	4	30
Benzoic acid	15	U	15.	6	ug/l	51	55	10-69	9	30
Benzyl alcohol	15	U	15.	5	ug/l	89	93	59-114	5	30
1,1'-Biphenyl	1	U	1.	0.5	ug/l	89	92	60-120	3	30
4-Bromophenyl-phenylether	1	U	1.	0.5	ug/l	92	96	75-115	4	30
Carbazole	1	U	1.	0.5	ug/l	97	101	70-128	4	30
4-Chloro-3-methylphenol	1	U	1.	0.5	ug/l	96	101	67-131	5	30
4-Chloroaniline	1	U	1.	0.5	ug/l	74	68	46-112	8	30
bis(2-Chloroethoxy)methane	1	U	1.	0.5	ug/l	94	97	65-125	4	30
bis(2-Chloroethyl)ether	1	U	1.	0.5	ug/l	93	97	73-112	5	30
bis(2-Chloroisopropyl)ether	1	U	1.	0.5	ug/l	86	90	67-115	5	30
2-Chloronaphthalene	1	U	1.	0.4	ug/l	92	95	60-138	3	30
2-Chlorophenol	1	U	1.	0.5	ug/l	95	101	76-111	7	30
4-Chlorophenyl-phenylether	1	U	1.	0.5	ug/l	90	93	77-114	3	30
Dibenzofuran	1	U	1.	0.5	ug/l	93	96	81-110	3	30
1,2-Dichlorobenzene	1	U	1.	0.5	ug/l	85	87	69-107	1	30
1,3-Dichlorobenzene	1	U	1.	0.5	ug/l	83	83	57-115	1	30
1,4-Dichlorobenzene	1	U	1.	0.5	ug/l	84	85	61-109	1	30
3,3'-Dichlorobenzidine	5	U	5.	2	ug/l	90	86	47-108	4	30
2,4-Dichlorophenol	1	U	1.	0.5	ug/l	97	102	84-114	5	30
2,6-Dichlorophenol	1	U	1.	0.5	ug/l	101	107	80-116	6	30
2,4-Dimethylphenol	1	U	1.	0.5	ug/l	91	95	66-125	4	30
3,5-Dimethylphenol	10	U	10.	3	ug/l	97	99	70-130	2	30
4,6-Dinitro-2-methylphenol	15	U	15.	5	ug/l	97	102	68-131	5	30
2,4-Dinitrophenol	30	U	30.	10	ug/l	84	87	43-137	3	30
1,2-Diphenylhydrazine	1	U	1.	0.5	ug/l	96	97	68-127	1	30
Hexachlorobenzene	0.5	U	0.5	0.1	ug/l	89	95	74-126	7	30
Hexachlorobutadiene	1	U	1.	0.5	ug/l	79	78	56-119	1	30
Hexachlorocyclopentadiene	15	U	15.	5	ug/l	55	56	21-126	2	30
Hexachloroethane	5	U	5.	1	ug/l	77	77	55-109	0	30
Isophorone	1	U	1.	0.5	ug/l	97	100	68-124	4	30
2-Methylphenol	1	U	1.	0.5	ug/l	89	95	61-118	7	30
4-Methylphenol	1	U	1.	0.5	ug/l	87	91	54-112	6	30
NDPA as diphenylamine	5	U	5.	2	ug/l	96	99	70-130	3	30
2-Nitroaniline	1	U	1.	0.5	ug/l	105	107	84-122	2	30
3-Nitroaniline	1	U	1.	0.5	ug/l	86	83	70-118	3	30
4-Nitroaniline	1	U	1.	0.5	ug/l	89	89	61-110	0	30
Nitrobenzene	1	U	1.	0.5	ug/l	94	97	67-123	3	30
2-Nitrophenol	1	U	1.	0.5	ug/l	102	109	84-118	7	30
4-Nitrophenol	30	U	30.	10	ug/l	69	73	16-91	5	30
N-Nitroso-di-n-propylamine	1	U	1.	0.5	ug/l	91	96	71-117	6	30
N-Nitrosodiphenylamine	1	U	1.	0.5	ug/l	96	99	80-115	3	30
Pentachlorophenol	5	U	5.	1	ug/l	90	91	50-129	2	30
Phenol	1	U	1.	0.5	ug/l	60	62	23-82	3	30
Pyridine	5	U	5.	2	ug/l	70	71	22-96	2	30
1,2,4-Trichlorobenzene	1	U	1.	0.5	ug/l	87	88	71-112	1	30
2,4,5-Trichlorophenol	1	U	1.	0.5	ug/l	96	101	81-121	5	30
2,4,6-Trichlorophenol	1	U	1.	0.5	ug/l	99	104	84-119	4	30
Batch number: 13210A94A	Sample number(s): 7141111,7141121									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	105	108	75-135	3	30
Batch number: 13210B16A	Sample number(s): 7141113-7141115,7141117-7141118,7141120									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	77		67-119		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132090030A	Sample number(s): 7141112									
2,4-D	0.50	U	0.50	0.16	ug/l	112	112	68-155	0	30
Dalapon	1.3	U	1.3	0.25	ug/l	92	77	39-115	18	30
2,4-DB	1.0	U	1.0	0.30	ug/l	104	107	50-163	3	30
Dicamba	0.30	U	0.30	0.080	ug/l	100	99	55-163	1	30
Dinoseb	0.50	U	0.50	0.12	ug/l	141	148	16-163	5	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	134	135	89-162	0	30
MCPA	200	U	200.	50	ug/l	97	98	68-154	1	30
MCPP	200	U	200.	50	ug/l	129	108	46-173	18	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	109	113	55-169	3	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	114	114	58-155	0	30
Batch number: 132080013A	Sample number(s): 7141113-7141115,7141117-7141120									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	69	72	36-106	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	92		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	94		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132120024A	Sample number(s): 7141112									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	63	68	55-126	9	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	74	83	63-132	12	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	68	75	63-132	10	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	66*	74	68-128	12	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	73	84	62-143	13	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	75	84	56-137	11	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	78	90	45-134	14	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	67	76	63-131	13	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	71	82	65-135	14	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	73	84	48-124	14	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	74	82	53-123	11	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	71	80	60-129	12	30
Endrin	0.016	U	0.016	0.0065	ug/l	72	49	43-139	37*	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	74	93	55-123	23*	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	71	102	51-138	36*	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	69	79	57-126	13	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	69	79	65-128	13	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	79	88	46-134	10	30
Mirex	0.20	U	0.20	0.068	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132120025A	Sample number(s): 7141111-7141112									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	64	62	35-84	3	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	81	91	69-120	12	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	83	91	69-128	9	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132090023A	Sample number(s): 7141111									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	84	92	70-130	9	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	97	98	70-130	1	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	102	104	70-130	2	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	86	98	70-130	13	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	66*	75	70-130	13	30
Batch number: 132110023A	Sample number(s): 7141113-7141115,7141117-7141120									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	107		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	114		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	113		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	116		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	89		49-107		
Batch number: 132100637001	Sample number(s): 7141113-7141120									
Aluminum	40.0	U	40.0	7.21	mg/kg	103		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	114		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	99		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	103		80-120		
Calcium	9.96	J	20.0	3.34	mg/kg	104		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	99		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	106		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	105		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	101		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	104		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.28	J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	101		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	100		80-120		
Zinc	0.614	J	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	101		80-120		
Batch number: 132100637001A	Sample number(s): 7141113-7141120									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	97		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Thallium	0.200 U	0.200	0.0300	mg/kg	90		80-120		
Batch number: 132100637001B	Sample number(s): 7141113-7141120								
Selenium	0.400 U	0.400	0.100	mg/kg	98		80-120		
Batch number: 132100638001	Sample number(s): 7141113-7141120								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	104		85-120		
Batch number: 132110635001	Sample number(s): 7141111-7141112								
Aluminum	0.400 U	0.400	0.0828	mg/l	99	97	90-112	3	20
Antimony	0.0400 U	0.0400	0.0053	mg/l	109	109	88-111	1	20
Arsenic	0.0400 U	0.0400	0.0068	mg/l	95	94	90-113	1	20
Barium	0.0100 U	0.0100	0.00033	mg/l	101	101	90-110	0	20
Beryllium	0.0100 U	0.0100	0.00067	mg/l	97	97	88-110	1	20
Boron	0.100 U	0.100	0.0084	mg/l	94	95	89-110	1	20
Cadmium	0.0100 U	0.0100	0.00076	mg/l	98	99	90-112	0	20
Calcium	0.400 U	0.400	0.0334	mg/l	100	100	90-110	0	20
Chromium	0.0300 U	0.0300	0.0016	mg/l	100	100	90-110	1	20
Cobalt	0.0100 U	0.0100	0.0013	mg/l	100	101	90-110	1	20
Copper	0.0200 U	0.0200	0.0027	mg/l	104	106	90-112	2	20
Iron	0.400 U	0.400	0.0430	mg/l	99	97	90-112	2	20
Lead	0.0300 U	0.0300	0.0047	mg/l	99	99	88-110	0	20
Lithium	0.0400 U	0.0400	0.0047	mg/l	101	101	90-110	1	20
Magnesium	0.200 U	0.200	0.0167	mg/l	98	99	90-110	0	20
Manganese	0.0100 U	0.0100	0.00083	mg/l	102	102	90-110	0	20
Molybdenum	0.0200 U	0.0200	0.0017	mg/l	101	102	90-110	1	20
Nickel	0.0200 U	0.0200	0.0015	mg/l	101	102	90-111	1	20
Phosphorus	0.200 U	0.200	0.0418	mg/l	99	99	90-110	0	20
Potassium	1.00 U	1.00	0.0980	mg/l	99	100	85-115	1	20
Sodium	2.00 U	2.00	0.167	mg/l	99	99	87-114	0	20
Tin	0.0400 U	0.0400	0.0029	mg/l	96	97	90-110	1	20
Titanium	0.0200 U	0.0200	0.0017	mg/l	101	101	90-113	0	20
Vanadium	0.0100 U	0.0100	0.0020	mg/l	101	101	90-110	0	20
Zinc	0.0400 U	0.0400	0.0020	mg/l	98	98	90-110	1	20
Zirconium	0.100 U	0.100	0.0084	mg/l	100	101	90-110	1	20
Batch number: 132110639001A	Sample number(s): 7141111-7141112								
Silver	0.0010 U	0.0010	0.00011	mg/l	104	102	90-115	2	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	103	100	80-120	2	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	101	103	80-120	2	20
Batch number: 132110639001B	Sample number(s): 7141111-7141112								
Selenium	0.0040 U	0.0040	0.00050	mg/l	102	107	80-120	4	20
Batch number: 132145713001	Sample number(s): 7141111-7141112								
3b Mercury 7470A	0.00020 U	0.00020	0.00006 0	mg/l	101	98	90-115	3	20
Batch number: 13211102201A	Sample number(s): 7141113-7141114,7141116-7141118								
18a Cyanide by EPA 9012B	0.50 U	0.50	0.18	mg/kg	100		90-110		
Batch number: 13219117101A	Sample number(s): 7141111								
16b Cyanide by EPA 9012B	0.010 U	0.010	0.0050	mg/l	97	98	90-110	1	15
Batch number: 13207039402A	Sample number(s): 7141113,7141116-7141120								
15a pH by 9045D					100		95-105		

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Quality Control Summary

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Reported: 08/13/13 at 11:39 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13208004101A	Sample number(s): 7141111									
28b pH (9040B and 9040C)						99		99-103		
Batch number: 13211162401A	Sample number(s): 7141113-7141120									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13212005	Sample number(s): 7141111									
2378-TCDD	2.00	U	2.00	0.253	pg/l	95		60-150		
12378-PeCDD	1.39	J	10.0	0.272	pg/l	98		60-150		
123478-HxCDD	0.780	J	10.0	0.156	pg/l	95		60-150		
123678-HxCDD	0.681	J	10.0	0.168	pg/l	93		60-150		
123789-HxCDD	0.679	J	10.0	0.168	pg/l	93		60-150		
1234678-HpCDD	1.39	J	10.0	0.173	pg/l	87		60-150		
OCDD	1.99	J	20.0	0.179	pg/l	91		60-150		
2378-TCDF	2.00	U	2.00	0.172	pg/l	89		60-150		
12378-PeCDF	0.757	J	10.0	0.133	pg/l	95		60-150		
23478-PeCDF	1.08	J	10.0	0.119	pg/l	96		60-150		
123478-HxCDF	0.898	J	10.0	0.0946	pg/l	91		60-150		
123678-HxCDF	0.859	J	10.0	0.0993	pg/l	91		60-150		
123789-HxCDF	0.974	J	10.0	0.105	pg/l	88		60-150		
234678-HxCDF	0.602	J	10.0	0.0920	pg/l	89		60-150		
1234678-HpCDF	0.610	J	10.0	0.0683	pg/l	92		60-150		
1234789-HpCDF	0.809	J	10.0	0.0814	pg/l	86		60-150		
OCDF	1.69	J	20.0	0.177	pg/l	82		60-150		
Batch number: 13212007	Sample number(s): 7141113-7141115,7141117-7141120									
2378-TCDD	1.00	U	1.00	0.0453	ng/kg	91		67-158		
12378-PeCDD	5.00	U	5.00	0.0506	ng/kg	92		70-142		
123478-HxCDD	0.0314	J	5.00	0.0238	ng/kg	96		70-164		
123678-HxCDD	5.00	U	5.00	0.0263	ng/kg	86		76-134		
123789-HxCDD	0.0370	J	5.00	0.0270	ng/kg	91		64-162		
1234678-HpCDD	0.0840	J	5.00	0.0287	ng/kg	88		70-140		
OCDD	0.248	J	10.0	0.0272	ng/kg	89		78-144		
2378-TCDF	1.00	U	1.00	0.0456	ng/kg	92		75-158		
12378-PeCDF	0.0452	J	5.00	0.0284	ng/kg	87		80-134		
23478-PeCDF	5.00	U	5.00	0.0279	ng/kg	87		68-160		
123478-HxCDF	5.00	U	5.00	0.0161	ng/kg	92		72-134		
123678-HxCDF	0.0274	J	5.00	0.0155	ng/kg	92		84-130		
123789-HxCDF	5.00	U	5.00	0.0210	ng/kg	89		78-130		
234678-HxCDF	0.0162	J	5.00	0.0149	ng/kg	89		70-156		
1234678-HpCDF	5.00	U	5.00	0.00950	ng/kg	89		82-122		
1234789-HpCDF	5.00	U	5.00	0.0170	ng/kg	89		78-138		
OCDF	0.0744	J	10.0	0.0441	ng/kg	86		63-170		
Batch number: 13212005	Sample number(s): 7141111									
TEQ WHO 2005 - EDLx0.0	0.104				pg/l					
Batch number: 13212007	Sample number(s): 7141113-7141115,7141117-7141120									
TEQ WHO 2005 - EDLx0.0	U				ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13209SLA026	Sample number(s): 7141113-7141115,7141117-7141120 UNSPK: 7141113								
Acenaphthene	99	100	48-127	1	30				
Acenaphthylene	90	90	49-121	1	30				
Anthracene	93	93	52-126	0	30				
Benzo(a)anthracene	97	96	32-135	1	30				
Benzo(a)pyrene	95	95	36-138	0	30				
Benzo(b)fluoranthene	102	103	26-142	1	30				
Benzo(e)pyrene	91	91	70-130	1	30				
Benzo(g,h,i)perylene	91	89	33-141	1	30				
Benzo(k)fluoranthene	96	97	47-129	1	30				
Butylbenzylphthalate	120	119	59-153	1	30				
Di-n-butylphthalate	120	120	62-154	0	30				
Chrysene	97	95	29-148	1	30				
Dibenz(a,h)anthracene	100	99	34-125	2	30				
Diethylphthalate	122	123	76-127	1	30				
Dimethylphthalate	100	101	62-136	0	30				
Bis(2-Ethylhexyl)phthalate	120	126	39-167	5	30				
Fluoranthene	99	98	47-135	1	30				
Fluorene	93	94	50-129	1	30				
Indeno(1,2,3-cd)pyrene	98	97	17-136	1	30				
1-Methylnaphthalene	102	99	50-131	2	30				
2-Methylnaphthalene	99	97	28-144	2	30				
Naphthalene	96	95	31-148	1	30				
N-Nitrosodimethylamine	78	77	48-113	1	30				
Di-n-octylphthalate	114	113	52-162	1	30				
Phenanthrene	94	93	29-142	0	30				
Pyrene	95	93	26-143	2	30				
Batch number: 13209SLB026	Sample number(s): 7141113-7141115,7141117-7141118 UNSPK: 7141113								
Acenaphthene	94	92	60-120	3	30				
Acenaphthylene	99	99	47-137	0	30				
Aniline	64	54	10-131	17	30				
Anthracene	94	97	41-142	4	30				
Benzidine	0*	0*	35-141	0	30				
Benzo(a)anthracene	87	89	32-150	3	30				
Benzo(a)pyrene	95	95	33-145	0	30				
Benzo(b)fluoranthene	98	100	29-150	1	30				
Benzo(g,h,i)perylene	93	96	48-134	4	30				
Benzo(k)fluoranthene	92	90	41-139	2	30				
Benzoic acid	47	49	23-170	4	30				
Benzyl alcohol	89	90	32-145	2	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,1'-Biphenyl	91	90	36-138	1	30				
4-Bromophenyl-phenylether	97	103	66-122	6	30				
Butylbenzylphthalate	92	93	42-146	2	30				
Di-n-butylphthalate	93	97	49-134	5	30				
Carbazole	91	95	58-126	5	30				
4-Chloro-3-methylphenol	90	90	50-137	0	30				
4-Chloroaniline	68	48	11-114	35*	30				
bis(2-Chloroethoxy)methane	98	95	58-122	3	30				
bis(2-Chloroethyl)ether	92	93	54-128	0	30				
bis(2-Chloroisopropyl)ether	82	87	50-115	6	30				
2-Chloronaphthalene	96	83	50-140	14	30				
2-Chlorophenol	94	96	51-139	2	30				
4-Chlorophenyl-phenylether	92	94	65-117	2	30				
Chrysene	81	84	33-142	3	30				
Dibenz(a,h)anthracene	91	95	45-142	4	30				
Dibenzofuran	96	96	60-120	0	30				
1,2-Dichlorobenzene	93	97	45-127	5	30				
1,3-Dichlorobenzene	94	98	46-123	4	30				
1,4-Dichlorobenzene	91	92	40-132	2	30				
3,3'-Dichlorobenzidine	68	66	10-143	2	30				
2,4-Dichlorophenol	94	95	54-135	0	30				
2,6-Dichlorophenol	89	88	56-133	1	30				
Diethylphthalate	89	91	53-132	3	30				
2,4-Dimethylphenol	82	79	39-147	3	30				
Dimethylphthalate	91	92	49-129	1	30				
4,6-Dinitro-2-methylphenol	90	99	10-148	9	30				
2,4-Dinitrophenol	93	93	20-143	1	30				
1,2-Diphenylhydrazine	100	102	51-145	2	30				
bis(2-Ethylhexyl)phthalate	89	90	38-151	1	30				
Fluoranthene	86	91	30-151	5	30				
Fluorene	92	92	55-128	1	30				
Hexachlorobenzene	99	104	46-132	5	30				
Hexachlorobutadiene	96	95	58-120	1	30				
Hexachlorocyclopentadiene	113	106	10-153	6	30				
Hexachloroethane	96	94	24-138	2	30				
Indeno(1,2,3-cd)pyrene	95	97	46-139	2	30				
Isophorone	92	90	59-122	2	30				
1-Methylnaphthalene	94	90	36-139	4	30				
2-Methylnaphthalene	84	83	45-134	2	30				
2-Methylphenol	81	87	32-146	7	30				
4-Methylphenol	84	84	31-150	0	30				
Naphthalene	93	92	35-141	2	30				
NDPA as diphenylamine	86	89	70-130	4	30				
2-Nitroaniline	93	98	63-137	5	30				
3-Nitroaniline	93	92	31-145	0	30				
4-Nitroaniline	82	86	25-137	5	30				
Nitrobenzene	91	90	46-133	2	30				
2-Nitrophenol	96	100	52-137	4	30				
4-Nitrophenol	83	87	25-142	4	30				
N-Nitroso-di-n-propylamine	82	83	45-133	1	30				
N-Nitrosodimethylamine	81	86	69-111	6	30				
N-Nitrosodiphenylamine	87	90	59-135	4	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Di-n-octylphthalate	97	97	48-155	0	30				
Pentachlorophenol	91	92	23-145	0	30				
Phenanthrene	91	94	34-147	3	30				
Phenol	84	88	34-146	4	30				
Pyrene	89	89	29-148	1	30				
Pyridine	73	80	16-108	9	30				
1,2,4-Trichlorobenzene	99	97	66-116	1	30				
2,4,5-Trichlorophenol	98	101	41-141	3	30				
2,4,6-Trichlorophenol	93	92	41-142	1	30				
Batch number: 13210B16A	Sample number(s): 7141113-7141115,7141117-7141118,7141120 UNSPK: 7141113								
11a TPH by EPA 8015B GRO	75	75	39-118	15	30				
Batch number: 132080013A	Sample number(s): 7141113-7141115,7141117-7141120 UNSPK: 7141113								
PCB-1016	88	86	16-146	2	50				
PCB-1260	88	88	40-134	0	50				
Batch number: 132110023A	Sample number(s): 7141113-7141115,7141117-7141120 UNSPK: 7141113								
EFH (C12-C14)	86	89	49-123	4	20				
EFH (C15-C20)	90	90	49-123	1	20				
EFH (C21-C30)	93	94	49-123	1	20				
EFH (C30-C40)	94	92	49-123	2	20				
EFH (C8-C11)	85	90	49-123	5	20				
Batch number: 132100637001	Sample number(s): 7141113-7141120 UNSPK: 7141113 BKG: 7141113								
Aluminum	4133 (2)	3286 (2)	75-125	5	20	24,900	25,600	3	20
Antimony	40*	40*	75-125	2	20	3.92 U	3.92 U	0 (1)	20
Arsenic	100	99	75-125	2	20	2.69 J	2.62 J	3 (1)	20
Barium	101	99	75-125	2	20	122	124	2	20
Beryllium	103	102	75-125	1	20	0.895 J	0.923 J	3 (1)	20
Boron	96	95	75-125	2	20	1.67 J	1.50 J	11 (1)	20
Cadmium	94	95	75-125	1	20	0.324 J	0.352 J	8 (1)	20
Calcium	179 (2)	107 (2)	75-125	4	20	6,390	6,410	0	20
Chromium	124	116	75-125	3	20	32.1	33.6	5	20
Cobalt	93	93	75-125	1	20	9.12	9.02	1	20
Copper	113	107	75-125	4	20	18.6	19.2	3	20
Iron	6514 (2)	7090 (2)	75-125	2	20	22,700	26,000	14	20
Lead	90	87	75-125	2	20	9.68	8.77	10 (1)	20
Lithium	103	102	75-125	1	20	20.7	21.3	3	20
Magnesium	428 (2)	336 (2)	75-125	3	20	6,280	6,400	2	20
Manganese	111 (2)	120 (2)	75-125	1	20	418	403	3	20
Molybdenum	91	90	75-125	2	20	1.96 U	1.96 U	0 (1)	20
Nickel	95	95	75-125	1	20	18.1	18.0	0	20
Phosphorus	110	104	75-125	2	20	257	263	2	20
Potassium	169*	141*	75-125	6	20	3,600	3,580	1	20
Sodium	97	96	75-125	1	20	139	148	7 (1)	20
Tin	87	87	75-125	1	20	2.61 J	2.88 J	10 (1)	20
Titanium	568 (2)	424 (2)	75-125	11	20	867	913	5	20
Vanadium	124	118	75-125	3	20	54.2	56.6	4	20
Zinc	102	99	75-125	2	20	61.5	62.0	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Zirconium	95	94	75-125	1	20	3.95 J	4.63 J	16 (1)	20
Batch number: 132100637001A	Sample number(s): 7141113-7141120 UNSPK: 7141113 BKG: 7141113								
Silver	99	95	75-125	4	20	0.0422 J	0.0427 J	1 (1)	20
Strontium	109	90	75-125	4	20	30.3	30.8	2	20
Thallium	105	106	75-125	0	20	0.296	0.275	7 (1)	20
Batch number: 132100637001B	Sample number(s): 7141113-7141120 UNSPK: 7141113 BKG: 7141113								
Selenium	91	91	75-125	1	20	0.167 J	0.190 J	13 (1)	20
Batch number: 132100638001	Sample number(s): 7141113-7141120 UNSPK: 7141113 BKG: 7141113								
3a Mercury 7471A	113	110	65-135	4	20	0.0165 U	0.0165 U	0 (1)	20
Batch number: 13211102201A	Sample number(s): 7141113-7141114,7141116-7141118 UNSPK: 7141113 BKG: 7141113								
18a Cyanide by EPA 9012B	95		75-125			0.50 U	0.49 U	0 (1)	20
Batch number: 13207039402A	Sample number(s): 7141113,7141116-7141120 BKG: 7141113								
15a pH by 9045D						8.01	8.04	0	3
Batch number: 13208004101A	Sample number(s): 7141111 BKG: P140850								
28b pH (9040B and 9040C)						7.7	7.9	2	3
Batch number: 13211162401A	Sample number(s): 7141113-7141120 BKG: 7141113								
14a Moisture Content by 160.3						12.9	15.0	15	20
14a Moisture Content by 160.3						12.9	15.0	15	20
14a Moisture Content by 160.3						12.9	15.0	15	20
Batch number: 13212007	Sample number(s): 7141113-7141115,7141117-7141120 UNSPK: 7141113								
2378-TCDD	96	94	40-135	6	20				
12378-PeCDD	98	90	40-135	12	20				
123478-HxCDD	91	89	40-135	7	20				
123678-HxCDD	91	89	40-135	6	20				
123789-HxCDD	88	86	40-135	6	20				
1234678-HpCDD	88	84	40-135	8	20				
OCDD	86	84	40-135	6	20				
2378-TCDF	95	91	40-135	8	20				
12378-PeCDF	91	86	40-135	9	20				
23478-PeCDF	93	92	40-135	6	20				
123478-HxCDF	89	89	40-135	4	20				
123678-HxCDF	87	88	40-135	2	20				
123789-HxCDF	86	85	40-135	6	20				
234678-HxCDF	88	89	40-135	3	20				
1234678-HpCDF	87	87	40-135	3	20				
1234789-HpCDF	84	85	40-135	4	20				
OCDF	80	79	40-135	5	20				

Surrogate Quality Control

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13209SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7141113	69	74	83
7141114	81	85	96
7141115	80	85	96
7141117	75	80	89
7141118	71	75	83
7141119	80	85	96
7141120	80	85	95
Blank	88	95	105
LCS	83	90	100
MS	81	85	96
MSD	80	85	96
Limits:	54-129	61-134	55-129

Analysis Name: 8a SVOCs by EPA 8270D
Batch number: 13209SLB026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7141113	83	92	94	91	95	91
7141114	82	89	83	91	90	106
7141115	86	92	85	89	90	83
7141117	78	87	90	83	86	83
7141118	80	90	96	93	96	90
Blank	75	87	90	81	86	85
LCS	87	99	99	92	99	93
LCSD	82	95	107			
MS	82	89	83	91	90	106
MSD	86	92	85	89	90	83
Limits:	25-120	25-130	35-130	40-130	45-130	45-130

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13212WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7141111	93	95	106
Blank	90	92	100
LCS	96	99	106
LCSD	101	103	111
Limits:	64-120	62-141	58-134

Analysis Name: 8b SVOCs by EPA 8270D
Batch number: 13212WAD026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7141111	40	59	79	82	86	91

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Surrogate Quality Control

Blank	42	61	84	84	88	97
LCS	51	70	93	90	92	98
LCSD	53	74	94	93	94	102
Limits:	20-110	20-110	30-110	40-130	45-130	45-130

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13210A94A

	Trifluorotoluene-F
7141111	74
7141121	72
Blank	72
LCS	76
LCSD	78
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13210B16A

	Trifluorotoluene-F
7141113	69
7141114	69
7141115	68
7141117	70
7141118	68
7141120	70
Blank	78
LCS	78
MS	69
MSD	68
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132080013A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7141113	95	86
7141114	99	92
7141115	95	89
7141117	96	87
7141118	94	88
7141119	94	89
7141120	96	95
Blank	101	103
LCS	103	96
LCSD	104	108
MS	99	92
MSD	95	89
Limits:	45-120	45-120

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 132090030A

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Surrogate Quality Control

	2,4-Dichlorophenylacetic acid
7141112	76
Blank	80
LCS	103
LCSD	100
Limits:	50-150

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132120024A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7141112	95	86
Blank	97	84
LCS	86	75
LCSD	94	60
Limits:	60-140	20-120

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132120025A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7141111	98	83
7141112	98	90
Blank	101	92
LCS	90	70
LCSD	100	54
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132090023A

	Chlorobenzene	Orthoterphenyl
7141111	96	100
Blank	94	101
LCS	94	103
LCSD	89	102
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132110023A

	Chlorobenzene	Orthoterphenyl
7141113	95	84
7141114	102	81
7141115	100	84
7141117	105	99
7141118	99	87
7141119	97	99
7141120	94	81
Blank	105	104

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Surrogate Quality Control

LCS	109	111
MS	102	81
MSD	100	84
Limits:	37-125	66-123

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13212005

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7141111	57	67	63	63	65	78
Blank	57	77	66	68	70	76
OPR	56	77	65	62	66	71
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7141111	67	69	63	68	71	74
Blank	71	75	72	75	75	76
OPR	66	70	69	77	68	72
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7141111	74	74	70	59	65
Blank	74	80	77	62	73
OPR	71	78	76	65	72
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13212007

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7141113	44	51	48	55	53	50
7141114	55	67	58	61	57	52
7141115	57	64	54	60	60	60
7141117	56	55	49	53	47	44
7141118	64	65	53	56	50	46
7141119	65	64	57	65	56	49
7141120	64	59	50	53	43	41
Blank	63	66	60	72	67	65
MS	55	67	58	61	57	52
MSD	57	64	54	60	60	60
OPR	55	60	56	65	61	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7141113	69	48	45	53	59	62
7141114	71	61	49	72	64	67
7141115	72	55	50	73	69	71
7141117	59	44	37	61	55	59

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407089
Reported: 08/13/13 at 11:39 AM

Surrogate Quality Control

7141118	66	41	31	73	59	65
7141119	73	47	39	72	65	68
7141120	60	38	28	66	53	54
Blank	86	62	60	77	81	84
MS	71	61	49	72	64	67
MSD	72	55	50	73	69	71
OPR	76	60	58	68	68	74
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7141113	62	63	64	40	50
7141114	68	70	70	48	68
7141115	72	74	72	49	66
7141117	57	57	55	46	58
7141118	63	64	58	58	70
7141119	68	68	67	58	71
7141120	54	53	51	50	66
Blank	84	86	84	53	68
MS	68	70	70	48	68
MSD	72	74	72	49	66
OPR	73	76	77	45	60
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Gp# 1407089 sample# 7141111-21

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/25/2013
CarrierName: FedEx
AirbillNo: 796320134625

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130725-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-072513	7/25/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB1-072513	7/25/13 15:00	WQ	None	3 - 250 mL Amber	10 day					X		X			X																					
EB1-072513	7/25/13 15:00	WQ	None	2 - 1 L Amber	10 day									X																						
EB1-072513	7/25/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																	
EB1-072513	7/25/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB1-072513	7/25/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
EB1-072513	7/25/13 15:00	WQ	NaOH	1 - 250 mL Poly	10 day																										X					
EB2-072513	7/25/13 15:30	WQ	None	2 - 250 mL Amber	10 day										X							X														
EB2-072513	7/25/13 15:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB2-072513	7/25/13 15:30	WQ	None	2 - 1 L Amber	10 day																X															

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stuart Myer	07/25/2013	1600							Brandy 7-26-13 915		

Brandy

Acct# 13013 Cp# 1407089 Sample# 7141111-21

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/25/2013
CarrierName: FedEx
AirbillNo: 796320134625

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130725-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-523-SA8-SB-4.0-5.0MS	7/25/13 08:20	SO	None	6 - 16 oz glass	10 day	X	X			X		X		X	X				X						X						X					MS/MSD
SL-823-SA8-SB-4.0-5.0	7/25/13 08:50	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X				X						X						X					
SL-524-SA8-SB-4.0-5.0	7/25/13 10:00	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X				X						X						X					
SL-525-SA8-SB-0.0-0.5	7/25/13 13:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-525-SA8-SB-0.0-0.5	7/25/13 13:05	SO	None	1 - 4 oz glass	10 day														X																	
SL-525-SA8-SB-4.0-5.0	7/25/13 13:38	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X						X											

Special Instructions:

Sampler: Bennett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[signature]	7/25/2013	1600							Brandy	7.26.13	915
									Barely		

1 of 1

acct# 13013 Cup# 1407039 Sample# 7141111-21

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/25/2013
CarrierName: FedEx
AirbillNo: 796320134625

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130725-03
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-523-SA8-SB-4.0-5.0MS	7/25/13 08:20	SO	None	6 - Encore	10 day																			X												MS/MSD
SL-823-SA8-SB-4.0-5.0	7/25/13 08:50	SO	None	2 - Encore	10 day																			X												
TB-072513	7/25/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-524-SA8-SB-4.0-5.0	7/25/13 10:00	SO	None	2 - Encore	10 day																			X												
SL-525-SA8-SB-4.0-5.0	7/25/13 13:38	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: J Barnett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stacy Mysel	07/25/2013	1600							Brandy Barely	7.26.13	915

1 of 1

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C# 1407039

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 7.26.13

Time of Receipt: 915

Source Code: SC-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	D+146	1.3	TB	WI	Y	B	
2	↓	1.3	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Barely 2249 **Date/Time:** 7.26.13 1044

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH076

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 13, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/27/2013
Group Number: 1407316
SDG: PH076
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-539B-SA8-SB-0.0-0.5 Soil	7142200
SL-539B-SA8-SB-2.0-3.0 Soil	7142201
SL-539A-SA8-SB-0.0-0.5 Soil	7142202
SL-539C-SA8-SB-0.0-0.5 Soil	7142203
SL-539D-SA8-SB-0.0-0.5 Soil	7142204
SL-540-SA8-SB-0.0-0.5 Soil	7142205
SL-540-SA8-SB-4.0-5.0 Soil	7142206
SL-522-SA8-SB-0.0-0.5 Soil	7142207
SL-522-SA8-SB-4.0-5.0 Soil	7142208
TB-072613 Water	7142209

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-539B-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142200
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 07:55 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B0 SDG#: PH076-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.1	J	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	8.3		1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	10		1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	20		1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	10	J	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	6.3		1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	8.8		1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	20		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	2.4		1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	24		1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	6.4		1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	10		1.9	0.77	1
12969	Pyrene	129-00-0	18		1.9	0.77	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	2.8	J	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142200
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 07:55 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B0 SDG#: PH076-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,700		44.6	8.05	1
06944	Antimony	7440-36-0	4.46	U	4.46	0.826	1
06935	Arsenic	7440-38-2	4.00	J	4.46	0.781	1
06946	Barium	7440-39-3	117		1.12	0.0368	1
06947	Beryllium	7440-41-7	0.911	J	1.12	0.0748	1
07914	Boron	7440-42-8	3.27	J	11.2	0.937	1
06949	Cadmium	7440-43-9	0.385	J	1.12	0.0848	1
01650	Calcium	7440-70-2	15,800		22.3	3.73	1
06951	Chromium	7440-47-3	36.7		3.35	0.179	1
06952	Cobalt	7440-48-4	8.95		1.12	0.110	1
06953	Copper	7440-50-8	22.5		2.23	0.324	1
01654	Iron	7439-89-6	34,100		89.3	8.08	2
06955	Lead	7439-92-1	10.8		3.35	0.558	1
01656	Lithium	7439-93-2	23.1		4.5	0.38	1
01657	Magnesium	7439-95-4	7,470		11.2	1.86	1
06958	Manganese	7439-96-5	368		1.12	0.0926	1
06960	Molybdenum	7439-98-7	2.23	U	2.23	0.190	1
06961	Nickel	7440-02-0	18.5		2.23	0.145	1
10145	Phosphorus	7723-14-0	388		11.2	3.23	1
01662	Potassium	7440-09-7	4,950		112	9.31	1
01667	Sodium	7440-23-5	174		112	18.6	1
06969	Tin	7440-31-5	2.64	J	11.2	0.246	1
06970	Titanium	7440-32-6	1,100		1.12	0.190	1
06971	Vanadium	7440-62-2	63.4		1.12	0.145	1
06972	Zinc	7440-66-6	71.0		4.46	0.223	1
10146	Zirconium	7440-67-7	4.27	J	5.58	0.937	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.264	J	0.446	0.112	2
06142	Silver	7440-22-4	0.0400	J	0.223	0.0290	2
06144	Strontium	7440-24-6	39.2		0.446	0.0759	2
06145	Thallium	7440-28-0	0.345		0.223	0.0335	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0188	U	0.0188	0.0113	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.87		0.0100	0.0100	1
	The pH was measured in water at 20.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142200
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 07:55 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B0 SDG#: PH076-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0357 JBQ	1.15	0.0286	1
11031	12378-PeCDD	40321-76-4	0.142 JQ	5.73	0.0434	1
11031	123478-HxCDD	39227-28-6	0.149 JB	5.73	0.0562	1
11031	123678-HxCDD	57653-85-7	0.329 JBQ	5.73	0.0617	1
11031	123789-HxCDD	19408-74-3	0.303 JB	5.73	0.0468	1
11031	1234678-HpCDD	35822-46-9	7.00 B	5.73	0.0740	1
11031	OCDD	3268-87-9	56.8 B	11.5	0.0425	1
11031	2378-TCDF	51207-31-9	0.0783 JQ	1.15	0.0369	1
11031	12378-PeCDF	57117-41-6	0.190 JBQ	5.73	0.0332	1
11031	23478-PeCDF	57117-31-4	5.73 U	5.73	0.0329	1
11031	123478-HxCDF	70648-26-9	0.197 JB	5.73	0.0290	1
11031	123678-HxCDF	57117-44-9	0.144 JB	5.73	0.0283	1
11031	123789-HxCDF	72918-21-9	0.275 JBQ	5.73	0.0208	1
11031	234678-HxCDF	60851-34-5	0.139 JB	5.73	0.0237	1
11031	1234678-HpCDF	67562-39-4	0.643 JB	5.73	0.0205	1
11031	1234789-HpCDF	55673-89-7	0.120 JBQ	5.73	0.0264	1
11031	OCDF	39001-02-0	1.63 JB	11.5	0.0534	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.187			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	40	25 - 181
13C12-123478-HxCDD	38	32 - 141
13C12-123678-HxCDD	40	28 - 130
13C12-123789-HxCDD	48	28 - 130
13C12-1234678-HpCDD	41	23 - 140
13C12-OCDD	45	17 - 157
13C12-2378-TCDF	49	24 - 169
13C12-12378-PeCDF	43	24 - 185
13C12-23478-PeCDF	40	21 - 178
13C12-123478-HxCDF	38	26 - 152
13C12-123678-HxCDF	39	26 - 123
13C12-234678-HxCDF	44	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	43	28 - 143
13C12-1234789-HpCDF	40	26 - 138
13C12-OCDF	37	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142200
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 07:55 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B0 SDG#: PH076-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142200
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 07:55 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B0 SDG#: PH076-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/30/2013 16:58	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090002A	07/30/2013 13:52	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090002A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 23:19	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/08/2013 08:45	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 07:08	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 14:19	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 18:02	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 18:02	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 18:02	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 18:02	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142200
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 07:55 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B0 SDG#: PH076-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132110638001	08/01/2013 04:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132110638001	07/31/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13208039401A	07/27/2013 15:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401A	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142201
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 08:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B2 SDG#: PH076-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.78	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.78	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.78	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.78	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.78	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.78	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.81
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142201
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 08:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B2 SDG#: PH076-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,600		45.3	8.16	1
06944	Antimony	7440-36-0	4.53	U	4.53	0.837	1
06935	Arsenic	7440-38-2	3.73	J	4.53	0.792	1
06946	Barium	7440-39-3	127		1.13	0.0373	1
06947	Beryllium	7440-41-7	0.975	J	1.13	0.0758	1
07914	Boron	7440-42-8	1.96	J	11.3	0.951	1
06949	Cadmium	7440-43-9	0.320	J	1.13	0.0860	1
01650	Calcium	7440-70-2	12,800		22.6	3.78	1
06951	Chromium	7440-47-3	35.8		3.39	0.181	1
06952	Cobalt	7440-48-4	7.99		1.13	0.112	1
06953	Copper	7440-50-8	18.1		2.26	0.328	1
01654	Iron	7439-89-6	32,200		90.5	8.19	2
06955	Lead	7439-92-1	9.89		3.39	0.566	1
01656	Lithium	7439-93-2	24.1		4.5	0.38	1
01657	Magnesium	7439-95-4	6,610		11.3	1.89	1
06958	Manganese	7439-96-5	350		1.13	0.0939	1
06960	Molybdenum	7439-98-7	2.26	U	2.26	0.192	1
06961	Nickel	7440-02-0	18.3		2.26	0.147	1
10145	Phosphorus	7723-14-0	222		11.3	3.27	1
01662	Potassium	7440-09-7	2,950		113	9.44	1
01667	Sodium	7440-23-5	186		113	18.9	1
06969	Tin	7440-31-5	2.91	J	11.3	0.249	1
06970	Titanium	7440-32-6	1,150		1.13	0.192	1
06971	Vanadium	7440-62-2	61.1		1.13	0.147	1
06972	Zinc	7440-66-6	60.8		4.53	0.226	1
10146	Zirconium	7440-67-7	3.91	J	5.66	0.951	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.133	J	0.453	0.113	2
06142	Silver	7440-22-4	0.226	U	0.226	0.0294	2
06144	Strontium	7440-24-6	33.8		0.453	0.0769	2
06145	Thallium	7440-28-0	0.333		0.226	0.0339	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0186	U	0.0186	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.82		0.0100	0.0100	1
	The pH was measured in water at 20.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142201
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 08:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B2 SDG#: PH076-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142201
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 08:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B2 SDG#: PH076-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.14	U	1.14	0.0277	1
11031	12378-PeCDD	40321-76-4	5.68	U	5.68	0.0494	1
11031	123478-HxCDD	39227-28-6	0.0641	JBQ	5.68	0.0393	1
11031	123678-HxCDD	57653-85-7	0.116	JB	5.68	0.0413	1
11031	123789-HxCDD	19408-74-3	0.0641	JB	5.68	0.0325	1
11031	1234678-HpCDD	35822-46-9	1.72	JB	5.68	0.0583	1
11031	OCDD	3268-87-9	12.7	B	11.4	0.0401	1
11031	2378-TCDF	51207-31-9	1.14	U	1.14	0.0273	1
11031	12378-PeCDF	57117-41-6	0.0797	JBQ	5.68	0.0312	1
11031	23478-PeCDF	57117-31-4	0.0714	JBQ	5.68	0.0304	1
11031	123478-HxCDF	70648-26-9	0.0810	JBQ	5.68	0.0246	1
11031	123678-HxCDF	57117-44-9	0.0570	JB	5.68	0.0232	1
11031	123789-HxCDF	72918-21-9	5.68	U	5.68	0.0174	1
11031	234678-HxCDF	60851-34-5	0.0534	JB	5.68	0.0192	1
11031	1234678-HpCDF	67562-39-4	0.281	JBQ	5.68	0.0218	1
11031	1234789-HpCDF	55673-89-7	0.0920	JBQ	5.68	0.0234	1
11031	OCDF	39001-02-0	0.241	JB	11.4	0.0472	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0502				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	54	25 - 164
13C12-12378-PeCDD	37	25 - 181
13C12-123478-HxCDD	35	32 - 141
13C12-123678-HxCDD	36	28 - 130
13C12-123789-HxCDD	43	28 - 130
13C12-1234678-HpCDD	38	23 - 140
13C12-OCDD	42	17 - 157
13C12-2378-TCDF	46	24 - 169
13C12-12378-PeCDF	39	24 - 185
13C12-23478-PeCDF	37	21 - 178
13C12-123478-HxCDF	34	26 - 152
13C12-123678-HxCDF	35	26 - 123
13C12-234678-HxCDF	41	28 - 136
13C12-123789-HxCDF	54	29 - 147
13C12-1234678-HpCDF	37	28 - 143
13C12-1234789-HpCDF	39	26 - 138
13C12-OCDF	37	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142201
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 08:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B2 SDG#: PH076-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142201
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 08:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B2 SDG#: PH076-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/31/2013 04:16	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/30/2013 20:25	Laura M Krieger	23.81
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320831847	07/27/2013 14:04	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320831847	07/27/2013 14:04	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090002A	07/30/2013 14:48	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090002A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 20:33	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/08/2013 09:41	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 07:12	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 14:30	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-539B-SA8-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142201
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 08:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

539B2 SDG#: PH076-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 18:09	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 18:09	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 18:09	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 18:09	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 10:10	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13208039401A	07/27/2013 15:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401A	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-539A-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142202
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 08:25 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S539A SDG#: PH076-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.5	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.8		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090002A	07/30/2013 15:06	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090002A	07/29/2013 19:00	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-539C-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142203
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 08:30 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S539C SDG#: PH076-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.2	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	11	J	20	3.9	1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	15.3		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090002A	07/30/2013 15:25	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090002A	07/29/2013 19:00	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-539D-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142204
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 08:40 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S539D SDG#: PH076-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.5	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.7		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090002A	07/30/2013 15:43	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090002A	07/29/2013 19:00	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142205
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:05 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH076-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	3.2	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	7.5	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142205
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:05 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH076-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,800		43.2	7.79	1
06944	Antimony	7440-36-0	4.32	U	4.32	0.800	1
06935	Arsenic	7440-38-2	3.13	J	4.32	0.757	1
06946	Barium	7440-39-3	132		1.08	0.0357	1
06947	Beryllium	7440-41-7	0.986	J	1.08	0.0724	1
07914	Boron	7440-42-8	2.51	J	10.8	0.908	1
06949	Cadmium	7440-43-9	0.472	J	1.08	0.0821	1
01650	Calcium	7440-70-2	20,300		21.6	3.61	1
06951	Chromium	7440-47-3	36.7		3.24	0.173	1
06952	Cobalt	7440-48-4	10.6		1.08	0.107	1
06953	Copper	7440-50-8	23.3		2.16	0.313	1
01654	Iron	7439-89-6	34,600		86.5	7.83	2
06955	Lead	7439-92-1	10.3		3.24	0.540	1
01656	Lithium	7439-93-2	26.0		4.3	0.37	1
01657	Magnesium	7439-95-4	7,660		10.8	1.81	1
06958	Manganese	7439-96-5	454		1.08	0.0897	1
06960	Molybdenum	7439-98-7	2.16	U	2.16	0.184	1
06961	Nickel	7440-02-0	21.3		2.16	0.141	1
10145	Phosphorus	7723-14-0	392		10.8	3.12	1
01662	Potassium	7440-09-7	5,480		108	9.01	1
01667	Sodium	7440-23-5	128		108	18.1	1
06969	Tin	7440-31-5	2.79	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,190		1.08	0.184	1
06971	Vanadium	7440-62-2	65.3		1.08	0.141	1
06972	Zinc	7440-66-6	76.1		4.32	0.216	1
10146	Zirconium	7440-67-7	4.22	J	5.40	0.908	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.201	J	0.432	0.108	2
06142	Silver	7440-22-4	0.0460	J	0.216	0.0281	2
06144	Strontium	7440-24-6	49.0		0.432	0.0735	2
06145	Thallium	7440-28-0	0.364		0.216	0.0324	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175	U	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.02		0.0100	0.0100	1
	The pH was measured in water at 20.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142205
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:05 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH076-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0219 JBQ	1.09	0.0155	1
11031	12378-PeCDD	40321-76-4	0.0518 J	5.45	0.0173	1
11031	123478-HxCDD	39227-28-6	0.0353 JBQ	5.45	0.0129	1
11031	123678-HxCDD	57653-85-7	0.102 JB	5.45	0.0138	1
11031	123789-HxCDD	19408-74-3	0.285 JB	5.45	0.0136	1
11031	1234678-HpCDD	35822-46-9	0.254 JB	5.45	0.0152	1
11031	OCDD	3268-87-9	0.678 JB	10.9	0.0162	1
11031	2378-TCDF	51207-31-9	1.09 U	1.09	0.0112	1
11031	12378-PeCDF	57117-41-6	0.0721 JB	5.45	0.0104	1
11031	23478-PeCDF	57117-31-4	0.0384 JBQ	5.45	0.00937	1
11031	123478-HxCDF	70648-26-9	0.0473 JBQ	5.45	0.00628	1
11031	123678-HxCDF	57117-44-9	0.0362 JB	5.45	0.00606	1
11031	123789-HxCDF	72918-21-9	0.281 JBQ	5.45	0.00717	1
11031	234678-HxCDF	60851-34-5	0.0407 JBQ	5.45	0.00606	1
11031	1234678-HpCDF	67562-39-4	0.0874 JBQ	5.45	0.00551	1
11031	1234789-HpCDF	55673-89-7	0.0405 JBQ	5.45	0.00772	1
11031	OCDF	39001-02-0	0.0852 JBQ	10.9	0.0151	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0992			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142205
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:05 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH076-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142205
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:05 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH076-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/31/2013 04:47	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090002A	07/30/2013 16:02	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090002A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 20:53	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/09/2013 09:03	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 07:15	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 14:34	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 18:11	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 18:11	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 18:11	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 18:11	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142205
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:05 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54000 SDG#: PH076-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 10:12	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13208039401A	07/27/2013 15:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142206
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54040 SDG#: PH076-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	0.90	J	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	0.67	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	0.84	J	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.56
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142206
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54040 SDG#: PH076-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	10		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	27		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,200		42.7	7.70	1
06944	Antimony	7440-36-0	4.27	U	4.27	0.791	1
06935	Arsenic	7440-38-2	3.88	J	4.27	0.748	1
06946	Barium	7440-39-3	127		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.971	J	1.07	0.0716	1
07914	Boron	7440-42-8	2.75	J	10.7	0.897	1
06949	Cadmium	7440-43-9	0.419	J	1.07	0.0812	1
01650	Calcium	7440-70-2	18,200		21.4	3.57	1
06951	Chromium	7440-47-3	36.4		3.21	0.171	1
06952	Cobalt	7440-48-4	11.7		1.07	0.106	1
06953	Copper	7440-50-8	22.5		2.14	0.310	1
01654	Iron	7439-89-6	37,700		85.5	7.74	2
06955	Lead	7439-92-1	10.7		3.21	0.534	1
01656	Lithium	7439-93-2	24.6		4.3	0.36	1
01657	Magnesium	7439-95-4	7,770		10.7	1.78	1
06958	Manganese	7439-96-5	517		1.07	0.0887	1
06960	Molybdenum	7439-98-7	2.14	U	2.14	0.182	1
06961	Nickel	7440-02-0	21.9		2.14	0.139	1
10145	Phosphorus	7723-14-0	391		10.7	3.09	1
01662	Potassium	7440-09-7	5,320		107	8.91	1
01667	Sodium	7440-23-5	102	J	107	17.8	1
06969	Tin	7440-31-5	2.62	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,100		1.07	0.182	1
06971	Vanadium	7440-62-2	64.4		1.07	0.139	1
06972	Zinc	7440-66-6	76.4		4.27	0.214	1
10146	Zirconium	7440-67-7	4.34	J	5.34	0.897	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.222	J	0.427	0.107	2
06142	Silver	7440-22-4	0.0511	J	0.214	0.0278	2
06144	Strontium	7440-24-6	49.2		0.427	0.0726	2
06145	Thallium	7440-28-0	0.362		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.8 C.	n.a.	7.78		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142206
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54040 SDG#: PH076-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142206
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54040 SDG#: PH076-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0234	1
11031	12378-PeCDD	40321-76-4	0.0897	JB	5.43	0.0277	1
11031	123478-HxCDD	39227-28-6	0.0577	JBQ	5.43	0.0219	1
11031	123678-HxCDD	57653-85-7	0.0925	JBQ	5.43	0.0237	1
11031	123789-HxCDD	19408-74-3	0.134	JBQ	5.43	0.0237	1
11031	1234678-HpCDD	35822-46-9	0.631	JB	5.43	0.0351	1
11031	OCDD	3268-87-9	5.67	JB	10.9	0.0271	1
11031	2378-TCDF	51207-31-9	0.0334	JQ	1.09	0.0206	1
11031	12378-PeCDF	57117-41-6	0.111	JBQ	5.43	0.0160	1
11031	23478-PeCDF	57117-31-4	0.0834	JB	5.43	0.0149	1
11031	123478-HxCDF	70648-26-9	0.0718	JBQ	5.43	0.0133	1
11031	123678-HxCDF	57117-44-9	0.0660	JB	5.43	0.0131	1
11031	123789-HxCDF	72918-21-9	0.111	JB	5.43	0.0162	1
11031	234678-HxCDF	60851-34-5	0.0476	JB	5.43	0.0127	1
11031	1234678-HpCDF	67562-39-4	0.113	JB	5.43	0.0104	1
11031	1234789-HpCDF	55673-89-7	0.0191	JBQ	5.43	0.0146	1
11031	OCDF	39001-02-0	0.255	JB	10.9	0.0296	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.146				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142206
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54040 SDG#: PH076-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142206
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54040 SDG#: PH076-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/31/2013 05:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/30/2013 21:03	Laura M Krieger	24.56
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320831847	07/27/2013 14:05	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320831847	07/27/2013 14:05	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090002A	07/30/2013 16:20	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090002A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 21:35	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13221002	08/12/2013 23:24	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	2	13221002	08/09/2013 15:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 07:19	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 14:38	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-540-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142206
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 10:15 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54040 SDG#: PH076-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 18:14	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 18:14	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 18:14	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 18:14	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 10:18	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13208039401A	07/27/2013 15:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142207
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 12:50 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH076-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.62	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	3.9	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142207
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 12:50 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH076-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,000		43.4	7.82	1
06944	Antimony	7440-36-0	4.34	U	4.34	0.802	1
06935	Arsenic	7440-38-2	3.88	J	4.34	0.759	1
06946	Barium	7440-39-3	110		1.08	0.0358	1
06947	Beryllium	7440-41-7	0.808	J	1.08	0.0727	1
07914	Boron	7440-42-8	4.24	J	10.8	0.911	1
06949	Cadmium	7440-43-9	0.510	J	1.08	0.0824	1
01650	Calcium	7440-70-2	37,600		21.7	3.62	1
06951	Chromium	7440-47-3	33.5		3.25	0.174	1
06952	Cobalt	7440-48-4	10.4		1.08	0.107	1
06953	Copper	7440-50-8	22.9		2.17	0.314	1
01654	Iron	7439-89-6	29,300		86.8	7.85	2
06955	Lead	7439-92-1	11.4		3.25	0.542	1
01656	Lithium	7439-93-2	22.8		4.3	0.37	1
01657	Magnesium	7439-95-4	7,630		10.8	1.81	1
06958	Manganese	7439-96-5	459		1.08	0.0900	1
06960	Molybdenum	7439-98-7	2.17	U	2.17	0.184	1
06961	Nickel	7440-02-0	20.6		2.17	0.141	1
10145	Phosphorus	7723-14-0	637		10.8	3.13	1
01662	Potassium	7440-09-7	6,000		108	9.04	1
01667	Sodium	7440-23-5	103	J	108	18.1	1
06969	Tin	7440-31-5	2.59	J	10.8	0.239	1
06970	Titanium	7440-32-6	976		1.08	0.184	1
06971	Vanadium	7440-62-2	58.5		1.08	0.141	1
06972	Zinc	7440-66-6	77.7		4.34	0.217	1
10146	Zirconium	7440-67-7	3.01	J	5.42	0.911	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.283	J	0.434	0.108	2
06142	Silver	7440-22-4	0.0384	J	0.217	0.0282	2
06144	Strontium	7440-24-6	64.9		0.434	0.0737	2
06145	Thallium	7440-28-0	0.343		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0178	U	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.04		0.0100	0.0100	1
	The pH was measured in water at 21 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142207
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 12:50 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH076-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0256	1
11031	12378-PeCDD	40321-76-4	0.178	JQ	5.47	0.0333	1
11031	123478-HxCDD	39227-28-6	0.257	JB	5.47	0.0414	1
11031	123678-HxCDD	57653-85-7	2.96	JB	5.47	0.0444	1
11031	123789-HxCDD	19408-74-3	0.759	JB	5.47	0.0434	1
11031	1234678-HpCDD	35822-46-9	80.8	B	5.47	0.0740	1
11031	OCDD	3268-87-9	808	B	10.9	0.0505	1
11031	2378-TCDF	51207-31-9	0.0519	JQ	1.09	0.0288	1
11031	12378-PeCDF	57117-41-6	0.241	JB	5.47	0.0235	1
11031	23478-PeCDF	57117-31-4	0.135	JB	5.47	0.0216	1
11031	123478-HxCDF	70648-26-9	0.363	JB	5.47	0.0309	1
11031	123678-HxCDF	57117-44-9	0.299	JB	5.47	0.0303	1
11031	123789-HxCDF	72918-21-9	5.47	U	5.47	0.0371	1
11031	234678-HxCDF	60851-34-5	0.603	JB	5.47	0.0300	1
11031	1234678-HpCDF	67562-39-4	8.26	B	5.47	0.0192	1
11031	1234789-HpCDF	55673-89-7	0.518	JB	5.47	0.0276	1
11031	OCDF	39001-02-0	8.96	JB	10.9	0.0325	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.71				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	53	25 - 164
13C12-12378-PeCDD	56	25 - 181
13C12-123478-HxCDD	58	32 - 141
13C12-123678-HxCDD	63	28 - 130
13C12-123789-HxCDD	60	28 - 130
13C12-1234678-HpCDD	61	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	48	24 - 169
13C12-12378-PeCDF	55	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	63	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	60	29 - 147
13C12-1234678-HpCDF	69	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	58	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142207
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 12:50 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH076-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142207
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 12:50 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH076-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/31/2013 05:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090002A	07/30/2013 16:39	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090002A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 21:14	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/08/2013 15:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 07:30	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 14:42	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 18:16	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 18:16	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 18:16	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 18:16	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142207
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 12:50 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52200 SDG#: PH076-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 10:20	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13208039401A	07/27/2013 15:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142208
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 13:20 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52240 SDG#: PH076-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	0.79	J	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	0.93	J	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.35
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	2.9	J	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142208
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 13:20 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52240 SDG#: PH076-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	6.5		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	17		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,700		44.7	8.06	1
06944	Antimony	7440-36-0	4.47	U	4.47	0.827	1
06935	Arsenic	7440-38-2	2.92	J	4.47	0.782	1
06946	Barium	7440-39-3	114		1.12	0.0369	1
06947	Beryllium	7440-41-7	0.849	J	1.12	0.0749	1
07914	Boron	7440-42-8	2.76	J	11.2	0.939	1
06949	Cadmium	7440-43-9	0.447	J	1.12	0.0849	1
01650	Calcium	7440-70-2	23,900		22.3	3.73	1
06951	Chromium	7440-47-3	32.9		3.35	0.179	1
06952	Cobalt	7440-48-4	9.81		1.12	0.111	1
06953	Copper	7440-50-8	21.6		2.23	0.324	1
01654	Iron	7439-89-6	27,300		89.4	8.09	2
06955	Lead	7439-92-1	9.56		3.35	0.559	1
01656	Lithium	7439-93-2	23.3		4.5	0.38	1
01657	Magnesium	7439-95-4	7,420		11.2	1.87	1
06958	Manganese	7439-96-5	423		1.12	0.0927	1
06960	Molybdenum	7439-98-7	2.23	U	2.23	0.190	1
06961	Nickel	7440-02-0	19.7		2.23	0.145	1
10145	Phosphorus	7723-14-0	547		11.2	3.23	1
01662	Potassium	7440-09-7	5,650		112	9.32	1
01667	Sodium	7440-23-5	90.4	J	112	18.7	1
06969	Tin	7440-31-5	2.59	J	11.2	0.246	1
06970	Titanium	7440-32-6	979		1.12	0.190	1
06971	Vanadium	7440-62-2	57.2		1.12	0.145	1
06972	Zinc	7440-66-6	74.3		4.47	0.223	1
10146	Zirconium	7440-67-7	3.52	J	5.59	0.939	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.237	J	0.447	0.112	2
06142	Silver	7440-22-4	0.0460	J	0.223	0.0291	2
06144	Strontium	7440-24-6	47.1		0.447	0.0760	2
06145	Thallium	7440-28-0	0.360		0.223	0.0335	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0181	U	0.0181	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.11		0.0100	0.0100	1
	The pH was measured in water at 20.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142208
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 13:20 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52240 SDG#: PH076-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142208
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52240 SDG#: PH076-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0230 JQ	1.09	0.0217	1
11031	12378-PeCDD	40321-76-4	0.0523 JBQ	5.47	0.0209	1
11031	123478-HxCDD	39227-28-6	0.0411 JBQ	5.47	0.0189	1
11031	123678-HxCDD	57653-85-7	0.0864 JBQ	5.47	0.0209	1
11031	123789-HxCDD	19408-74-3	0.131 JB	5.47	0.0202	1
11031	1234678-HpCDD	35822-46-9	0.216 JB	5.47	0.0226	1
11031	OCDD	3268-87-9	0.982 JB	10.9	0.0226	1
11031	2378-TCDF	51207-31-9	1.09 U	1.09	0.0179	1
11031	12378-PeCDF	57117-41-6	0.0884 JBQ	5.47	0.0135	1
11031	23478-PeCDF	57117-31-4	0.0313 JBQ	5.47	0.0124	1
11031	123478-HxCDF	70648-26-9	0.0529 JBQ	5.47	0.0106	1
11031	123678-HxCDF	57117-44-9	0.0356 JB	5.47	0.0103	1
11031	123789-HxCDF	72918-21-9	0.105 JBQ	5.47	0.0120	1
11031	234678-HxCDF	60851-34-5	0.0286 JBQ	5.47	0.00994	1
11031	1234678-HpCDF	67562-39-4	0.0499 JB	5.47	0.00682	1
11031	1234789-HpCDF	55673-89-7	0.0506 JBQ	5.47	0.0101	1
11031	OCDF	39001-02-0	0.172 JB	10.9	0.0248	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0196			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142208
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 13:20 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52240 SDG#: PH076-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142208
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 13:20 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52240 SDG#: PH076-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13209SLA026	07/31/2013 06:22	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13209SLA026	07/29/2013 14:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/30/2013 21:41	Laura M Krieger	25.35
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201320831847	07/27/2013 14:06	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201320831847	07/27/2013 14:06	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132090002A	07/30/2013 16:57	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132090002A	07/29/2013 19:00	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132110023A	08/01/2013 21:56	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132110023A	07/31/2013 08:50	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13221002	08/12/2013 20:34	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	2	13221002	08/09/2013 15:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132100637001	08/05/2013 07:34	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132100637001	08/03/2013 14:46	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-522-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7142208
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 13:20 by TB

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52240 SDG#: PH076-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132100637001B	08/05/2013 18:18	David K Beck	2
06142	Silver	SW-846 6020A	1	132100637001A	08/05/2013 18:18	David K Beck	2
06144	Strontium	SW-846 6020A	1	132100637001A	08/05/2013 18:18	David K Beck	2
06145	Thallium	SW-846 6020A	1	132100637001A	08/05/2013 18:18	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132100638001	07/30/2013 10:22	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132100637001	07/31/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132100638001	07/30/2013 04:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13208039401A	07/27/2013 15:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-072613 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7142209
LL Group # 1407316
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/26/2013 08:00

Submitted: 07/27/2013 09:35
Reported: 08/13/2013 22:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

522TB SDG#: PH076-10TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13210A94A	07/29/2013 13:23	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13210A94A	07/29/2013 13:23	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407316
Reported: 08/13/13 at 10:03 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13209SLA026	Sample number(s): 7142200-7142201,7142205-7142208									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	93		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	95		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	101		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	99		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	119		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	123		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	97		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	125		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	117		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	101		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	104		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	79		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	116		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	93		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	98		71-120		
Batch number: 13210A94A	Sample number(s): 7142209									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	105	108	75-135	3	30
Batch number: 13210B16A	Sample number(s): 7142201,7142206,7142208									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	77		67-119		
Batch number: 132090002A	Sample number(s): 7142200-7142208									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	68	69	36-106	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407316
Reported: 08/13/13 at 10:03 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	105		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132110023A	Sample number(s): 7142200-7142201,7142205-7142208									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	107		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	114		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	113		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	116		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	89		49-107		
Batch number: 132100637001	Sample number(s): 7142200-7142201,7142205-7142208									
Aluminum	40.0	U	40.0	7.21	mg/kg	103		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	114		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	99		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	103		80-120		
Calcium	9.96	J	20.0	3.34	mg/kg	104		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	99		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	106		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	105		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	101		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	104		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.28	J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	101		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	100		80-120		
Zinc	0.614	J	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	101		80-120		
Batch number: 132100637001A	Sample number(s): 7142200-7142201,7142205-7142208									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	97		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	90		80-120		
Batch number: 132100637001B	Sample number(s): 7142200-7142201,7142205-7142208									
Selenium	0.400	U	0.400	0.100	mg/kg	98		80-120		
Batch number: 132100638001	Sample number(s): 7142201,7142205-7142208									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	104		85-120		
Batch number: 132110638001	Sample number(s): 7142200									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	115		85-120		
Batch number: 13208039401A	Sample number(s): 7142200-7142201,7142205-7142208									

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407316
Reported: 08/13/13 at 10:03 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
15a pH by 9045D					99		95-105		
Batch number: 13214162401A	Sample number(s): 7142200-7142201								
14a Moisture Content by 160.3					100		80-120		
Batch number: 13214162401B	Sample number(s): 7142202-7142208								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13218001	Sample number(s): 7142200-7142201,7142205,7142207								
2378-TCDD	0.0240 J	1.00	0.0223	ng/kg	91		67-158		
12378-PeCDD	5.00 U	5.00	0.0227	ng/kg	96		70-142		
123478-HxCDD	0.0349 J	5.00	0.0148	ng/kg	99		70-164		
123678-HxCDD	0.0314 J	5.00	0.0166	ng/kg	98		76-134		
123789-HxCDD	0.0571 J	5.00	0.0161	ng/kg	97		64-162		
1234678-HpCDD	0.0597 J	5.00	0.0164	ng/kg	95		70-140		
OCDD	0.310 J	10.0	0.0170	ng/kg	96		78-144		
2378-TCDF	1.00 U	1.00	0.0188	ng/kg	95		75-158		
12378-PeCDF	0.0576 J	5.00	0.0141	ng/kg	98		80-134		
23478-PeCDF	0.0456 J	5.00	0.0132	ng/kg	95		68-160		
123478-HxCDF	0.0428 J	5.00	0.00810	ng/kg	102		72-134		
123678-HxCDF	0.00975 J	5.00	0.00770	ng/kg	97		84-130		
123789-HxCDF	0.0419 J	5.00	0.00940	ng/kg	99		78-130		
234678-HxCDF	0.0472 J	5.00	0.00760	ng/kg	97		70-156		
1234678-HpCDF	0.0459 J	5.00	0.00620	ng/kg	96		82-122		
1234789-HpCDF	0.0308 J	5.00	0.00880	ng/kg	98		78-138		
OCDF	0.129 J	10.0	0.0224	ng/kg	96		63-170		
Batch number: 13221002	Sample number(s): 7142206,7142208								
2378-TCDD	1.00 U	1.00	0.0271	ng/kg	92		67-158		
12378-PeCDD	0.0500 J	5.00	0.0269	ng/kg	95		70-142		
123478-HxCDD	0.0401 J	5.00	0.0184	ng/kg	101		70-164		
123678-HxCDD	0.0496 J	5.00	0.0196	ng/kg	100		76-134		
123789-HxCDD	0.0309 J	5.00	0.0194	ng/kg	100		64-162		
1234678-HpCDD	0.0631 J	5.00	0.0245	ng/kg	98		70-140		
OCDD	0.267 J	10.0	0.0244	ng/kg	99		78-144		
2378-TCDF	1.00 U	1.00	0.0228	ng/kg	93		75-158		
12378-PeCDF	0.0497 J	5.00	0.0166	ng/kg	98		80-134		
23478-PeCDF	0.0240 J	5.00	0.0158	ng/kg	99		68-160		
123478-HxCDF	0.0315 J	5.00	0.0103	ng/kg	102		72-134		
123678-HxCDF	0.0303 J	5.00	0.0104	ng/kg	101		84-130		
123789-HxCDF	0.0360 J	5.00	0.0119	ng/kg	103		78-130		
234678-HxCDF	0.0403 J	5.00	0.0104	ng/kg	101		70-156		
1234678-HpCDF	0.0690 J	5.00	0.00820	ng/kg	101		82-122		
1234789-HpCDF	0.0395 J	5.00	0.0136	ng/kg	101		78-138		
OCDF	0.145 J	10.0	0.0275	ng/kg	99		63-170		
Batch number: 13218001	Sample number(s): 7142200-7142201,7142205,7142207								
TEQ WHO 2005 - EDLx0.0	0.0247			ng/kg					
Batch number: 13221002	Sample number(s): 7142206,7142208								
TEQ WHO 2005 - EDLx0.0	0.0115			ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407316
Reported: 08/13/13 at 10:03 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13209SLA026	Sample number(s): 7142200-7142201,7142205-7142208 UNSPK: P141113								
Acenaphthene	99	100	48-127	1	30				
Acenaphthylene	90	90	49-121	1	30				
Anthracene	93	93	52-126	0	30				
Benzo(a)anthracene	97	96	32-135	1	30				
Benzo(a)pyrene	95	95	36-138	0	30				
Benzo(b)fluoranthene	102	103	26-142	1	30				
Benzo(e)pyrene	91	91	70-130	1	30				
Benzo(g,h,i)perylene	91	89	33-141	1	30				
Benzo(k)fluoranthene	96	97	47-129	1	30				
Butylbenzylphthalate	120	119	59-153	1	30				
Di-n-butylphthalate	120	120	62-154	0	30				
Chrysene	97	95	29-148	1	30				
Dibenz(a,h)anthracene	100	99	34-125	2	30				
Diethylphthalate	122	123	76-127	1	30				
Dimethylphthalate	100	101	62-136	0	30				
Bis(2-Ethylhexyl)phthalate	120	126	39-167	5	30				
Fluoranthene	99	98	47-135	1	30				
Fluorene	93	94	50-129	1	30				
Indeno(1,2,3-cd)pyrene	98	97	17-136	1	30				
1-Methylnaphthalene	102	99	50-131	2	30				
2-Methylnaphthalene	99	97	28-144	2	30				
Naphthalene	96	95	31-148	1	30				
N-Nitrosodimethylamine	78	77	48-113	1	30				
Di-n-octylphthalate	114	113	52-162	1	30				
Phenanthrene	94	93	29-142	0	30				
Pyrene	95	93	26-143	2	30				
Batch number: 13210B16A	Sample number(s): 7142201,7142206,7142208 UNSPK: P141113								
11a TPH by EPA 8015B GRO	75	75	39-118	15	30				
Batch number: 132090002A	Sample number(s): 7142200-7142208 UNSPK: 7142200								
PCB-1016	87	90	16-146	4	50				
PCB-1260	91	91	40-134	0	50				
Batch number: 132110023A	Sample number(s): 7142200-7142201,7142205-7142208 UNSPK: P141113								
EFH (C12-C14)	86	89	49-123	4	20				
EFH (C15-C20)	90	90	49-123	1	20				
EFH (C21-C30)	93	94	49-123	1	20				
EFH (C30-C40)	94	92	49-123	2	20				
EFH (C8-C11)	85	90	49-123	5	20				
Batch number: 132100637001	Sample number(s): 7142200-7142201,7142205-7142208 UNSPK: P141113 BKG: P141113								
Aluminum	4133	3286	75-125	5	20	24,900	25,600	3	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407316
Reported: 08/13/13 at 10:03 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
	(2)	(2)									
Antimony	40*	40*	75-125	2	20	3.92	U	3.92	U	0 (1)	20
Arsenic	100	99	75-125	2	20	2.69	J	2.62	J	3 (1)	20
Barium	101	99	75-125	2	20	122		124		2	20
Beryllium	103	102	75-125	1	20	0.895	J	0.923	J	3 (1)	20
Boron	96	95	75-125	2	20	1.67	J	1.50	J	11 (1)	20
Cadmium	94	95	75-125	1	20	0.324	J	0.352	J	8 (1)	20
Calcium	179 (2)	107 (2)	75-125	4	20	6,390		6,410		0	20
Chromium	124	116	75-125	3	20	32.1		33.6		5	20
Cobalt	93	93	75-125	1	20	9.12		9.02		1	20
Copper	113	107	75-125	4	20	18.6		19.2		3	20
Iron	6514	7090	75-125	2	20	22,700		26,000		14	20
	(2)	(2)									
Lead	90	87	75-125	2	20	9.68		8.77		10 (1)	20
Lithium	103	102	75-125	1	20	20.7		21.3		3	20
Magnesium	428 (2)	336 (2)	75-125	3	20	6,280		6,400		2	20
Manganese	111 (2)	120 (2)	75-125	1	20	418		403		3	20
Molybdenum	91	90	75-125	2	20	1.96	U	1.96	U	0 (1)	20
Nickel	95	95	75-125	1	20	18.1		18.0		0	20
Phosphorus	110	104	75-125	2	20	257		263		2	20
Potassium	169*	141*	75-125	6	20	3,600		3,580		1	20
Sodium	97	96	75-125	1	20	139		148		7 (1)	20
Tin	87	87	75-125	1	20	2.61	J	2.88	J	10 (1)	20
Titanium	568 (2)	424 (2)	75-125	11	20	867		913		5	20
Vanadium	124	118	75-125	3	20	54.2		56.6		4	20
Zinc	102	99	75-125	2	20	61.5		62.0		1	20
Zirconium	95	94	75-125	1	20	3.95	J	4.63	J	16 (1)	20
Batch number: 132100637001A	Sample number(s): 7142200-7142201,7142205-7142208 UNSPK: P141113 BKG: P141113										
Silver	99	95	75-125	4	20	0.0422	J	0.0427	J	1 (1)	20
Strontium	109	90	75-125	4	20	30.3		30.8		2	20
Thallium	105	106	75-125	0	20	0.296		0.275		7 (1)	20
Batch number: 132100637001B	Sample number(s): 7142200-7142201,7142205-7142208 UNSPK: P141113 BKG: P141113										
Selenium	91	91	75-125	1	20	0.167	J	0.190	J	13 (1)	20
Batch number: 132100638001	Sample number(s): 7142201,7142205-7142208 UNSPK: P141113 BKG: P141113										
3a Mercury 7471A	113	110	65-135	4	20	0.0165	U	0.0165	U	0 (1)	20
Batch number: 132110638001	Sample number(s): 7142200 UNSPK: P143795 BKG: P143795										
3a Mercury 7471A	126	121	65-135	3	20	0.0155	U	0.0165	U	0 (1)	20
Batch number: 13208039401A	Sample number(s): 7142200-7142201,7142205-7142208 BKG: 7142205										
15a pH by 9045D						8.02		8.00		0	3
Batch number: 13214162401A	Sample number(s): 7142200-7142201 BKG: 7142201										
14a Moisture Content by 160.3						14.2		14.0		1	20
Batch number: 13214162401B	Sample number(s): 7142202-7142208 BKG: 7142202										
14a Moisture Content by 160.3						12.8		13.4		5	20

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407316
Reported: 08/13/13 at 10:03 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13209SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7142200	81	84	96
7142201	81	84	95
7142205	86	89	101
7142206	83	87	100
7142207	84	86	100
7142208	85	88	100
Blank	88	95	105
LCS	83	90	100
MS	81	85	96
MSD	80	85	96
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13210A94A

	Trifluorotoluene-F
7142209	72
Blank	72
LCS	76
LCSD	78
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13210B16A

	Trifluorotoluene-F
7142201	71
7142206	67
7142208	72
Blank	78
LCS	78
MS	69
MSD	68
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132090002A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7142200	100	88
7142201	102	98
7142202	94	87

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407316
Reported: 08/13/13 at 10:03 PM

Surrogate Quality Control

7142203	96	86
7142204	101	91
7142205	102	93
7142206	95	87
7142207	99	92
7142208	101	93
Blank	108	100
LCS	110	99
LCSD	106	102
MS	95	86
MSD	99	89
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132110023A

	Chlorobenzene	Orthoterphenyl
7142200	95	91
7142201	96	83
7142205	102	101
7142206	96	98
7142207	95	91
7142208	102	102
Blank	105	104
LCS	109	111
MS	102	81
MSD	100	84
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13218001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7142200	61	40	38	39	44	59
7142201	54	37	34	35	41	54
7142205	63	68	73	76	73	72
7142207	53	55	59	63	61	60
Blank	74	75	83	87	83	85
OPR	53	29	25	26	34	51
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7142200	43	40	37	40	38	40
7142201	37	39	37	37	35	36
7142205	85	71	65	70	73	73
7142207	69	57	58	56	58	63
Blank	94	79	80	76	82	84
OPR	29	29	30	29	26	26
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407316
Reported: 08/13/13 at 10:03 PM

Surrogate Quality Control

7142200	48	41	45	49	43	
7142201	43	38	42	46	39	
7142205	72	72	69	58	67	
7142207	60	61	63	48	55	
Blank	82	82	84	67	75	
OPR	37	30	37	42	33	
Limits:	28-130	23-140	17-157	24-169	24-185	

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13221002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7142206	65	63	71	74	71	71
7142208	61	63	70	72	70	72
Blank	66	68	76	80	78	79
OPR	57	60	67	72	69	66
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7142206	79	67	61	68	72	76
7142208	79	65	64	67	72	73
Blank	96	71	69	72	77	84
OPR	83	63	61	64	68	74
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7142206	72	73	69	58	64
7142208	71	72	70	54	63
Blank	78	79	77	58	68
OPR	70	71	69	50	60
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Gp# 1407316 Sample# 7142200-09

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/26/2013
CarrierName: FedEx
AirbillNo: 796329674137

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130726-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-539B-SA8-SB-0.0-0.5	7/26/13 07:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-539B-SA8-SB-0.0-0.5	7/26/13 07:55	SO	None	1 - 4 oz glass	10 day													X																			
SL-539B-SA8-SB-2.0-3.0	7/26/13 08:15	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X											
SL-539A-SA8-SB-0.0-0.5	7/26/13 08:25	SO	None	1 - SS-Sleeve	10 day										X																						
SL-539C-SA8-SB-0.0-0.5	7/26/13 08:30	SO	None	1 - SS-Sleeve	10 day										X																						
SL-539D-SA8-SB-0.0-0.5	7/26/13 08:40	SO	None	1 - SS-Sleeve	10 day										X																						
SL-540-SA8-SB-0.0-0.5	7/26/13 10:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-540-SA8-SB-0.0-0.5	7/26/13 10:05	SO	None	1 - 4 oz glass	10 day													X																			
SL-540-SA8-SB-4.0-5.0	7/26/13 10:15	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X											
SL-522-SA8-SB-0.0-0.5	7/26/13 12:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-522-SA8-SB-0.0-0.5	7/26/13 12:50	SO	None	1 - 4 oz glass	10 day													X																			
SL-522-SA8-SB-4.0-5.0	7/26/13 13:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X											

Special Instructions:

Sampler: T Bennett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible] Mysel	07/26/2013	1600									
									K Conn	7/27/13	0935

COC Rev 2

COC: 20130726-01, Page 1 of 1

acct#13013 Cp# 1407316 Sample# 7142200-09

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/26/2013

CarrierName: FedEx

AirbillNo:

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20130726-02

Cooler #: 1

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-539B-SA8-SB-2.0-3.0	7/26/13 08:15	SO	None	2 - Encore	10 day																			X												
SL-540-SA8-SB-4.0-5.0	7/26/13 10:15	SO	None	2 - Encore	10 day																			X												
TB-072613	7/26/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-522-SA8-SB-4.0-5.0	7/26/13 13:20	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: J Bennett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stacy Myers	07/29/2013	1600									
									Ron	7/27/13	0935

COC Rev 2

COC: 20130726-02, Page 1 of 1

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C# 1407316

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 7/27/13

Time of Receipt: 0935

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	2.1	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: KAM 2241 **Date/Time:** 7/27/13 1005

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH078

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 11, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/30/2013
Group Number: 1407679
SDG: PH078
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB1-072913 Water	7143812
SL-529-SA8-SB-0.0-0.5 Soil	7143813
SL-529-SA8-SB-4.0-5.0 Soil	7143814
SL-526-SA8-SB-0.0-0.5 Soil	7143815
SL-526-SA8-SB-4.0-5.0 Soil	7143816

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB1-072913 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7143812
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:00

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

729TB SDG#: PH078-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13213A20A	08/01/2013 19:55	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13213A20A	08/01/2013 19:55	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143813
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:10 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH078-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	0.38	J	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.9		1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	J	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	4.2		1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.4	J	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.2	J	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	9.1		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	4.7		1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.3	J	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	0.83	J	1.8	0.72	1
12969	Naphthalene	91-20-3	1.4	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	3.7		1.8	0.72	1
12969	Pyrene	129-00-0	4.3		1.8	0.72	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	7.3	J	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	2.5	J	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	19		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	37		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143813
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:10 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH078-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,900		41.4	7.47	1
06944	Antimony	7440-36-0	4.14	U	4.14	0.767	1
06935	Arsenic	7440-38-2	4.47		4.14	0.725	1
06946	Barium	7440-39-3	110		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.872	J	1.04	0.0694	1
07914	Boron	7440-42-8	8.74	J	10.4	0.870	1
06949	Cadmium	7440-43-9	0.194	J	1.04	0.0787	1
01650	Calcium	7440-70-2	17,700		20.7	3.46	1
06951	Chromium	7440-47-3	40.3		3.11	0.166	1
06952	Cobalt	7440-48-4	9.51		1.04	0.103	1
06953	Copper	7440-50-8	25.1		2.07	0.300	1
01654	Iron	7439-89-6	28,000		82.9	7.50	2
06955	Lead	7439-92-1	11.4		3.11	0.518	1
01656	Lithium	7439-93-2	23.1		4.1	0.35	1
01657	Magnesium	7439-95-4	7,770		10.4	1.73	1
06958	Manganese	7439-96-5	472		1.04	0.0860	1
06960	Molybdenum	7439-98-7	0.332	J	2.07	0.176	1
06961	Nickel	7440-02-0	21.0		2.07	0.135	1
10145	Phosphorus	7723-14-0	670		10.4	2.99	1
01662	Potassium	7440-09-7	6,490		104	8.64	1
01667	Sodium	7440-23-5	94.0	J	104	17.3	1
06969	Tin	7440-31-5	2.82	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,340		1.04	0.176	1
06971	Vanadium	7440-62-2	67.2		1.04	0.135	1
06972	Zinc	7440-66-6	79.2		4.14	0.207	1
10146	Zirconium	7440-67-7	3.12	J	5.18	0.870	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.291	J	0.414	0.104	2
06142	Silver	7440-22-4	0.0472	J	0.207	0.0269	2
06144	Strontium	7440-24-6	43.0		0.414	0.0705	2
06145	Thallium	7440-28-0	0.333		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0493		0.0174	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.02		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143813
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:10 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH078-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0206	1
11031	12378-PeCDD	40321-76-4	0.0707	JQ	5.23	0.0277	1
11031	123478-HxCDD	39227-28-6	0.0813	JB	5.23	0.0250	1
11031	123678-HxCDD	57653-85-7	0.230	JB	5.23	0.0266	1
11031	123789-HxCDD	19408-74-3	0.280	JB	5.23	0.0263	1
11031	1234678-HpCDD	35822-46-9	3.21	JB	5.23	0.0318	1
11031	OCDD	3268-87-9	28.0	B	10.5	0.0211	1
11031	2378-TCDF	51207-31-9	0.108	J	1.05	0.0356	1
11031	12378-PeCDF	57117-41-6	0.610	JB	5.23	0.0203	1
11031	23478-PeCDF	57117-31-4	0.0763	JBQ	5.23	0.0192	1
11031	123478-HxCDF	70648-26-9	0.112	JBQ	5.23	0.0156	1
11031	123678-HxCDF	57117-44-9	0.107	JB	5.23	0.0156	1
11031	123789-HxCDF	72918-21-9	0.166	JB	5.23	0.0178	1
11031	234678-HxCDF	60851-34-5	0.0848	JBQ	5.23	0.0148	1
11031	1234678-HpCDF	67562-39-4	0.841	JB	5.23	0.0111	1
11031	1234789-HpCDF	55673-89-7	0.0881	JB	5.23	0.0152	1
11031	OCDF	39001-02-0	2.41	JB	10.5	0.0207	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.166				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143813
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:10 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH078-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143813
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:10 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH078-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 05:21	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 01:26	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 15:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/08/2013 21:36	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 10:15	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 10:18	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 00:34	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 20:51	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 20:51	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 20:51	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143813
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:10 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52900 SDG#: PH078-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 20:51	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132110638001	08/01/2013 04:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132110638001	07/31/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13211039402A	07/30/2013 19:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401B	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143814
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52940 SDG#: PH078-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	25.88
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.8	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.8	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.5	1
10592	PCB-1262	37324-23-5	19	U	19	3.8	1
10592	PCB-1268	11100-14-4	19	U	19	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143814
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52940 SDG#: PH078-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	3.8	J	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	8.5	J	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,300		45.9	8.28	1
06944	Antimony	7440-36-0	4.59	U	4.59	0.850	1
06935	Arsenic	7440-38-2	4.23	J	4.59	0.804	1
06946	Barium	7440-39-3	131		1.15	0.0379	1
06947	Beryllium	7440-41-7	1.00	J	1.15	0.0770	1
07914	Boron	7440-42-8	4.91	J	11.5	0.965	1
06949	Cadmium	7440-43-9	0.144	J	1.15	0.0873	1
01650	Calcium	7440-70-2	7,280		23.0	3.84	1
06951	Chromium	7440-47-3	38.6		3.45	0.184	1
06952	Cobalt	7440-48-4	9.91		1.15	0.114	1
06953	Copper	7440-50-8	23.0		2.30	0.333	1
01654	Iron	7439-89-6	28,100		91.9	8.32	2
06955	Lead	7439-92-1	10.3		3.45	0.574	1
01656	Lithium	7439-93-2	24.2		4.6	0.39	1
01657	Magnesium	7439-95-4	7,310		11.5	1.92	1
06958	Manganese	7439-96-5	477		1.15	0.0953	1
06960	Molybdenum	7439-98-7	2.30	U	2.30	0.195	1
06961	Nickel	7440-02-0	20.5		2.30	0.149	1
10145	Phosphorus	7723-14-0	342		11.5	3.32	1
01662	Potassium	7440-09-7	4,580		115	9.58	1
01667	Sodium	7440-23-5	107	J	115	19.2	1
06969	Tin	7440-31-5	2.93	J	11.5	0.253	1
06970	Titanium	7440-32-6	1,110		1.15	0.195	1
06971	Vanadium	7440-62-2	64.3		1.15	0.149	1
06972	Zinc	7440-66-6	72.0		4.59	0.230	1
10146	Zirconium	7440-67-7	3.12	J	5.74	0.965	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.185	J	0.459	0.115	2
06142	Silver	7440-22-4	0.0430	J	0.230	0.0299	2
06144	Strontium	7440-24-6	32.7		0.459	0.0781	2
06145	Thallium	7440-28-0	0.339		0.230	0.0345	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0188	U	0.0188	0.0113	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.6 C.	n.a.	7.89		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.8		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143814
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52940 SDG#: PH078-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143814
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52940 SDG#: PH078-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0245 JBQ	1.13	0.0215	1
11031	12378-PeCDD	40321-76-4	0.0444 JQ	5.66	0.0274	1
11031	123478-HxCDD	39227-28-6	0.0413 JBQ	5.66	0.0181	1
11031	123678-HxCDD	57653-85-7	0.0836 JBQ	5.66	0.0195	1
11031	123789-HxCDD	19408-74-3	0.276 JB	5.66	0.0191	1
11031	1234678-HpCDD	35822-46-9	0.303 JB	5.66	0.0188	1
11031	OCDD	3268-87-9	1.04 JB	11.3	0.0212	1
11031	2378-TCDF	51207-31-9	1.13 U	1.13	0.0174	1
11031	12378-PeCDF	57117-41-6	0.0582 JBQ	5.66	0.0140	1
11031	23478-PeCDF	57117-31-4	5.66 U	5.66	0.0123	1
11031	123478-HxCDF	70648-26-9	0.0268 JBQ	5.66	0.00882	1
11031	123678-HxCDF	57117-44-9	0.0376 JBQ	5.66	0.00882	1
11031	123789-HxCDF	72918-21-9	0.283 JBQ	5.66	0.0103	1
11031	234678-HxCDF	60851-34-5	0.0317 JBQ	5.66	0.00858	1
11031	1234678-HpCDF	67562-39-4	0.0625 JB	5.66	0.00766	1
11031	1234789-HpCDF	55673-89-7	0.0373 JBQ	5.66	0.0103	1
11031	OCDF	39001-02-0	0.121 JBQ	11.3	0.0261	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0316			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143814
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52940 SDG#: PH078-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143814
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52940 SDG#: PH078-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 05:52	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/31/2013 12:01	Laura M Krieger	25.88
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321131875	07/30/2013 16:52	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321131875	07/30/2013 16:52	Lisa J Cooke	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 01:45	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 15:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/08/2013 22:33	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 10:22	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 10:26	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-529-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143814
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 12:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52940 SDG#: PH078-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 00:38	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 20:53	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 20:53	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 20:53	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 20:53	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132110638001	08/01/2013 04:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132110638001	07/31/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13211039402A	07/30/2013 19:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401B	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143815
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:20 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH078-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	0.55	J	1.8	0.36	1
12969	Anthracene	120-12-7	2.2		1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	2.5		1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.6	J	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	8.5		1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.3	J	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	2.4		1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	15		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.2	J	20	6.6	1
12969	Fluoranthene	206-44-0	13		1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.4	J	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.6	J	1.8	0.73	1
12969	Naphthalene	91-20-3	2.2		1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	5.9		1.8	0.73	1
12969	Pyrene	129-00-0	9.4		1.8	0.73	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	15	J	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	2.3	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	16		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	34		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143815
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:20 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH078-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,100		42.9	7.73	1
06944	Antimony	7440-36-0	4.29	U	4.29	0.794	1
06935	Arsenic	7440-38-2	4.25	J	4.29	0.751	1
06946	Barium	7440-39-3	115		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.928	J	1.07	0.0719	1
07914	Boron	7440-42-8	7.84	J	10.7	0.901	1
06949	Cadmium	7440-43-9	0.231	J	1.07	0.0815	1
01650	Calcium	7440-70-2	7,400		21.5	3.58	1
06951	Chromium	7440-47-3	39.1		3.22	0.172	1
06952	Cobalt	7440-48-4	9.74		1.07	0.106	1
06953	Copper	7440-50-8	25.7		2.15	0.311	1
01654	Iron	7439-89-6	29,000		85.8	7.77	2
06955	Lead	7439-92-1	14.0		3.22	0.536	1
01656	Lithium	7439-93-2	22.7		4.3	0.36	1
01657	Magnesium	7439-95-4	7,600		10.7	1.79	1
06958	Manganese	7439-96-5	506		1.07	0.0890	1
06960	Molybdenum	7439-98-7	0.225	J	2.15	0.182	1
06961	Nickel	7440-02-0	20.6		2.15	0.139	1
10145	Phosphorus	7723-14-0	512		10.7	3.10	1
01662	Potassium	7440-09-7	6,630		107	8.95	1
01667	Sodium	7440-23-5	94.9	J	107	17.9	1
06969	Tin	7440-31-5	2.88	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,390		1.07	0.182	1
06971	Vanadium	7440-62-2	67.9		1.07	0.139	1
06972	Zinc	7440-66-6	83.1		4.29	0.215	1
10146	Zirconium	7440-67-7	3.73	J	5.36	0.901	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.312	J	0.429	0.107	2
06142	Silver	7440-22-4	0.0384	J	0.215	0.0279	2
06144	Strontium	7440-24-6	28.5		0.429	0.0729	2
06145	Thallium	7440-28-0	0.375		0.215	0.0322	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0502		0.0174	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.26		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143815
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:20 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH078-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0188	1
11031	12378-PeCDD	40321-76-4	0.194	JQ	5.31	0.0329	1
11031	123478-HxCDD	39227-28-6	0.382	JBQ	5.31	0.0402	1
11031	123678-HxCDD	57653-85-7	1.05	JBQ	5.31	0.0425	1
11031	123789-HxCDD	19408-74-3	0.913	JB	5.31	0.0418	1
11031	1234678-HpCDD	35822-46-9	30.8	B	5.31	0.0469	1
11031	OCDD	3268-87-9	265	B	10.6	0.0324	1
11031	2378-TCDF	51207-31-9	0.299	JQ	1.06	0.0407	1
11031	12378-PeCDF	57117-41-6	0.893	JB	5.31	0.0230	1
11031	23478-PeCDF	57117-31-4	0.351	JBQ	5.31	0.0216	1
11031	123478-HxCDF	70648-26-9	0.319	JB	5.31	0.0198	1
11031	123678-HxCDF	57117-44-9	0.283	JB	5.31	0.0202	1
11031	123789-HxCDF	72918-21-9	0.462	JB	5.31	0.0240	1
11031	234678-HxCDF	60851-34-5	0.280	JB	5.31	0.0196	1
11031	1234678-HpCDF	67562-39-4	3.44	JB	5.31	0.0178	1
11031	1234789-HpCDF	55673-89-7	0.242	JB	5.31	0.0239	1
11031	OCDF	39001-02-0	7.79	JB	10.6	0.0225	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.679				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	86	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	88	32 - 141
13C12-123678-HxCDD	92	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	90	26 - 152
13C12-123678-HxCDF	93	26 - 123
13C12-234678-HxCDF	91	28 - 136
13C12-123789-HxCDF	92	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	87	26 - 138
13C12-OCDF	80	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143815
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:20 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH078-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143815
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:20 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH078-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 06:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 02:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 21:05	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/08/2013 23:29	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 10:30	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 10:34	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 00:42	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 20:55	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 20:55	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 20:55	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143815
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:20 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52600 SDG#: PH078-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 20:55	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132110638001	08/01/2013 04:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132110638001	07/31/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13211039402A	07/30/2013 19:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401B	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143816
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52640 SDG#: PH078-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.78	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.78	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	0.46	J	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.78	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.78	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.78	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.78	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.04
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143816
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52640 SDG#: PH078-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	3.6	J	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	6.8	J	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,400		45.0	8.11	1
06944	Antimony	7440-36-0	4.50	U	4.50	0.832	1
06935	Arsenic	7440-38-2	5.10		4.50	0.787	1
06946	Barium	7440-39-3	137		1.12	0.0371	1
06947	Beryllium	7440-41-7	0.981	J	1.12	0.0753	1
07914	Boron	7440-42-8	6.24	J	11.2	0.945	1
06949	Cadmium	7440-43-9	1.12	U	1.12	0.0855	1
01650	Calcium	7440-70-2	20,300		22.5	3.76	1
06951	Chromium	7440-47-3	40.5		3.37	0.180	1
06952	Cobalt	7440-48-4	12.2		1.12	0.111	1
06953	Copper	7440-50-8	22.1		2.25	0.326	1
01654	Iron	7439-89-6	35,100		90.0	8.14	2
06955	Lead	7439-92-1	11.2		3.37	0.562	1
01656	Lithium	7439-93-2	25.4		4.5	0.38	1
01657	Magnesium	7439-95-4	7,470		11.2	1.88	1
06958	Manganese	7439-96-5	629		1.12	0.0933	1
06960	Molybdenum	7439-98-7	2.25	U	2.25	0.191	1
06961	Nickel	7440-02-0	23.5		2.25	0.146	1
10145	Phosphorus	7723-14-0	302		11.2	3.25	1
01662	Potassium	7440-09-7	3,480		112	9.38	1
01667	Sodium	7440-23-5	119		112	18.8	1
06969	Tin	7440-31-5	3.03	J	11.2	0.247	1
06970	Titanium	7440-32-6	1,310		1.12	0.191	1
06971	Vanadium	7440-62-2	74.1		1.12	0.146	1
06972	Zinc	7440-66-6	67.4		4.50	0.225	1
10146	Zirconium	7440-67-7	3.38	J	5.62	0.945	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.166	J	0.450	0.112	2
06142	Silver	7440-22-4	0.0405	J	0.225	0.0292	2
06144	Strontium	7440-24-6	44.1		0.450	0.0765	2
06145	Thallium	7440-28-0	0.346		0.225	0.0337	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0194	U	0.0194	0.0116	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	7.88		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143816
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52640 SDG#: PH078-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143816
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52640 SDG#: PH078-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.12	U	1.12	0.0211	1
11031	12378-PeCDD	40321-76-4	0.0338	JQ	5.60	0.0212	1
11031	123478-HxCDD	39227-28-6	0.0298	JB	5.60	0.0189	1
11031	123678-HxCDD	57653-85-7	0.0446	JBQ	5.60	0.0206	1
11031	123789-HxCDD	19408-74-3	0.0943	JBQ	5.60	0.0204	1
11031	1234678-HpCDD	35822-46-9	0.693	JB	5.60	0.0251	1
11031	OCDD	3268-87-9	5.12	JB	11.2	0.0174	1
11031	2378-TCDF	51207-31-9	1.12	U	1.12	0.0170	1
11031	12378-PeCDF	57117-41-6	0.0318	JBQ	5.60	0.0140	1
11031	23478-PeCDF	57117-31-4	0.0560	JBQ	5.60	0.0132	1
11031	123478-HxCDF	70648-26-9	0.0300	JBQ	5.60	0.00865	1
11031	123678-HxCDF	57117-44-9	0.0310	JB	5.60	0.00865	1
11031	123789-HxCDF	72918-21-9	0.0559	JBQ	5.60	0.0102	1
11031	234678-HxCDF	60851-34-5	0.0171	JB	5.60	0.00819	1
11031	1234678-HpCDF	67562-39-4	0.115	JB	5.60	0.00854	1
11031	1234789-HpCDF	55673-89-7	0.0517	JBQ	5.60	0.0120	1
11031	OCDF	39001-02-0	0.271	JBQ	11.2	0.0209	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0174				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143816
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52640 SDG#: PH078-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143816
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52640 SDG#: PH078-05*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 06:57	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/31/2013 12:39	Laura M Krieger	24.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321131875	07/30/2013 16:53	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321131875	07/30/2013 16:53	Lisa J Cooke	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 02:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 16:15	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/09/2013 00:26	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 10:38	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 10:42	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-526-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7143816
LL Group # 1407679
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 13:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/11/2013 18:54

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

52640 SDG#: PH078-05*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 00:46	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 20:58	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 20:58	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 20:58	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 20:58	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132110638001	08/01/2013 04:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132110638001	07/31/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13211039402A	07/30/2013 19:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401B	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407679
Reported: 08/11/13 at 06:54 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13214SLC026	Sample number(s): 7143813-7143816									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	108		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	102		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	101		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	106		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	107		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	115		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	102		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	109		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	123		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	128		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	106		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	112		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	134*		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	114		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	120		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	109		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	110		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	112		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	109		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	102		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	85		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	124		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	104		71-120		
Batch number: 13210B16A	Sample number(s): 7143814,7143816									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	77		67-119		
Batch number: 13213A20A	Sample number(s): 7143812									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	105	100	75-135	4	30
Batch number: 132140017A	Sample number(s): 7143813-7143816									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	76	79	36-106	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	95		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407679
Reported: 08/11/13 at 06:54 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	97		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132140001A	Sample number(s): 7143813-7143816									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	99		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	102		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	105		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	104		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	86		49-107		
Batch number: 132110638001	Sample number(s): 7143813-7143816									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	115		85-120		
Batch number: 132170637001	Sample number(s): 7143813-7143816									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	101		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	101		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	101		80-120		
Calcium	6.93	J	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	103		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	107		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	101		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	103		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	100		80-120		
Tin	1.37	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	101		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132170637001A	Sample number(s): 7143813-7143816									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	107		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	114		80-120		
Batch number: 132170637001B	Sample number(s): 7143813-7143816									
Selenium	0.400	U	0.400	0.100	mg/kg	104		80-120		
Batch number: 13211039402A	Sample number(s): 7143813-7143816									
15a pH by 9045D						100		95-105		
Batch number: 13211162401B	Sample number(s): 7143813-7143816									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407679
Reported: 08/11/13 at 06:54 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13218001	Sample number(s): 7143813-7143816								
2378-TCDD	0.0240 J	1.00	0.0223	ng/kg	91		67-158		
12378-PeCDD	5.00 U	5.00	0.0227	ng/kg	96		70-142		
123478-HxCDD	0.0349 J	5.00	0.0148	ng/kg	99		70-164		
123678-HxCDD	0.0314 J	5.00	0.0166	ng/kg	98		76-134		
123789-HxCDD	0.0571 J	5.00	0.0161	ng/kg	97		64-162		
1234678-HpCDD	0.0597 J	5.00	0.0164	ng/kg	95		70-140		
OCDD	0.310 J	10.0	0.0170	ng/kg	96		78-144		
2378-TCDF	1.00 U	1.00	0.0188	ng/kg	95		75-158		
12378-PeCDF	0.0576 J	5.00	0.0141	ng/kg	98		80-134		
23478-PeCDF	0.0456 J	5.00	0.0132	ng/kg	95		68-160		
123478-HxCDF	0.0428 J	5.00	0.00810	ng/kg	102		72-134		
123678-HxCDF	0.00975 J	5.00	0.00770	ng/kg	97		84-130		
123789-HxCDF	0.0419 J	5.00	0.00940	ng/kg	99		78-130		
234678-HxCDF	0.0472 J	5.00	0.00760	ng/kg	97		70-156		
1234678-HpCDF	0.0459 J	5.00	0.00620	ng/kg	96		82-122		
1234789-HpCDF	0.0308 J	5.00	0.00880	ng/kg	98		78-138		
OCDF	0.129 J	10.0	0.0224	ng/kg	96		63-170		
TEQ WHO 2005 - EDLx0.0	0.0247			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13214SLC026	Sample number(s): 7143813-7143816 UNSPK: P143796								
Acenaphthene	113	114	48-127	1	30				
Acenaphthylene	100	102	49-121	2	30				
Anthracene	101	99	52-126	2	30				
Benzo(a)anthracene	104	104	32-135	0	30				
Benzo(a)pyrene	102	103	36-138	1	30				
Benzo(b)fluoranthene	108	108	26-142	0	30				
Benzo(e)pyrene	96	96	70-130	1	30				
Benzo(g,h,i)perylene	105	105	33-141	0	30				
Benzo(k)fluoranthene	106	105	47-129	1	30				
Butylbenzylphthalate	125	127	59-153	2	30				
Di-n-butylphthalate	131	129	62-154	1	30				
Chrysene	103	104	29-148	1	30				
Dibenz(a,h)anthracene	110	110	34-125	1	30				
Diethylphthalate	133*	134*	76-127	0	30				
Dimethylphthalate	110	110	62-136	0	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407679
Reported: 08/11/13 at 06:54 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Bis(2-Ethylhexyl)phthalate	125	124	39-167	0	30				
Fluoranthene	107	104	47-135	3	30				
Fluorene	101	104	50-129	3	30				
Indeno(1,2,3-cd)pyrene	109	110	17-136	1	30				
1-Methylnaphthalene	108	107	50-131	1	30				
2-Methylnaphthalene	106	104	28-144	2	30				
Naphthalene	102	102	31-148	0	30				
N-Nitrosodimethylamine	83	84	48-113	2	30				
Di-n-octylphthalate	121	124	52-162	2	30				
Phenanthrene	102	99	29-142	3	30				
Pyrene	102	101	26-143	1	30				
Batch number: 13210B16A	Sample number(s): 7143814,7143816 UNSPK: P141113								
11a TPH by EPA 8015B GRO	75	75	39-118	15	30				
Batch number: 132140017A	Sample number(s): 7143813-7143816 UNSPK: P143795								
PCB-1016	86	88	16-146	3	50				
PCB-1260	88	91	40-134	4	50				
Batch number: 132140001A	Sample number(s): 7143813-7143816 UNSPK: P145272								
EFH (C12-C14)	100	96	49-123	5	20				
EFH (C15-C20)	110	108	49-123	2	20				
EFH (C21-C30)	91	106	49-123	9	20				
EFH (C30-C40)	151*	165*	49-123	4	20				
EFH (C8-C11)	96	97	49-123	1	20				
Batch number: 132110638001	Sample number(s): 7143813-7143816 UNSPK: P143795 BKG: P143795								
3a Mercury 7471A	126	121	65-135	3	20	0.0155 U	0.0165 U	0 (1)	20
Batch number: 132170637001	Sample number(s): 7143813-7143816 UNSPK: P143796 BKG: P143796								
Aluminum	1505 (2)	2798 (2)	75-125	12	20	17,300	16,100	7	20
Antimony	54*	53*	75-125	3	20	3.85 U	3.85 U	0 (1)	20
Arsenic	95	94	75-125	1	20	4.58	4.24	8 (1)	20
Barium	96	102	75-125	4	20	84.5	84.3	0	20
Beryllium	102	104	75-125	2	20	0.696 J	0.661 J	5 (1)	20
Boron	100	100	75-125	0	20	9.62 U	9.62 U	0 (1)	20
Cadmium	98	96	75-125	2	20	0.962 U	0.962 U	0 (1)	20
Calcium	91 (2)	159 (2)	75-125	10	20	2,170	2,070	5	20
Chromium	98	110	75-125	6	20	21.9	21.2	4	20
Cobalt	94	97	75-125	3	20	5.71	8.36	38*	20
Copper	101	111	75-125	6	20	13.7	12.8	7	20
Iron	-2073 (2)	871 (2)	75-125	13	20	22,200	20,500	8	20
Lead	93	104	75-125	8	20	5.87	6.14	5 (1)	20
Lithium	99	103	75-125	3	20	28.0	26.1	7	20
Magnesium	-105 (2)	189 (2)	75-125	12	20	4,580	4,280	7	20
Manganese	10 (2)	173 (2)	75-125	21*	20	324	413	24*	20
Molybdenum	96	96	75-125	0	20	0.867 J	0.418 J	70* (1)	20
Nickel	97	100	75-125	2	20	12.7	12.9	2	20
Phosphorus	73*	103	75-125	9	20	247	219	12	20

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407679
Reported: 08/11/13 at 06:54 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Potassium	84	117	75-125	10	20	2,250	1,970	13	20
Sodium	97	99	75-125	2	20	129	122	6 (1)	20
Tin	89	89	75-125	1	20	2.66 J	2.63 J	1 (1)	20
Titanium	133 (2)	268 (2)	75-125	10	20	1,080	949	13	20
Vanadium	102	112	75-125	5	20	39.4	36.3	8	20
Zinc	89	100	75-125	6	20	48.7	44.6	9	20
Zirconium	99	100	75-125	1	20	4.81 U	1.37 J	200* (1)	20
Batch number: 132170637001A	Sample number(s): 7143813-7143816 UNSPK: P143796 BKG: P143796								
Silver	101	102	75-125	2	20	0.0417 J	0.0396 J	5 (1)	20
Strontium	92	97	75-125	1	20	17.8	16.5	8	20
Thallium	95	96	75-125	0	20	0.253	0.263	4 (1)	20
Batch number: 132170637001B	Sample number(s): 7143813-7143816 UNSPK: P143796 BKG: P143796								
Selenium	106	99	75-125	6	20	0.128 J	0.131 J	2 (1)	20
Batch number: 13211039402A	Sample number(s): 7143813-7143816 BKG: P143795								
15a pH by 9045D						6.43	6.40	0	3
Batch number: 13211162401B	Sample number(s): 7143813-7143816 BKG: 7143814								
14a Moisture Content by 160.3						13.8	13.2	4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13214SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7143813	86	88	101
7143814	93	96	106
7143815	86	89	106
7143816	88	96	108
Blank	94	97	109
LCS	94	101	111
MS	94	97	107
MSD	92	98	109
Limits:	54-129	61-134	55-129

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13210B16A

	Trifluorotoluene-F
7143814	65
7143816	71

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407679
Reported: 08/11/13 at 06:54 PM

Surrogate Quality Control

Blank	78
LCS	78
MS	69
MSD	68
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13213A20A

	Trifluorotoluene-F
7143812	86
Blank	88
LCS	117
LCSD	118
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132140017A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7143813	96	89
7143814	101	97
7143815	93	93
7143816	98	95
Blank	100	101
LCS	101	106
LCSD	121*	119
MS	92	88
MSD	93	92
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132140001A

	Chlorobenzene	Orthoterphenyl
7143813	92	97
7143814	91	77
7143815	98	102
7143816	97	91
Blank	91	96
LCS	99	106
MS	97	99
MSD	92	98
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13218001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7143813	72	75	78	82	80	81
7143814	69	72	76	79	78	78
7143815	86	85	90	93	91	92

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407679
Reported: 08/11/13 at 06:54 PM

Surrogate Quality Control

7143816	70	72	76	80	78	78
Blank	74	75	83	87	83	85
OPR	53	29	25	26	34	51
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7143813	92	78	74	77	77	81
7143814	82	72	67	71	73	80
7143815	98	87	80	87	88	92
7143816	84	73	72	73	74	78
Blank	94	79	80	76	82	84
OPR	29	29	30	29	26	26
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7143813	77	77	76	66	74	
7143814	75	73	70	62	69	
7143815	88	85	82	79	85	
7143816	75	73	73	64	71	
Blank	82	82	84	67	75	
OPR	37	30	37	42	33	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1407679 7143812-16

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/29/2013
CarrierName: FedEx
AirbillNo: 796342615190

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130729-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB1-072913	7/29/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-529-SA8-SB-0.0-0.5	7/29/13 12:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-529-SA8-SB-0.0-0.5	7/29/13 12:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-529-SA8-SB-4.0-5.0	7/29/13 12:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-529-SA8-SB-4.0-5.0	7/29/13 12:40	SO	None	2 - Encore	10 day																			X												
SL-526-SA8-SB-0.0-0.5	7/29/13 13:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-526-SA8-SB-0.0-0.5	7/29/13 13:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-526-SA8-SB-4.0-5.0	7/29/13 13:45	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-526-SA8-SB-4.0-5.0	7/29/13 13:45	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: JBennett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Joe Myers	07/29/2013	1600									
									Pat Gu	7/30/13	0925

COC Rev 2

COC 20130729-02, Page 1 of 1

1 of 1

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Environmental Sample Administration Receipt Documentation Log

1407679

Client/Project: CDM Smith

Date of Receipt: 7/30/13

Time of Receipt: 0925

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.3	TB	WI	y	B	
2	↓	0.8	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 7/30/13 1010

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH080

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 13, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/31/2013
Group Number: 1408036
SDG: PH080
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-073013 Water	7145266
SL-560-SA8-SB-0.0-0.5 Soil	7145267
SL-560-SA8-SB-4.0-5.0 Soil	7145268
SL-549-SA8-SB-0.0-0.5 Soil	7145269
SL-549-SA8-SB-4.0-5.0 Soil	7145270
SL-612-SA8-SB-0.0-0.5 Soil	7145271
SL-612-SA8-SB-4.0-5.0 Soil	7145272
SL-596-SA8-SB-0.0-0.5 Soil	7145273
SL-589-SA8-SB-0.0-0.5 Soil	7145274
SL-589-SA8-SB-2.5-3.5 Soil	7145275

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB-073013 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7145266
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 08:00

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB730 SDG#: PH080-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13213A20A	08/01/2013 20:16	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13213A20A	08/01/2013 20:16	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145267
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 07:50 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56000 SDG#: PH080-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	0.56	J	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	3.1		1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	4.3		1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	11		1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	6.9	J	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	3.4		1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	3.7		1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	9.0		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.3	J	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	8.0		1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.3		1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	0.80	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	3.3		1.8	0.71	1
12969	Pyrene	129-00-0	6.4		1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	14	J	18	4.6	1
10592	PCB-1260	11096-82-5	9.4	J	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	27	U	27	11	5
12952	EFH (C15-C20)	n.a.	27	U	27	11	5
12952	EFH (C21-C30)	n.a.	47		27	11	5
12952	EFH (C30-C40)	n.a.	180		54	21	5
12952	EFH (C8-C11)	n.a.	27	U	27	11	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145267
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 07:50 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56000 SDG#: PH080-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,400		42.4	7.64	1
06944	Antimony	7440-36-0	4.24	U	4.24	0.784	1
06935	Arsenic	7440-38-2	3.16	J	4.24	0.742	1
06946	Barium	7440-39-3	130		1.06	0.0350	1
06947	Beryllium	7440-41-7	0.866	J	1.06	0.0710	1
07914	Boron	7440-42-8	7.31	J	10.6	0.890	1
06949	Cadmium	7440-43-9	0.234	J	1.06	0.0806	1
01650	Calcium	7440-70-2	9,240		21.2	3.54	1
06951	Chromium	7440-47-3	33.3		3.18	0.170	1
06952	Cobalt	7440-48-4	8.83		1.06	0.105	1
06953	Copper	7440-50-8	24.6		2.12	0.307	1
01654	Iron	7439-89-6	27,200		84.8	7.67	2
06955	Lead	7439-92-1	14.3		3.18	0.530	1
01656	Lithium	7439-93-2	21.4		4.2	0.36	1
01657	Magnesium	7439-95-4	7,790		10.6	1.77	1
06958	Manganese	7439-96-5	486		1.06	0.0880	1
06960	Molybdenum	7439-98-7	0.726	J	2.12	0.180	1
06961	Nickel	7440-02-0	19.3		2.12	0.138	1
10145	Phosphorus	7723-14-0	403		10.6	3.06	1
01662	Potassium	7440-09-7	5,270		106	8.84	1
01667	Sodium	7440-23-5	125		106	17.7	1
06969	Tin	7440-31-5	2.98	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,250		1.06	0.180	1
06971	Vanadium	7440-62-2	59.5		1.06	0.138	1
06972	Zinc	7440-66-6	93.8		4.24	0.212	1
10146	Zirconium	7440-67-7	4.97	J	5.30	0.890	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.385	J	0.424	0.106	2
06142	Silver	7440-22-4	0.0541	J	0.212	0.0276	2
06144	Strontium	7440-24-6	34.1		0.424	0.0721	2
06145	Thallium	7440-28-0	0.335		0.212	0.0318	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.379		0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.45		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145267
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 07:50 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56000 SDG#: PH080-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0384	JQ	1.06	0.0182	1
11031	12378-PeCDD	40321-76-4	0.508	JBQ	5.28	0.0337	1
11031	123478-HxCDD	39227-28-6	0.800	JB	5.28	0.0375	1
11031	123678-HxCDD	57653-85-7	2.94	JB	5.28	0.0398	1
11031	123789-HxCDD	19408-74-3	1.86	JB	5.28	0.0389	1
11031	1234678-HpCDD	35822-46-9	98.1	B	5.28	0.0666	1
11031	OCDD	3268-87-9	1,140	B	10.6	0.0550	1
11031	2378-TCDF	51207-31-9	0.321	JBQ	1.06	0.0459	1
11031	12378-PeCDF	57117-41-6	1.11	JB	5.28	0.0270	1
11031	23478-PeCDF	57117-31-4	0.446	JQ	5.28	0.0256	1
11031	123478-HxCDF	70648-26-9	0.505	JBQ	5.28	0.0228	1
11031	123678-HxCDF	57117-44-9	0.514	JB	5.28	0.0239	1
11031	123789-HxCDF	72918-21-9	0.717	JB	5.28	0.0255	1
11031	234678-HxCDF	60851-34-5	0.581	JB	5.28	0.0233	1
11031	1234678-HpCDF	67562-39-4	5.78	B	5.28	0.0180	1
11031	1234789-HpCDF	55673-89-7	0.384	JBQ	5.28	0.0198	1
11031	OCDF	39001-02-0	6.57	JB	10.6	0.0210	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.16				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145267
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 07:50 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56000 SDG#: PH080-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145267
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 07:50 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56000 SDG#: PH080-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/10/2013 02:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 02:41	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 22:28	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/10/2013 18:28	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 10:46	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 10:49	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 00:50	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 21:00	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 21:00	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 21:00	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145267
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 07:50 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56000 SDG#: PH080-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 21:00	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638001	08/06/2013 05:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638001	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13212039401A	07/31/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145268
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 08:10 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56040 SDG#: PH080-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	0.80	J	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	J	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.6	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	2.7		1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	0.75	J	1.9	0.74	1
12969	Pyrene	129-00-0	2.1		1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	26.6
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145268
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 08:10 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56040 SDG#: PH080-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,600		44.5	8.03	1
06944	Antimony	7440-36-0	4.45	U	4.45	0.824	1
06935	Arsenic	7440-38-2	4.26	J	4.45	0.780	1
06946	Barium	7440-39-3	162		1.11	0.0367	1
06947	Beryllium	7440-41-7	1.03	J	1.11	0.0746	1
07914	Boron	7440-42-8	6.70	J	11.1	0.935	1
06949	Cadmium	7440-43-9	1.11	U	1.11	0.0846	1
01650	Calcium	7440-70-2	10,100		22.3	3.72	1
06951	Chromium	7440-47-3	39.9		3.34	0.178	1
06952	Cobalt	7440-48-4	11.2		1.11	0.110	1
06953	Copper	7440-50-8	23.9		2.23	0.323	1
01654	Iron	7439-89-6	33,400		89.1	8.06	2
06955	Lead	7439-92-1	11.8		3.34	0.557	1
01656	Lithium	7439-93-2	26.3		4.5	0.38	1
01657	Magnesium	7439-95-4	7,840		11.1	1.86	1
06958	Manganese	7439-96-5	487		1.11	0.0924	1
06960	Molybdenum	7439-98-7	2.23	U	2.23	0.189	1
06961	Nickel	7440-02-0	22.9		2.23	0.145	1
10145	Phosphorus	7723-14-0	278		11.1	3.22	1
01662	Potassium	7440-09-7	3,230		111	9.29	1
01667	Sodium	7440-23-5	296		111	18.6	1
06969	Tin	7440-31-5	3.25	J	11.1	0.245	1
06970	Titanium	7440-32-6	1,460		1.11	0.189	1
06971	Vanadium	7440-62-2	74.7		1.11	0.145	1
06972	Zinc	7440-66-6	73.1		4.45	0.223	1
10146	Zirconium	7440-67-7	3.80	J	5.57	0.935	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.130	J	0.445	0.111	2
06142	Silver	7440-22-4	0.0503	J	0.223	0.0290	2
06144	Strontium	7440-24-6	50.3		0.445	0.0757	2
06145	Thallium	7440-28-0	0.323		0.223	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0188		0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	7.88		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145268
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 08:10 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56040 SDG#: PH080-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145268
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 08:10 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56040 SDG#: PH080-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0192 JQ	1.08	0.0155	1
11031	12378-PeCDD	40321-76-4	0.0445 JBQ	5.40	0.0215	1
11031	123478-HxCDD	39227-28-6	0.100 JB	5.40	0.0243	1
11031	123678-HxCDD	57653-85-7	0.244 JBQ	5.40	0.0257	1
11031	123789-HxCDD	19408-74-3	0.186 JBQ	5.40	0.0252	1
11031	1234678-HpCDD	35822-46-9	3.95 JB	5.40	0.0291	1
11031	OCDD	3268-87-9	32.4 B	10.8	0.0234	1
11031	2378-TCDF	51207-31-9	1.08 U	1.08	0.0171	1
11031	12378-PeCDF	57117-41-6	0.114 JBQ	5.40	0.0117	1
11031	23478-PeCDF	57117-31-4	0.0742 J	5.40	0.0117	1
11031	123478-HxCDF	70648-26-9	0.0760 JBQ	5.40	0.0130	1
11031	123678-HxCDF	57117-44-9	0.0601 JB	5.40	0.0130	1
11031	123789-HxCDF	72918-21-9	0.121 JB	5.40	0.0149	1
11031	234678-HxCDF	60851-34-5	0.0850 JBQ	5.40	0.0127	1
11031	1234678-HpCDF	67562-39-4	0.398 JB	5.40	0.0121	1
11031	1234789-HpCDF	55673-89-7	0.0882 JB	5.40	0.0183	1
11031	OCDF	39001-02-0	0.597 JB	10.8	0.0236	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.105			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	65	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145268
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 08:10 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56040 SDG#: PH080-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145268
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 08:10 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56040 SDG#: PH080-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 07:29	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 12:35	Laura M Krieger	26.6
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321231884	07/31/2013 14:31	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321231884	07/31/2013 14:31	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 02:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/12/2013 22:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	2	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/10/2013 19:24	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 11:00	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 11:04	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145268
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 08:10 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56040 SDG#: PH080-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 00:54	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 21:02	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 21:02	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 21:02	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 21:02	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638001	08/06/2013 05:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638001	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13212039401A	07/31/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145269
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54900 SDG#: PH080-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	2.9		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.6	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	0.95	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.2	J	1.8	0.72	1
12969	Pyrene	129-00-0	1.1	J	1.8	0.72	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	14		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	29		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145269
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54900 SDG#: PH080-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,700		42.5	7.67	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.787	1
06935	Arsenic	7440-38-2	3.65	J	4.25	0.744	1
06946	Barium	7440-39-3	118		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.895	J	1.06	0.0712	1
07914	Boron	7440-42-8	7.02	J	10.6	0.893	1
06949	Cadmium	7440-43-9	0.222	J	1.06	0.0808	1
01650	Calcium	7440-70-2	6,850		21.3	3.55	1
06951	Chromium	7440-47-3	36.6		3.19	0.170	1
06952	Cobalt	7440-48-4	9.52		1.06	0.105	1
06953	Copper	7440-50-8	25.1		2.13	0.308	1
01654	Iron	7439-89-6	28,300		85.1	7.70	2
06955	Lead	7439-92-1	10.9		3.19	0.532	1
01656	Lithium	7439-93-2	22.0		4.3	0.36	1
01657	Magnesium	7439-95-4	7,450		10.6	1.78	1
06958	Manganese	7439-96-5	500		1.06	0.0883	1
06960	Molybdenum	7439-98-7	0.325	J	2.13	0.181	1
06961	Nickel	7440-02-0	20.5		2.13	0.138	1
10145	Phosphorus	7723-14-0	477		10.6	3.07	1
01662	Potassium	7440-09-7	6,610		106	8.87	1
01667	Sodium	7440-23-5	89.1	J	106	17.8	1
06969	Tin	7440-31-5	2.83	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,330		1.06	0.181	1
06971	Vanadium	7440-62-2	64.7		1.06	0.138	1
06972	Zinc	7440-66-6	79.5		4.25	0.213	1
10146	Zirconium	7440-67-7	3.43	J	5.32	0.893	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.338	J	0.425	0.106	2
06142	Silver	7440-22-4	0.0574	J	0.213	0.0276	2
06144	Strontium	7440-24-6	30.0		0.425	0.0723	2
06145	Thallium	7440-28-0	0.355		0.213	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0170	J	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.34		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145269
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54900 SDG#: PH080-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0209	JQ	1.06	0.0194	1
11031	12378-PeCDD	40321-76-4	0.0745	JB	5.31	0.0228	1
11031	123478-HxCDD	39227-28-6	0.0723	JBQ	5.31	0.0220	1
11031	123678-HxCDD	57653-85-7	0.269	JB	5.31	0.0230	1
11031	123789-HxCDD	19408-74-3	0.325	JB	5.31	0.0226	1
11031	1234678-HpCDD	35822-46-9	2.18	JB	5.31	0.0201	1
11031	OCDD	3268-87-9	20.2	B	10.6	0.0180	1
11031	2378-TCDF	51207-31-9	0.105	JB	1.06	0.0316	1
11031	12378-PeCDF	57117-41-6	0.377	JBQ	5.31	0.0168	1
11031	23478-PeCDF	57117-31-4	0.151	JQ	5.31	0.0158	1
11031	123478-HxCDF	70648-26-9	0.112	JBQ	5.31	0.0136	1
11031	123678-HxCDF	57117-44-9	0.101	JBQ	5.31	0.0136	1
11031	123789-HxCDF	72918-21-9	0.519	JB	5.31	0.0154	1
11031	234678-HxCDF	60851-34-5	0.105	JB	5.31	0.0131	1
11031	1234678-HpCDF	67562-39-4	0.475	JB	5.31	0.0123	1
11031	1234789-HpCDF	55673-89-7	0.0595	JBQ	5.31	0.0154	1
11031	OCDF	39001-02-0	1.13	JB	10.6	0.0188	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.240				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	87	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	86	21 - 178
13C12-123478-HxCDF	88	26 - 152
13C12-123678-HxCDF	92	26 - 123
13C12-234678-HxCDF	89	28 - 136
13C12-123789-HxCDF	94	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	85	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145269
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54900 SDG#: PH080-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145269
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54900 SDG#: PH080-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 08:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 03:17	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 21:47	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/10/2013 20:21	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 11:08	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 11:12	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 00:57	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 21:05	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 21:05	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 21:05	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145269
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54900 SDG#: PH080-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 21:05	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638001	08/06/2013 05:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638001	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13212039401A	07/31/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145270
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:30 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54940 SDG#: PH080-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	25.99
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145270
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:30 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54940 SDG#: PH080-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	2.7	J	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	5.1	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,200		44.6	8.04	1
06944	Antimony	7440-36-0	4.46	U	4.46	0.825	1
06935	Arsenic	7440-38-2	3.64	J	4.46	0.780	1
06946	Barium	7440-39-3	148		1.11	0.0368	1
06947	Beryllium	7440-41-7	0.983	J	1.11	0.0747	1
07914	Boron	7440-42-8	5.30	J	11.1	0.937	1
06949	Cadmium	7440-43-9	1.11	U	1.11	0.0847	1
01650	Calcium	7440-70-2	16,800		22.3	3.72	1
06951	Chromium	7440-47-3	37.2		3.34	0.178	1
06952	Cobalt	7440-48-4	10.6		1.11	0.110	1
06953	Copper	7440-50-8	20.6		2.23	0.323	1
01654	Iron	7439-89-6	29,300		89.2	8.07	2
06955	Lead	7439-92-1	11.4		3.34	0.557	1
01656	Lithium	7439-93-2	24.4		4.5	0.38	1
01657	Magnesium	7439-95-4	6,490		11.1	1.86	1
06958	Manganese	7439-96-5	579		1.11	0.0925	1
06960	Molybdenum	7439-98-7	2.23	U	2.23	0.190	1
06961	Nickel	7440-02-0	22.3		2.23	0.145	1
10145	Phosphorus	7723-14-0	288		11.1	3.22	1
01662	Potassium	7440-09-7	3,650		111	9.30	1
01667	Sodium	7440-23-5	103	J	111	18.6	1
06969	Tin	7440-31-5	2.97	J	11.1	0.245	1
06970	Titanium	7440-32-6	1,390		1.11	0.190	1
06971	Vanadium	7440-62-2	69.5		1.11	0.145	1
06972	Zinc	7440-66-6	64.7		4.46	0.223	1
10146	Zirconium	7440-67-7	3.97	J	5.57	0.937	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.139	J	0.446	0.111	2
06142	Silver	7440-22-4	0.0399	J	0.223	0.0290	2
06144	Strontium	7440-24-6	41.1		0.446	0.0758	2
06145	Thallium	7440-28-0	0.367		0.223	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0186	J	0.0186	0.0112	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	7.94		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145270
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:30 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54940 SDG#: PH080-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145270
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:30 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54940 SDG#: PH080-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0318 JQ	1.12	0.0171	1
11031	12378-PeCDD	40321-76-4	0.0594 JBQ	5.58	0.0216	1
11031	123478-HxCDD	39227-28-6	0.0594 JB	5.58	0.0195	1
11031	123678-HxCDD	57653-85-7	0.0983 JBQ	5.58	0.0206	1
11031	123789-HxCDD	19408-74-3	0.128 JBQ	5.58	0.0205	1
11031	1234678-HpCDD	35822-46-9	0.251 JBQ	5.58	0.0186	1
11031	OCDD	3268-87-9	1.56 JB	11.2	0.0172	1
11031	2378-TCDF	51207-31-9	1.12 U	1.12	0.0157	1
11031	12378-PeCDF	57117-41-6	0.0687 JBQ	5.58	0.0124	1
11031	23478-PeCDF	57117-31-4	0.0418 JQ	5.58	0.0124	1
11031	123478-HxCDF	70648-26-9	0.0584 JBQ	5.58	0.00923	1
11031	123678-HxCDF	57117-44-9	0.0604 JB	5.58	0.00912	1
11031	123789-HxCDF	72918-21-9	0.193 JB	5.58	0.00991	1
11031	234678-HxCDF	60851-34-5	0.0565 JBQ	5.58	0.00912	1
11031	1234678-HpCDF	67562-39-4	0.0949 JBQ	5.58	0.00631	1
11031	1234789-HpCDF	55673-89-7	0.0612 JBQ	5.58	0.00957	1
11031	OCDF	39001-02-0	0.248 JB	11.2	0.0226	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0319			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145270
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:30 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54940 SDG#: PH080-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145270
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:30 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54940 SDG#: PH080-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 08:33	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 13:13	Laura M Krieger	25.99
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321231884	07/31/2013 14:32	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321231884	07/31/2013 14:32	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 03:36	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 16:57	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 00:15	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 11:16	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 11:20	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145270
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 09:30 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54940 SDG#: PH080-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 01:01	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 21:07	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 21:07	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 21:07	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 21:07	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638001	08/06/2013 05:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638001	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13212039401A	07/31/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145271
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 10:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61200 SDG#: PH080-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	6.1	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145271
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 10:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61200 SDG#: PH080-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,200	43.7	7.88	1
06944	Antimony	7440-36-0	5.52	4.37	0.809	1
06935	Arsenic	7440-38-2	4.92	4.37	0.765	1
06946	Barium	7440-39-3	77.0	1.09	0.0361	1
06947	Beryllium	7440-41-7	0.364 J	1.09	0.0732	1
07914	Boron	7440-42-8	11.0	10.9	0.918	1
06949	Cadmium	7440-43-9	1.09 U	1.09	0.0830	1
01650	Calcium	7440-70-2	143,000	109	18.2	5
06951	Chromium	7440-47-3	28.1	3.28	0.175	1
06952	Cobalt	7440-48-4	8.48	1.09	0.108	1
06953	Copper	7440-50-8	24.7	2.19	0.317	1
01654	Iron	7439-89-6	26,700	43.7	3.96	1
06955	Lead	7439-92-1	9.61	3.28	0.546	1
01656	Lithium	7439-93-2	23.6	4.4	0.37	1
01657	Magnesium	7439-95-4	7,190	10.9	1.82	1
06958	Manganese	7439-96-5	278	1.09	0.0907	1
06960	Molybdenum	7439-98-7	2.63	2.19	0.186	1
06961	Nickel	7440-02-0	16.3	2.19	0.142	1
10145	Phosphorus	7723-14-0	470	10.9	3.16	1
01662	Potassium	7440-09-7	2,880	109	9.11	1
01667	Sodium	7440-23-5	170	109	18.2	1
06969	Tin	7440-31-5	2.55 J	10.9	0.240	1
06970	Titanium	7440-32-6	1,240	1.09	0.186	1
06971	Vanadium	7440-62-2	65.2	1.09	0.142	1
06972	Zinc	7440-66-6	71.3	4.37	0.219	1
10146	Zirconium	7440-67-7	3.13 J	5.46	0.918	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.329 J	0.437	0.109	2
06142	Silver	7440-22-4	0.219 U	0.219	0.0284	2
06144	Strontium	7440-24-6	230	2.19	0.372	10
06145	Thallium	7440-28-0	0.289	0.219	0.0328	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0163 J	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.36	0.0100	0.0100	1
	The pH was measured in water at 21.7 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.0	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145271
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 10:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61200 SDG#: PH080-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0276 JQ	1.12	0.0270	1
11031	12378-PeCDD	40321-76-4	0.0530 JBQ	5.61	0.0234	1
11031	123478-HxCDD	39227-28-6	0.0561 JBQ	5.61	0.0149	1
11031	123678-HxCDD	57653-85-7	0.0323 JBQ	5.61	0.0163	1
11031	123789-HxCDD	19408-74-3	0.0593 JBQ	5.61	0.0161	1
11031	1234678-HpCDD	35822-46-9	0.0722 JB	5.61	0.0150	1
11031	OCDD	3268-87-9	0.264 JBQ	11.2	0.0172	1
11031	2378-TCDF	51207-31-9	0.0272 JBQ	1.12	0.0194	1
11031	12378-PeCDF	57117-41-6	0.0522 JBQ	5.61	0.0136	1
11031	23478-PeCDF	57117-31-4	0.0540 JQ	5.61	0.0125	1
11031	123478-HxCDF	70648-26-9	0.0543 JBQ	5.61	0.00841	1
11031	123678-HxCDF	57117-44-9	0.0420 JBQ	5.61	0.00830	1
11031	123789-HxCDF	72918-21-9	0.0341 JBQ	5.61	0.0107	1
11031	234678-HxCDF	60851-34-5	0.0497 JBQ	5.61	0.00795	1
11031	1234678-HpCDF	67562-39-4	0.0557 JB	5.61	0.00625	1
11031	1234789-HpCDF	55673-89-7	0.0444 JBQ	5.61	0.00977	1
11031	OCDF	39001-02-0	0.151 JB	11.2	0.0231	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00125			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	54	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	48	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145271
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 10:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61200 SDG#: PH080-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145271
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 10:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61200 SDG#: PH080-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 09:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 03:54	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 17:18	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 01:12	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 11:24	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 11:28	Joanne M Gates	5
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 01:05	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 21:09	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 21:09	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/08/2013 21:22	David K Beck	10

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145271
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 10:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61200 SDG#: PH080-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 21:09	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638001	08/06/2013 06:10	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638001	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13212039401A	07/31/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145272
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 11:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61240 SDG#: PH080-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.2	J	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	0.93	J	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	J	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.5	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	2.7		1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.3	J	1.8	0.71	1
12969	Pyrene	129-00-0	2.3		1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	28.47
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145272
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 11:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61240 SDG#: PH080-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	3.2	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	12		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,100		41.9	7.56	1
06944	Antimony	7440-36-0	5.53		4.19	0.776	1
06935	Arsenic	7440-38-2	5.02		4.19	0.734	1
06946	Barium	7440-39-3	71.0		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.337	J	1.05	0.0703	1
07914	Boron	7440-42-8	9.47	J	10.5	0.881	1
06949	Cadmium	7440-43-9	1.05	U	1.05	0.0797	1
01650	Calcium	7440-70-2	137,000		105	17.5	5
06951	Chromium	7440-47-3	26.2		3.15	0.168	1
06952	Cobalt	7440-48-4	7.99		1.05	0.104	1
06953	Copper	7440-50-8	23.2		2.10	0.304	1
01654	Iron	7439-89-6	25,100		41.9	3.80	1
06955	Lead	7439-92-1	9.19		3.15	0.524	1
01656	Lithium	7439-93-2	21.8		4.2	0.36	1
01657	Magnesium	7439-95-4	6,760		10.5	1.75	1
06958	Manganese	7439-96-5	258		1.05	0.0870	1
06960	Molybdenum	7439-98-7	2.50		2.10	0.178	1
06961	Nickel	7440-02-0	15.0		2.10	0.136	1
10145	Phosphorus	7723-14-0	442		10.5	3.03	1
01662	Potassium	7440-09-7	2,820		105	8.74	1
01667	Sodium	7440-23-5	194		105	17.5	1
06969	Tin	7440-31-5	2.22	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,110		1.05	0.178	1
06971	Vanadium	7440-62-2	59.5		1.05	0.136	1
06972	Zinc	7440-66-6	66.2		4.19	0.210	1
10146	Zirconium	7440-67-7	3.26	J	5.24	0.881	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.283	J	0.419	0.105	2
06142	Silver	7440-22-4	0.210	U	0.210	0.0273	2
06144	Strontium	7440-24-6	212		2.10	0.357	10
06145	Thallium	7440-28-0	0.273		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0148	J	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.41		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145272
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 11:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61240 SDG#: PH080-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145272
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 11:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61240 SDG#: PH080-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0231 JQ	1.04	0.0203	1
11031	12378-PeCDD	40321-76-4	5.22 U	5.22	0.0234	1
11031	123478-HxCDD	39227-28-6	0.0565 JBQ	5.22	0.0168	1
11031	123678-HxCDD	57653-85-7	5.22 U	5.22	0.0184	1
11031	123789-HxCDD	19408-74-3	0.0442 JBQ	5.22	0.0174	1
11031	1234678-HpCDD	35822-46-9	0.364 JBQ	5.22	0.0198	1
11031	OCDD	3268-87-9	4.69 JB	10.4	0.0190	1
11031	2378-TCDF	51207-31-9	0.0636 JBQ	1.04	0.0244	1
11031	12378-PeCDF	57117-41-6	0.126 JB	5.22	0.0169	1
11031	23478-PeCDF	57117-31-4	0.0839 JQ	5.22	0.0157	1
11031	123478-HxCDF	70648-26-9	0.0786 JB	5.22	0.0121	1
11031	123678-HxCDF	57117-44-9	0.0609 JB	5.22	0.0114	1
11031	123789-HxCDF	72918-21-9	0.0491 JBQ	5.22	0.0132	1
11031	234678-HxCDF	60851-34-5	0.0740 JBQ	5.22	0.0111	1
11031	1234678-HpCDF	67562-39-4	0.0976 JB	5.22	0.00727	1
11031	1234789-HpCDF	55673-89-7	0.0608 JBQ	5.22	0.0107	1
11031	OCDF	39001-02-0	0.258 JB	10.4	0.0191	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0202			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145272
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 11:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61240 SDG#: PH080-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145272
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 11:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61240 SDG#: PH080-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 09:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 13:51	Laura M Krieger	28.47
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321231884	07/31/2013 14:34	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321231884	07/31/2013 14:34	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 04:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 17:38	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 02:09	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 11:32	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 11:36	Joanne M Gates	5
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-612-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145272
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 11:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61240 SDG#: PH080-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 01:09	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 21:12	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 21:12	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/08/2013 21:24	David K Beck	10
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 21:12	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638001	08/06/2013 06:12	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638001	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13212039401A	07/31/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145273
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH080-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.5		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	14		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145273
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH080-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,300		39.7	7.15	1
06944	Antimony	7440-36-0	3.97	U	3.97	0.734	1
06935	Arsenic	7440-38-2	2.63	J	3.97	0.695	1
06946	Barium	7440-39-3	74.6		0.992	0.0327	1
06947	Beryllium	7440-41-7	0.534	J	0.992	0.0665	1
07914	Boron	7440-42-8	1.04	J	9.92	0.834	1
06949	Cadmium	7440-43-9	0.113	J	0.992	0.0754	1
01650	Calcium	7440-70-2	2,400		19.8	3.31	1
06951	Chromium	7440-47-3	17.7		2.98	0.159	1
06952	Cobalt	7440-48-4	4.92		0.992	0.0982	1
06953	Copper	7440-50-8	12.4		1.98	0.288	1
01654	Iron	7439-89-6	20,100		39.7	3.59	1
06955	Lead	7439-92-1	5.40		2.98	0.496	1
01656	Lithium	7439-93-2	24.8		4.0	0.34	1
01657	Magnesium	7439-95-4	4,680		9.92	1.66	1
06958	Manganese	7439-96-5	298		0.992	0.0824	1
06960	Molybdenum	7439-98-7	0.288	J	1.98	0.169	1
06961	Nickel	7440-02-0	9.78		1.98	0.129	1
10145	Phosphorus	7723-14-0	372		9.92	2.87	1
01662	Potassium	7440-09-7	2,920		99.2	8.28	1
01667	Sodium	7440-23-5	80.2	J	99.2	16.6	1
06969	Tin	7440-31-5	2.40	J	9.92	0.218	1
06970	Titanium	7440-32-6	1,160		0.992	0.169	1
06971	Vanadium	7440-62-2	35.9		0.992	0.129	1
06972	Zinc	7440-66-6	49.2		3.97	0.198	1
10146	Zirconium	7440-67-7	4.96	U	4.96	0.834	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.201	J	0.397	0.0992	2
06142	Silver	7440-22-4	0.0310	J	0.198	0.0258	2
06144	Strontium	7440-24-6	14.3		0.397	0.0675	2
06145	Thallium	7440-28-0	0.229		0.198	0.0298	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0137	J	0.0164	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.30		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145273
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH080-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0191 JQ	0.986	0.0168	1
11031	12378-PeCDD	40321-76-4	0.0406 JB	4.93	0.0171	1
11031	123478-HxCDD	39227-28-6	0.0362 JBQ	4.93	0.0169	1
11031	123678-HxCDD	57653-85-7	0.0845 JB	4.93	0.0186	1
11031	123789-HxCDD	19408-74-3	0.106 JBQ	4.93	0.0177	1
11031	1234678-HpCDD	35822-46-9	0.924 JB	4.93	0.0178	1
11031	OCDD	3268-87-9	8.00 JB	9.86	0.0132	1
11031	2378-TCDF	51207-31-9	0.0180 JBQ	0.986	0.0149	1
11031	12378-PeCDF	57117-41-6	0.0700 JB	4.93	0.0110	1
11031	23478-PeCDF	57117-31-4	0.0741 J	4.93	0.0100	1
11031	123478-HxCDF	70648-26-9	0.0773 JB	4.93	0.00769	1
11031	123678-HxCDF	57117-44-9	0.0502 JBQ	4.93	0.00729	1
11031	123789-HxCDF	72918-21-9	0.0904 JB	4.93	0.00810	1
11031	234678-HxCDF	60851-34-5	0.0506 JBQ	4.93	0.00729	1
11031	1234678-HpCDF	67562-39-4	0.199 JB	4.93	0.00729	1
11031	1234789-HpCDF	55673-89-7	0.0337 JBQ	4.93	0.00992	1
11031	OCDF	39001-02-0	0.414 JB	9.86	0.0158	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.104			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145273
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH080-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145273
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH080-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 10:08	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 04:31	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 18:40	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 03:05	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 11:47	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 01:20	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 21:19	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 21:19	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 21:19	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145273
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:40 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH080-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 21:19	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638001	08/06/2013 06:14	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638001	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13212039401A	07/31/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145274
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 12:50 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH080-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	4.0	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	8.5	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145274
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 12:50 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH080-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,200		41.1	7.41	1
06944	Antimony	7440-36-0	4.11	U	4.11	0.761	1
06935	Arsenic	7440-38-2	2.41	J	4.11	0.720	1
06946	Barium	7440-39-3	109		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.628	J	1.03	0.0689	1
07914	Boron	7440-42-8	1.52	J	10.3	0.864	1
06949	Cadmium	7440-43-9	0.147	J	1.03	0.0781	1
01650	Calcium	7440-70-2	2,910		20.6	3.43	1
06951	Chromium	7440-47-3	20.2		3.08	0.165	1
06952	Cobalt	7440-48-4	5.30		1.03	0.102	1
06953	Copper	7440-50-8	14.4		2.06	0.298	1
01654	Iron	7439-89-6	20,200		41.1	3.72	1
06955	Lead	7439-92-1	6.22		3.08	0.514	1
01656	Lithium	7439-93-2	21.0		4.1	0.35	1
01657	Magnesium	7439-95-4	4,110		10.3	1.72	1
06958	Manganese	7439-96-5	303		1.03	0.0853	1
06960	Molybdenum	7439-98-7	0.255	J	2.06	0.175	1
06961	Nickel	7440-02-0	12.0		2.06	0.134	1
10145	Phosphorus	7723-14-0	243		10.3	2.97	1
01662	Potassium	7440-09-7	2,450		103	8.57	1
01667	Sodium	7440-23-5	85.8	J	103	17.2	1
06969	Tin	7440-31-5	2.66	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,170		1.03	0.175	1
06971	Vanadium	7440-62-2	37.5		1.03	0.134	1
06972	Zinc	7440-66-6	48.6		4.11	0.206	1
10146	Zirconium	7440-67-7	5.14	U	5.14	0.864	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.163	J	0.411	0.103	2
06142	Silver	7440-22-4	0.0306	J	0.206	0.0267	2
06144	Strontium	7440-24-6	21.8		0.411	0.0699	2
06145	Thallium	7440-28-0	0.282		0.206	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0132	J	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.63		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145274
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 12:50 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH080-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0432 JQ	1.02	0.0219	1
11031	12378-PeCDD	40321-76-4	0.161 JBQ	5.10	0.0239	1
11031	123478-HxCDD	39227-28-6	0.0832 JBQ	5.10	0.0192	1
11031	123678-HxCDD	57653-85-7	0.202 JBQ	5.10	0.0206	1
11031	123789-HxCDD	19408-74-3	0.342 JB	5.10	0.0202	1
11031	1234678-HpCDD	35822-46-9	0.114 JBQ	5.10	0.0169	1
11031	OCDD	3268-87-9	1.12 JB	10.2	0.0166	1
11031	2378-TCDF	51207-31-9	0.0684 JB	1.02	0.0160	1
11031	12378-PeCDF	57117-41-6	0.228 JBQ	5.10	0.0148	1
11031	23478-PeCDF	57117-31-4	0.138 JQ	5.10	0.0142	1
11031	123478-HxCDF	70648-26-9	0.115 JB	5.10	0.0116	1
11031	123678-HxCDF	57117-44-9	0.129 JB	5.10	0.0116	1
11031	123789-HxCDF	72918-21-9	0.316 JB	5.10	0.0138	1
11031	234678-HxCDF	60851-34-5	0.0864 JBQ	5.10	0.0110	1
11031	1234678-HpCDF	67562-39-4	0.0834 JBQ	5.10	0.00768	1
11031	1234789-HpCDF	55673-89-7	0.0396 JBQ	5.10	0.0109	1
11031	OCDF	39001-02-0	0.157 JBQ	10.2	0.0209	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0975			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	58	24 - 185
13C12-23478-PeCDF	59	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145274
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 12:50 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH080-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145274
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 12:50 by TB

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH080-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 10:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 04:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 19:01	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 04:02	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 11:51	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 01:24	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 21:21	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 21:21	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 21:21	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145274
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 12:50 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58900 SDG#: PH080-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 21:21	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638001	08/06/2013 06:16	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638001	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13212039401A	07/31/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145275
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58925 SDG#: PH080-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.3	U	1.3	0.3	31.65
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145275
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58925 SDG#: PH080-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	3.8	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	8.7	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,200		40.6	7.32	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.751	1
06935	Arsenic	7440-38-2	2.72	J	4.06	0.710	1
06946	Barium	7440-39-3	99.3		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.615	J	1.01	0.0680	1
07914	Boron	7440-42-8	1.32	J	10.1	0.853	1
06949	Cadmium	7440-43-9	0.0842	J	1.01	0.0771	1
01650	Calcium	7440-70-2	2,680		20.3	3.39	1
06951	Chromium	7440-47-3	18.1		3.04	0.162	1
06952	Cobalt	7440-48-4	4.78		1.01	0.100	1
06953	Copper	7440-50-8	12.9		2.03	0.294	1
01654	Iron	7439-89-6	19,400		40.6	3.67	1
06955	Lead	7439-92-1	5.88		3.04	0.507	1
01656	Lithium	7439-93-2	20.6		4.1	0.35	1
01657	Magnesium	7439-95-4	3,920		10.1	1.69	1
06958	Manganese	7439-96-5	265		1.01	0.0842	1
06960	Molybdenum	7439-98-7	0.240	J	2.03	0.173	1
06961	Nickel	7440-02-0	10.1		2.03	0.132	1
10145	Phosphorus	7723-14-0	245		10.1	2.93	1
01662	Potassium	7440-09-7	2,180		101	8.46	1
01667	Sodium	7440-23-5	87.2	J	101	16.9	1
06969	Tin	7440-31-5	2.56	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,110		1.01	0.173	1
06971	Vanadium	7440-62-2	36.3		1.01	0.132	1
06972	Zinc	7440-66-6	44.6		4.06	0.203	1
10146	Zirconium	7440-67-7	5.07	U	5.07	0.853	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.128	J	0.406	0.101	2
06142	Silver	7440-22-4	0.0302	J	0.203	0.0264	2
06144	Strontium	7440-24-6	21.2		0.406	0.0690	2
06145	Thallium	7440-28-0	0.237		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0225		0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.8 C.	n.a.	7.52		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.4		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145275
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58925 SDG#: PH080-10*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145275
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58925 SDG#: PH080-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0913	JQ	1.01	0.0224	1
11031	12378-PeCDD	40321-76-4	0.216	JBQ	5.04	0.0248	1
11031	123478-HxCDD	39227-28-6	0.146	JB	5.04	0.0214	1
11031	123678-HxCDD	57653-85-7	0.260	JB	5.04	0.0231	1
11031	123789-HxCDD	19408-74-3	0.333	JB	5.04	0.0219	1
11031	1234678-HpCDD	35822-46-9	1.09	JB	5.04	0.0203	1
11031	OCDD	3268-87-9	11.9	B	10.1	0.0178	1
11031	2378-TCDF	51207-31-9	0.0962	JBQ	1.01	0.0193	1
11031	12378-PeCDF	57117-41-6	0.338	JBQ	5.04	0.0154	1
11031	23478-PeCDF	57117-31-4	0.253	J	5.04	0.0146	1
11031	123478-HxCDF	70648-26-9	0.165	JB	5.04	0.0130	1
11031	123678-HxCDF	57117-44-9	0.209	JBQ	5.04	0.0122	1
11031	123789-HxCDF	72918-21-9	0.266	JB	5.04	0.0145	1
11031	234678-HxCDF	60851-34-5	0.127	JBQ	5.04	0.0120	1
11031	1234678-HpCDF	67562-39-4	0.285	JB	5.04	0.00932	1
11031	1234789-HpCDF	55673-89-7	0.0803	JB	5.04	0.0133	1
11031	OCDF	39001-02-0	0.480	JB	10.1	0.0212	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.211				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145275
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58925 SDG#: PH080-10*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145275
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58925 SDG#: PH080-10*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 11:12	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 14:29	Laura M Krieger	31.65
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321231884	07/31/2013 14:35	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321231884	07/31/2013 14:35	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 06:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 19:22	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 04:58	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 11:55	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-589-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7145275
LL Group # 1408036
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 13:00 by TB

Submitted: 07/31/2013 09:10
Reported: 08/13/2013 16:08

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58925 SDG#: PH080-10*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 01:28	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 21:23	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 21:23	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 21:23	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 21:23	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638001	08/06/2013 06:18	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638001	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13212039401A	07/31/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13214162401B	08/02/2013 22:38	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408036
Reported: 08/13/13 at 04:08 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13214SLC026	Sample number(s): 7145267-7145275									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	108		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	102		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	101		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	106		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	107		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	115		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	102		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	109		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	123		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	128		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	106		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	112		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	134*		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	114		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	120		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	109		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	110		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	112		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	109		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	102		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	85		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	124		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	104		71-120		
Batch number: 13213A20A	Sample number(s): 7145266									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	105	100	75-135	4	30
Batch number: 13217B16A	Sample number(s): 7145268,7145270,7145272,7145275									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	73	71	67-119	3	30
Batch number: 132140017A	Sample number(s): 7145267-7145275									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	76	79	36-106	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	95		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408036
Reported: 08/13/13 at 04:08 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	97		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132140001A	Sample number(s): 7145267,7145269-7145275									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	99		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	102		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	105		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	104		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	86		49-107		
Batch number: 132220004A	Sample number(s): 7145268									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	101		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	107		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	110		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	70		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	88		49-107		
Batch number: 132170637001	Sample number(s): 7145267-7145275									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	101		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	101		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	101		80-120		
Calcium	6.93	J	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	103		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	107		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	101		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	103		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	100		80-120		
Tin	1.37	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	101		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132170637001A	Sample number(s): 7145267-7145275									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	107		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	114		80-120		
Batch number: 132170637001B	Sample number(s): 7145267-7145275									
Selenium	0.400	U	0.400	0.100	mg/kg	104		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408036
Reported: 08/13/13 at 04:08 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132170638001	Sample number(s): 7145267-7145275								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	117		85-120		
Batch number: 13212039401A	Sample number(s): 7145267-7145275								
15a pH by 9045D					100		95-105		
Batch number: 13214162401B	Sample number(s): 7145267-7145275								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13220001	Sample number(s): 7145267-7145275								
2378-TCDD	1.00 U	1.00	0.0191	ng/kg	90		67-158		
12378-PeCDD	0.0480 J	5.00	0.0196	ng/kg	94		70-142		
123478-HxCDD	0.0477 J	5.00	0.0149	ng/kg	99		70-164		
123678-HxCDD	0.0420 J	5.00	0.0160	ng/kg	96		76-134		
123789-HxCDD	0.0352 J	5.00	0.0151	ng/kg	96		64-162		
1234678-HpCDD	0.0719 J	5.00	0.0147	ng/kg	96		70-140		
OCDD	0.322 J	10.0	0.0147	ng/kg	96		78-144		
2378-TCDF	0.0184 J	1.00	0.0168	ng/kg	92		75-158		
12378-PeCDF	0.0644 J	5.00	0.0120	ng/kg	95		80-134		
23478-PeCDF	5.00 U	5.00	0.0112	ng/kg	96		68-160		
123478-HxCDF	0.0376 J	5.00	0.00880	ng/kg	99		72-134		
123678-HxCDF	0.0498 J	5.00	0.00790	ng/kg	96		84-130		
123789-HxCDF	0.0646 J	5.00	0.00970	ng/kg	98		78-130		
234678-HxCDF	0.0470 J	5.00	0.00800	ng/kg	98		70-156		
1234678-HpCDF	0.0373 J	5.00	0.00600	ng/kg	97		82-122		
1234789-HpCDF	0.0456 J	5.00	0.00970	ng/kg	97		78-138		
OCDF	0.148 J	10.0	0.0232	ng/kg	98		63-170		
TEQ WHO 2005 - EDLx0.0	0.00770			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13214SLC026	Sample number(s): 7145267-7145275 UNSPK: P143796								
Acenaphthene	113	114	48-127	1	30				
Acenaphthylene	100	102	49-121	2	30				
Anthracene	101	99	52-126	2	30				
Benzo(a)anthracene	104	104	32-135	0	30				
Benzo(a)pyrene	102	103	36-138	1	30				
Benzo(b)fluoranthene	108	108	26-142	0	30				
Benzo(e)pyrene	96	96	70-130	1	30				
Benzo(g,h,i)perylene	105	105	33-141	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408036
Reported: 08/13/13 at 04:08 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(k)fluoranthene	106	105	47-129	1	30				
Butylbenzylphthalate	125	127	59-153	2	30				
Di-n-butylphthalate	131	129	62-154	1	30				
Chrysene	103	104	29-148	1	30				
Dibenz(a,h)anthracene	110	110	34-125	1	30				
Diethylphthalate	133*	134*	76-127	0	30				
Dimethylphthalate	110	110	62-136	0	30				
Bis(2-Ethylhexyl)phthalate	125	124	39-167	0	30				
Fluoranthene	107	104	47-135	3	30				
Fluorene	101	104	50-129	3	30				
Indeno(1,2,3-cd)pyrene	109	110	17-136	1	30				
1-Methylnaphthalene	108	107	50-131	1	30				
2-Methylnaphthalene	106	104	28-144	2	30				
Naphthalene	102	102	31-148	0	30				
N-Nitrosodimethylamine	83	84	48-113	2	30				
Di-n-octylphthalate	121	124	52-162	2	30				
Phenanthrene	102	99	29-142	3	30				
Pyrene	102	101	26-143	1	30				
Batch number: 132140017A	Sample number(s): 7145267-7145275 UNSPK: P143795								
PCB-1016	86	88	16-146	3	50				
PCB-1260	88	91	40-134	4	50				
Batch number: 132140001A	Sample number(s): 7145267,7145269-7145275 UNSPK: 7145272								
EFH (C12-C14)	100	96	49-123	5	20				
EFH (C15-C20)	110	108	49-123	2	20				
EFH (C21-C30)	91	106	49-123	9	20				
EFH (C30-C40)	151*	165*	49-123	4	20				
EFH (C8-C11)	96	97	49-123	1	20				
Batch number: 132220004A	Sample number(s): 7145268 UNSPK: P152828								
EFH (C12-C14)	113	0*	49-123	200*	20				
EFH (C15-C20)	178*	246*	49-123	32*	20				
EFH (C21-C30)	478*	436*	49-123	5	20				
EFH (C30-C40)	267 (2)	703 (2)	49-123	38*	20				
EFH (C8-C11)	104	0*	49-123	200*	20				
Batch number: 132170637001	Sample number(s): 7145267-7145275 UNSPK: P143796 BKG: P143796								
Aluminum	1505 (2)	2798 (2)	75-125	12	20	17,300	16,100	7	20
Antimony	54*	53*	75-125	3	20	3.85 U	3.85 U	0 (1)	20
Arsenic	95	94	75-125	1	20	4.58	4.24	8 (1)	20
Barium	96	102	75-125	4	20	84.5	84.3	0	20
Beryllium	102	104	75-125	2	20	0.696 J	0.661 J	5 (1)	20
Boron	100	100	75-125	0	20	9.62 U	9.62 U	0 (1)	20
Cadmium	98	96	75-125	2	20	0.962 U	0.962 U	0 (1)	20
Calcium	91 (2)	159 (2)	75-125	10	20	2,170	2,070	5	20
Chromium	98	110	75-125	6	20	21.9	21.2	4	20
Cobalt	94	97	75-125	3	20	5.71	8.36	38*	20
Copper	101	111	75-125	6	20	13.7	12.8	7	20
Iron	-2073 (2)	871 (2)	75-125	13	20	22,200	20,500	8	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408036
Reported: 08/13/13 at 04:08 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Lead	93	104	75-125	8	20	5.87		6.14		5 (1)	20
Lithium	99	103	75-125	3	20	28.0		26.1		7	20
Magnesium	-105 (2)	189 (2)	75-125	12	20	4,580		4,280		7	20
Manganese	10 (2)	173 (2)	75-125	21*	20	324		413		24*	20
Molybdenum	96	96	75-125	0	20	0.867	J	0.418	J	70* (1)	20
Nickel	97	100	75-125	2	20	12.7		12.9		2	20
Phosphorus	73*	103	75-125	9	20	247		219		12	20
Potassium	84	117	75-125	10	20	2,250		1,970		13	20
Sodium	97	99	75-125	2	20	129		122		6 (1)	20
Tin	89	89	75-125	1	20	2.66	J	2.63	J	1 (1)	20
Titanium	133 (2)	268 (2)	75-125	10	20	1,080		949		13	20
Vanadium	102	112	75-125	5	20	39.4		36.3		8	20
Zinc	89	100	75-125	6	20	48.7		44.6		9	20
Zirconium	99	100	75-125	1	20	4.81	U	1.37	J	200* (1)	20
Batch number: 132170637001A	Sample number(s): 7145267-7145275 UNSPK: P143796 BKG: P143796										
Silver	101	102	75-125	2	20	0.0417	J	0.0396	J	5 (1)	20
Strontium	92	97	75-125	1	20	17.8		16.5		8	20
Thallium	95	96	75-125	0	20	0.253		0.263		4 (1)	20
Batch number: 132170637001B	Sample number(s): 7145267-7145275 UNSPK: P143796 BKG: P143796										
Selenium	106	99	75-125	6	20	0.128	J	0.131	J	2 (1)	20
Batch number: 132170638001	Sample number(s): 7145267-7145275 UNSPK: 7145270 BKG: 7145270										
3a Mercury 7471A	118	118	65-135	4	20	0.0165	J	0.0160		3 (1)	20
Batch number: 13212039401A	Sample number(s): 7145267-7145275 BKG: 7145267										
15a pH by 9045D						7.45		7.46		0	3
Batch number: 13214162401B	Sample number(s): 7145267-7145275 BKG: P142202										
14a Moisture Content by 160.3						12.8		13.4		5	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13214SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7145267	90	95	105
7145268	91	96	105
7145269	91	93	105
7145270	88	97	103
7145271	58	61	67
7145272	70	75	83

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408036
Reported: 08/13/13 at 04:08 PM

Surrogate Quality Control

7145273	88	93	103
7145274	90	93	101
7145275	87	92	101
Blank	94	97	109
LCS	94	101	111
MS	94	97	107
MSD	92	98	109
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13213A20A

	Trifluorotoluene-F
7145266	86
Blank	88
LCS	117
LCSD	118
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13217B16A

	Trifluorotoluene-F
7145268	71
7145270	72
7145272	69
7145275	69
Blank	83
LCS	80
LCSD	77
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132140017A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7145267	97	93
7145268	103	96
7145269	97	100
7145270	98	101
7145271	89	87
7145272	89	83
7145273	102	97
7145274	102	99
7145275	105	97
Blank	100	101
LCS	101	106
LCSD	121*	119
MS	92	88
MSD	93	92
Limits:	45-120	45-120

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408036
Reported: 08/13/13 at 04:08 PM

Surrogate Quality Control

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132140001A

	Chlorobenzene	Orthoterphenyl
7145267	105	110
7145269	94	99
7145270	92	89
7145271	93	89
7145272	94	99
7145273	98	104
7145274	96	102
7145275	98	104
Blank	91	96
LCS	99	106
MS	97	99
MSD	92	98
Limits:	37-125	66-123

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132220004A

	Chlorobenzene	Orthoterphenyl
7145268	93	88
Blank	99	105
LCS	100	108
MS	103	108
MSD	100	106
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13220001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7145267	75	72	76	77	75	83
7145268	66	63	66	71	67	70
7145269	87	86	88	92	89	94
7145270	70	66	69	74	71	75
7145271	54	61	67	70	69	66
7145272	66	65	69	71	69	72
7145273	68	69	74	75	74	78
7145274	61	59	65	68	65	66
7145275	63	65	68	71	69	71
Blank	62	62	66	72	68	66
OPR	68	70	75	79	77	78
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7145267	77	80	76	73	73	75
7145268	77	60	61	66	66	69
7145269	98	91	85	88	86	90
7145270	80	65	63	67	69	73
7145271	80	61	59	65	69	72

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408036
Reported: 08/13/13 at 04:08 PM

Surrogate Quality Control

7145272	79	63	59	70	71	73
7145273	82	70	67	72	76	77
7145274	72	60	57	64	66	69
7145275	78	65	62	69	72	73
Blank	81	60	57	65	67	71
OPR	88	71	70	72	75	79
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7145267	73	75	77	71	71
7145268	67	65	68	58	65
7145269	88	89	89	77	86
7145270	70	69	68	63	67
7145271	70	69	67	48	60
7145272	71	70	67	58	66
7145273	76	75	74	61	68
7145274	67	66	63	52	58
7145275	71	72	70	56	64
Blank	68	67	65	55	63
OPR	77	76	77	62	69
Limits:	28-130	23-140	17-157	24-169	24-185

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13013 1408036 7145266-75

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/30/2013
CarrierName: FedEx
AirbillNo: 796353135781

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130730-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-073013	7/30/13 08:00	WQ	None	3 - 40 mL Vial	10 day																				X												
SL-560-SA8-SB-0.0-0.5	7/30/13 07:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-560-SA8-SB-0.0-0.5	7/30/13 07:50	SO	None	1 - 4 oz glass	10 day													X																			
SL-560-SA8-SB-4.0-5.0	7/30/13 08:10	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X											
SL-560-SA8-SB-4.0-5.0	7/30/13 08:10	SO	None	2 - Encore	10 day																				X												
SL-549-SA8-SB-0.0-0.5	7/30/13 09:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-549-SA8-SB-0.0-0.5	7/30/13 09:00	SO	None	1 - 4 oz glass	10 day													X																			
SL-549-SA8-SB-4.0-5.0	7/30/13 09:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X											
SL-549-SA8-SB-4.0-5.0	7/30/13 09:30	SO	None	2 - Encore	10 day																				X												
SL-612-SA8-SB-0.0-0.5	7/30/13 10:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-612-SA8-SB-0.0-0.5	7/30/13 10:40	SO	None	1 - 4 oz glass	10 day													X																			
SL-612-SA8-SB-4.0-5.0	7/30/13 11:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X											
SL-612-SA8-SB-4.0-5.0	7/30/13 11:00	SO	None	2 - Encore	10 day																				X												
SL-596-SA8-SB-0.0-0.5	7/30/13 13:40	SO	None	4 - 8 oz glass	10 day	X	X					X		X	X											X											
SL-596-SA8-SB-0.0-0.5	7/30/13 13:40	SO	None	1 - 4 oz glass	10 day													X																			
SL-589-SA8-SB-0.0-0.5	7/30/13 12:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-589-SA8-SB-0.0-0.5	7/30/13 12:50	SO	None	1 - 4 oz glass	10 day													X																			
SL-589-SA8-SB-2.5-3.5	7/30/13 13:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X											
SL-589-SA8-SB-2.5-3.5	7/30/13 13:00	SO	None	2 - Encore	10 day																				X												

Recd By: Pat Gh ELLE 7/31/13 0910

13013 1408036 71452666-75

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/30/2013
CarrierName: FedEx
AirbillNo: 796353135781

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130730-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: O Bennett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stacy Myers	07/30/2013	1600									
									Patty	7/31/13	0910

COC Rev 2

COC: 20130730-02, Page 2 of 2

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1408036

Client/Project: CDM Smith

Date of Receipt: 7/31/13

Time of Receipt: 0910

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	1396	5.3	ST	WI	y	B	
2	DT121	3.2	TB	WI	y	B	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat Gla 3472 **Date/Time:** 7/31/13 1010

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH081

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 13, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/01/2013
Group Number: 1408356
SDG: PH081
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-598-SA8-SB-0.0-0.5 Soil	7146667
SL-598-SA8-SB-4.5-5.5 Soil	7146668
SL-599-SA8-SB-0.0-0.5 Soil	7146669
SL-599-SA8-SB-3.0-4.0 Soil	7146670
SL-536-SA8-SB-0.0-0.5 Soil	7146671
SL-536-SA8-SB-4.0-5.0 Soil	7146672
SL-537-SA8-SB-0.0-0.5 Soil	7146673
SL-537-SA8-SB-4.0-5.0 Soil	7146674
TB-073113 Water	7146675

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SL-598-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146667
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 09:15 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59800 SDG#: PH081-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.0	J	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	0.89	J	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	2.1		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.99	J	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	49		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	7.0	J	19	6.3	1
12969	Chrysene	218-01-9	3.0		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.2	J	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	16	J	19	6.3	1
12969	Fluoranthene	206-44-0	2.4		1.7	0.70	1
12969	Fluorene	86-73-7	2.2		1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.82	J	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.4	J	1.7	0.70	1
12969	Naphthalene	91-20-3	1.3	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.6	J	1.7	0.70	1
12969	Pyrene	129-00-0	1.6	J	1.7	0.70	1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	4.8		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 03:23	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-598-SA8-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146668
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 09:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59845 SDG#: PH081-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.2		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 04:27	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-599-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146669
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 07:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59900 SDG#: PH081-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	140		17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.4		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-599-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146669
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 07:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59900 SDG#: PH081-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0151	JQ	0.992	0.0150	1
11031	12378-PeCDD	40321-76-4	4.96	U	4.96	0.0266	1
11031	123478-HxCDD	39227-28-6	0.0446	JB	4.96	0.0180	1
11031	123678-HxCDD	57653-85-7	0.0975	JBQ	4.96	0.0195	1
11031	123789-HxCDD	19408-74-3	0.123	JBQ	4.96	0.0188	1
11031	1234678-HpCDD	35822-46-9	1.09	JB	4.96	0.0176	1
11031	OCDD	3268-87-9	8.01	JB	9.92	0.0155	1
11031	2378-TCDF	51207-31-9	0.530	JBQ	0.992	0.0541	1
11031	12378-PeCDF	57117-41-6	5.36	B	4.96	0.0281	1
11031	23478-PeCDF	57117-31-4	0.453	J	4.96	0.0272	1
11031	123478-HxCDF	70648-26-9	0.316	JB	4.96	0.0180	1
11031	123678-HxCDF	57117-44-9	0.421	JB	4.96	0.0183	1
11031	123789-HxCDF	72918-21-9	0.0655	JB	4.96	0.0224	1
11031	234678-HxCDF	60851-34-5	0.200	JB	4.96	0.0180	1
11031	1234678-HpCDF	67562-39-4	0.373	JB	4.96	0.0119	1
11031	1234789-HpCDF	55673-89-7	0.130	JBQ	4.96	0.0165	1
11031	OCDF	39001-02-0	0.544	JB	9.92	0.0183	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.419				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-599-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146669
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 07:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59900 SDG#: PH081-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-599-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146669
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 07:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59900 SDG#: PH081-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 17:06	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 05:55	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-599-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146670
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 08:05 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59930 SDG#: PH081-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.7		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-599-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146670
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 08:05 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59930 SDG#: PH081-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0162	1
11031	12378-PeCDD	40321-76-4	0.0352	JBQ	5.22	0.0176	1
11031	123478-HxCDD	39227-28-6	0.0422	JB	5.22	0.0135	1
11031	123678-HxCDD	57653-85-7	0.0467	JB	5.22	0.0142	1
11031	123789-HxCDD	19408-74-3	0.132	JB	5.22	0.0139	1
11031	1234678-HpCDD	35822-46-9	0.0855	JBQ	5.22	0.0125	1
11031	OCDD	3268-87-9	0.417	JB	10.4	0.0151	1
11031	2378-TCDF	51207-31-9	1.04	U	1.04	0.0120	1
11031	12378-PeCDF	57117-41-6	0.0744	JBQ	5.22	0.0111	1
11031	23478-PeCDF	57117-31-4	0.0395	J	5.22	0.0108	1
11031	123478-HxCDF	70648-26-9	0.0518	JBQ	5.22	0.00742	1
11031	123678-HxCDF	57117-44-9	0.0327	JB	5.22	0.00710	1
11031	123789-HxCDF	72918-21-9	0.122	JB	5.22	0.00848	1
11031	234678-HxCDF	60851-34-5	0.0297	JBQ	5.22	0.00721	1
11031	1234678-HpCDF	67562-39-4	0.0521	JBQ	5.22	0.00795	1
11031	1234789-HpCDF	55673-89-7	0.0377	JBQ	5.22	0.0127	1
11031	OCDF	39001-02-0	0.141	JB	10.4	0.0168	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0496				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	60	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-599-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146670
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 08:05 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59930 SDG#: PH081-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-599-SA8-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146670
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 08:05 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59930 SDG#: PH081-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 18:02	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 06:52	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146671
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 11:45 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53600 SDG#: PH081-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.5	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	270		19	6.2	1
12969	Fluoranthene	206-44-0	1.3	J	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.2	J	1.7	0.69	1
12969	Naphthalene	91-20-3	1.4	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	0.96	J	1.7	0.69	1
12969	Pyrene	129-00-0	1.2	J	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	10	U	10	4.1	2
12952	EFH (C15-C20)	n.a.	10	U	10	4.1	2
12952	EFH (C21-C30)	n.a.	31		10	4.1	2
12952	EFH (C30-C40)	n.a.	100		21	8.3	2
12952	EFH (C8-C11)	n.a.	10	U	10	4.1	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146671
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 11:45 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53600 SDG#: PH081-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,000		40.5	7.30	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.749	1
06935	Arsenic	7440-38-2	5.62		4.05	0.709	1
06946	Barium	7440-39-3	119		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.947	J	1.01	0.0679	1
07914	Boron	7440-42-8	19.1		10.1	0.851	1
06949	Cadmium	7440-43-9	0.172	J	1.01	0.0770	1
01650	Calcium	7440-70-2	9,200		20.3	3.38	1
06951	Chromium	7440-47-3	37.7		3.04	0.162	1
06952	Cobalt	7440-48-4	9.23		1.01	0.100	1
06953	Copper	7440-50-8	19.4		2.03	0.294	1
01654	Iron	7439-89-6	33,500		81.0	7.33	2
06955	Lead	7439-92-1	12.7		3.04	0.506	1
01656	Lithium	7439-93-2	24.1		4.1	0.34	1
01657	Magnesium	7439-95-4	7,230		10.1	1.69	1
06958	Manganese	7439-96-5	470		1.01	0.0841	1
06960	Molybdenum	7439-98-7	0.513	J	2.03	0.172	1
06961	Nickel	7440-02-0	18.3		2.03	0.132	1
10145	Phosphorus	7723-14-0	436		10.1	2.93	1
01662	Potassium	7440-09-7	4,660		101	8.45	1
01667	Sodium	7440-23-5	87.1	J	101	16.9	1
06969	Tin	7440-31-5	1.47	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,220		1.01	0.172	1
06971	Vanadium	7440-62-2	64.7		1.01	0.132	1
06972	Zinc	7440-66-6	70.9		4.05	0.203	1
10146	Zirconium	7440-67-7	5.43		5.06	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.239	J	0.405	0.101	2
06142	Silver	7440-22-4	0.0551	J	0.203	0.0263	2
06144	Strontium	7440-24-6	30.3		0.405	0.0689	2
06145	Thallium	7440-28-0	0.316		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0198		0.0164	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.63		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146671
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 11:45 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53600 SDG#: PH081-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0195	1
11031	12378-PeCDD	40321-76-4	0.0583	JB	5.10	0.0238	1
11031	123478-HxCDD	39227-28-6	0.109	JBQ	5.10	0.0262	1
11031	123678-HxCDD	57653-85-7	0.231	JBQ	5.10	0.0288	1
11031	123789-HxCDD	19408-74-3	0.222	JBQ	5.10	0.0272	1
11031	1234678-HpCDD	35822-46-9	2.90	JB	5.10	0.0264	1
11031	OCDD	3268-87-9	24.4	B	10.2	0.0220	1
11031	2378-TCDF	51207-31-9	0.233	JB	1.02	0.0505	1
11031	12378-PeCDF	57117-41-6	0.886	JBQ	5.10	0.0303	1
11031	23478-PeCDF	57117-31-4	5.10	U	5.10	0.0294	1
11031	123478-HxCDF	70648-26-9	0.141	JBQ	5.10	0.0249	1
11031	123678-HxCDF	57117-44-9	0.231	JB	5.10	0.0241	1
11031	123789-HxCDF	72918-21-9	0.124	JBQ	5.10	0.0295	1
11031	234678-HxCDF	60851-34-5	0.347	JB	5.10	0.0226	1
11031	1234678-HpCDF	67562-39-4	0.637	JB	5.10	0.0159	1
11031	1234789-HpCDF	55673-89-7	0.0875	JB	5.10	0.0235	1
11031	OCDF	39001-02-0	0.878	JB	10.2	0.0197	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.183				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146671
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 11:45 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53600 SDG#: PH081-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146671
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 11:45 by TB

Submitted: 08/01/2013 09:15
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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

53600 SDG#: PH081-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 05:00	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 18:20	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/07/2013 18:27	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 07:48	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 09:15	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 18:08	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:17	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:17	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 20:33	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146671
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 11:45 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53600 SDG#: PH081-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:17	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 06:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13213039401A	08/01/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146672
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 12:35 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53640 SDG#: PH081-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.36
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146672
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 12:35 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53640 SDG#: PH081-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	8.3		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	21		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,700		43.4	7.82	1
06944	Antimony	7440-36-0	4.34	U	4.34	0.803	1
06935	Arsenic	7440-38-2	4.27	J	4.34	0.759	1
06946	Barium	7440-39-3	65.9		1.08	0.0358	1
06947	Beryllium	7440-41-7	0.490	J	1.08	0.0727	1
07914	Boron	7440-42-8	10.7	J	10.8	0.911	1
06949	Cadmium	7440-43-9	0.174	J	1.08	0.0824	1
01650	Calcium	7440-70-2	55,100		21.7	3.62	1
06951	Chromium	7440-47-3	23.8		3.25	0.174	1
06952	Cobalt	7440-48-4	6.14		1.08	0.107	1
06953	Copper	7440-50-8	10.7		2.17	0.315	1
01654	Iron	7439-89-6	22,200		43.4	3.93	1
06955	Lead	7439-92-1	6.34		3.25	0.542	1
01656	Lithium	7439-93-2	21.6		4.3	0.37	1
01657	Magnesium	7439-95-4	5,490		10.8	1.81	1
06958	Manganese	7439-96-5	327		1.08	0.0900	1
06960	Molybdenum	7439-98-7	2.17	U	2.17	0.184	1
06961	Nickel	7440-02-0	12.8		2.17	0.141	1
10145	Phosphorus	7723-14-0	371		10.8	3.13	1
01662	Potassium	7440-09-7	1,880		108	9.04	1
01667	Sodium	7440-23-5	86.8	J	108	18.1	1
06969	Tin	7440-31-5	1.40	J	10.8	0.239	1
06970	Titanium	7440-32-6	1,180		1.08	0.184	1
06971	Vanadium	7440-62-2	43.6		1.08	0.141	1
06972	Zinc	7440-66-6	51.0		4.34	0.217	1
10146	Zirconium	7440-67-7	2.50	J	5.42	0.911	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.434	U	0.434	0.108	2
06142	Silver	7440-22-4	0.217	U	0.217	0.0282	2
06144	Strontium	7440-24-6	37.1		0.434	0.0737	2
06145	Thallium	7440-28-0	0.237		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0120	J	0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.07		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146672
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 12:35 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53640 SDG#: PH081-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146672
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 12:35 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53640 SDG#: PH081-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0165	1
11031	12378-PeCDD	40321-76-4	5.42	U	5.42	0.0217	1
11031	123478-HxCDD	39227-28-6	0.0336	JBQ	5.42	0.0159	1
11031	123678-HxCDD	57653-85-7	0.0763	JB	5.42	0.0176	1
11031	123789-HxCDD	19408-74-3	0.0593	JB	5.42	0.0173	1
11031	1234678-HpCDD	35822-46-9	0.421	JB	5.42	0.0222	1
11031	OCDD	3268-87-9	3.18	JB	10.8	0.0168	1
11031	2378-TCDF	51207-31-9	1.08	U	1.08	0.0226	1
11031	12378-PeCDF	57117-41-6	5.42	U	5.42	0.0175	1
11031	23478-PeCDF	57117-31-4	0.0413	JQ	5.42	0.0165	1
11031	123478-HxCDF	70648-26-9	0.0483	JBQ	5.42	0.0106	1
11031	123678-HxCDF	57117-44-9	0.0675	JB	5.42	0.0110	1
11031	123789-HxCDF	72918-21-9	0.0370	JBQ	5.42	0.0128	1
11031	234678-HxCDF	60851-34-5	0.0537	JB	5.42	0.0103	1
11031	1234678-HpCDF	67562-39-4	0.116	JB	5.42	0.00841	1
11031	1234789-HpCDF	55673-89-7	0.0337	JBQ	5.42	0.0122	1
11031	OCDF	39001-02-0	0.230	JBQ	10.8	0.0218	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0321				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	61	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146672
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 12:35 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53640 SDG#: PH081-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146672
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 12:35 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53640 SDG#: PH081-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 05:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 15:07	Laura M Krieger	22.36
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321331904	08/01/2013 18:04	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321331904	08/01/2013 17:58	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 18:39	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 20:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 08:45	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-536-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146672
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 12:35 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53640 SDG#: PH081-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 18:34	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:31	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:31	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 20:44	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:31	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 06:26	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13213039401A	08/01/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146673
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:00 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53700 SDG#: PH081-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.34	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	0.72	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	2.1		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	0.75	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	3.0		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.2	J	19	6.2	1
12969	Fluoranthene	206-44-0	5.1		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	0.80	J	1.7	0.69	1
12969	Naphthalene	91-20-3	0.95	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	3.1		1.7	0.69	1
12969	Pyrene	129-00-0	3.7		1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	27		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	58		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146673
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:00 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53700 SDG#: PH081-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,800		40.6	7.32	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.751	1
06935	Arsenic	7440-38-2	4.62		4.06	0.710	1
06946	Barium	7440-39-3	108		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.836	J	1.01	0.0680	1
07914	Boron	7440-42-8	17.5		10.1	0.853	1
06949	Cadmium	7440-43-9	0.245	J	1.01	0.0771	1
01650	Calcium	7440-70-2	18,100		20.3	3.39	1
06951	Chromium	7440-47-3	33.2		3.04	0.162	1
06952	Cobalt	7440-48-4	9.17		1.01	0.100	1
06953	Copper	7440-50-8	19.3		2.03	0.294	1
01654	Iron	7439-89-6	32,900		81.2	7.35	2
06955	Lead	7439-92-1	13.4		3.04	0.507	1
01656	Lithium	7439-93-2	22.1		4.1	0.35	1
01657	Magnesium	7439-95-4	6,970		10.1	1.69	1
06958	Manganese	7439-96-5	441		1.01	0.0842	1
06960	Molybdenum	7439-98-7	0.296	J	2.03	0.173	1
06961	Nickel	7440-02-0	17.8		2.03	0.132	1
10145	Phosphorus	7723-14-0	570		10.1	2.93	1
01662	Potassium	7440-09-7	5,400		101	8.46	1
01667	Sodium	7440-23-5	104		101	16.9	1
06969	Tin	7440-31-5	1.64	J	10.1	0.223	1
06970	Titanium	7440-32-6	975		1.01	0.173	1
06971	Vanadium	7440-62-2	57.7		1.01	0.132	1
06972	Zinc	7440-66-6	78.6		4.06	0.203	1
10146	Zirconium	7440-67-7	3.69	J	5.07	0.853	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.272	J	0.406	0.101	2
06142	Silver	7440-22-4	0.0371	J	0.203	0.0264	2
06144	Strontium	7440-24-6	39.3		0.406	0.0690	2
06145	Thallium	7440-28-0	0.327		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0199		0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.01		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146673
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:00 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53700 SDG#: PH081-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0298	JQ	0.995	0.0143	1
11031	12378-PeCDD	40321-76-4	0.186	JBQ	4.98	0.0230	1
11031	123478-HxCDD	39227-28-6	0.227	JB	4.98	0.0257	1
11031	123678-HxCDD	57653-85-7	0.409	JB	4.98	0.0276	1
11031	123789-HxCDD	19408-74-3	0.352	JB	4.98	0.0263	1
11031	1234678-HpCDD	35822-46-9	4.06	JB	4.98	0.0206	1
11031	OCDD	3268-87-9	33.6	B	9.95	0.0182	1
11031	2378-TCDF	51207-31-9	0.352	JB	0.995	0.0457	1
11031	12378-PeCDF	57117-41-6	1.96	JB	4.98	0.0277	1
11031	23478-PeCDF	57117-31-4	0.477	JQ	4.98	0.0257	1
11031	123478-HxCDF	70648-26-9	0.338	JB	4.98	0.0252	1
11031	123678-HxCDF	57117-44-9	0.434	JB	4.98	0.0246	1
11031	123789-HxCDF	72918-21-9	0.294	JBQ	4.98	0.0277	1
11031	234678-HxCDF	60851-34-5	0.468	JB	4.98	0.0235	1
11031	1234678-HpCDF	67562-39-4	0.955	JB	4.98	0.0201	1
11031	1234789-HpCDF	55673-89-7	0.289	JBQ	4.98	0.0281	1
11031	OCDF	39001-02-0	1.46	JB	9.95	0.0170	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.377				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146673
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:00 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53700 SDG#: PH081-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146673
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:00 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53700 SDG#: PH081-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 06:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 18:57	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/06/2013 20:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 12:39	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 09:38	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 18:38	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:33	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:33	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 20:45	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146673
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:00 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53700 SDG#: PH081-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:33	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 06:28	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13213039401A	08/01/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146674
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53740 SDG#: PH081-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	0.87	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	14	J	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.9		1.1	0.2	25.2
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146674
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53740 SDG#: PH081-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	7.4		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	12		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,100		43.5	7.84	1
06944	Antimony	7440-36-0	4.35	U	4.35	0.804	1
06935	Arsenic	7440-38-2	4.15	J	4.35	0.761	1
06946	Barium	7440-39-3	87.0		1.09	0.0359	1
06947	Beryllium	7440-41-7	0.739	J	1.09	0.0728	1
07914	Boron	7440-42-8	15.6		10.9	0.913	1
06949	Cadmium	7440-43-9	0.139	J	1.09	0.0826	1
01650	Calcium	7440-70-2	16,100		21.7	3.63	1
06951	Chromium	7440-47-3	30.0		3.26	0.174	1
06952	Cobalt	7440-48-4	7.79		1.09	0.108	1
06953	Copper	7440-50-8	15.1		2.17	0.315	1
01654	Iron	7439-89-6	28,800		43.5	3.93	1
06955	Lead	7439-92-1	9.02		3.26	0.543	1
01656	Lithium	7439-93-2	21.9		4.3	0.37	1
01657	Magnesium	7439-95-4	6,430		10.9	1.82	1
06958	Manganese	7439-96-5	410		1.09	0.0902	1
06960	Molybdenum	7439-98-7	2.17	U	2.17	0.185	1
06961	Nickel	7440-02-0	15.1		2.17	0.141	1
10145	Phosphorus	7723-14-0	428		10.9	3.14	1
01662	Potassium	7440-09-7	3,870		109	9.06	1
01667	Sodium	7440-23-5	109		109	18.2	1
06969	Tin	7440-31-5	1.44	J	10.9	0.239	1
06970	Titanium	7440-32-6	1,260		1.09	0.185	1
06971	Vanadium	7440-62-2	55.0		1.09	0.141	1
06972	Zinc	7440-66-6	63.9		4.35	0.217	1
10146	Zirconium	7440-67-7	3.58	J	5.43	0.913	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.191	J	0.435	0.109	2
06142	Silver	7440-22-4	0.0363	J	0.217	0.0283	2
06144	Strontium	7440-24-6	37.4		0.435	0.0739	2
06145	Thallium	7440-28-0	0.302		0.217	0.0326	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183		0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.5 C.	n.a.	8.20		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146674
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53740 SDG#: PH081-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146674
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53740 SDG#: PH081-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0254 JQ	1.09	0.0145	1
11031	12378-PeCDD	40321-76-4	5.44 U	5.44	0.0183	1
11031	123478-HxCDD	39227-28-6	0.0376 JBQ	5.44	0.0167	1
11031	123678-HxCDD	57653-85-7	0.0661 JB	5.44	0.0179	1
11031	123789-HxCDD	19408-74-3	0.0741 JB	5.44	0.0172	1
11031	1234678-HpCDD	35822-46-9	0.681 JB	5.44	0.0169	1
11031	OCDD	3268-87-9	4.35 JB	10.9	0.0182	1
11031	2378-TCDF	51207-31-9	0.0553 JBQ	1.09	0.0222	1
11031	12378-PeCDF	57117-41-6	0.321 JB	5.44	0.0164	1
11031	23478-PeCDF	57117-31-4	0.102 JQ	5.44	0.0154	1
11031	123478-HxCDF	70648-26-9	0.0685 JB	5.44	0.0135	1
11031	123678-HxCDF	57117-44-9	0.0784 JB	5.44	0.0127	1
11031	123789-HxCDF	72918-21-9	0.0701 JBQ	5.44	0.0162	1
11031	234678-HxCDF	60851-34-5	0.0967 JB	5.44	0.0120	1
11031	1234678-HpCDF	67562-39-4	0.203 JB	5.44	0.00757	1
11031	1234789-HpCDF	55673-89-7	0.0488 JBQ	5.44	0.0121	1
11031	OCDF	39001-02-0	0.356 JBQ	10.9	0.0200	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0580			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	58	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146674
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53740 SDG#: PH081-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146674
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53740 SDG#: PH081-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 06:37	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 15:45	Laura M Krieger	25.2
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321331904	08/01/2013 18:06	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321331904	08/01/2013 18:06	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 19:16	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132140001A	08/07/2013 18:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132140001A	08/02/2013 13:45	Wanda F Oswald	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13220001	08/11/2013 13:36	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13220001	08/08/2013 11:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-537-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7146674
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 13:40 by TB

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53740 SDG#: PH081-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 18:50	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:40	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:40	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 20:51	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:40	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 06:34	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13213039401A	08/01/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-073113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7146675
LL Group # 1408356
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/31/2013 08:00

Submitted: 08/01/2013 09:15
Reported: 08/13/2013 14:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB731 SDG#: PH081-09TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13213A20A	08/01/2013 23:10	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13213A20A	08/01/2013 23:10	Laura M Krieger	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408356
Reported: 08/13/13 at 02:22 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13217SLG026	Sample number(s): 7146667-7146668,7146671-7146674									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	111		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	101		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	103		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	109		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	108		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	113		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	102		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	109		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	126		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	130		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	107		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	111		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	133*		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	112		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	120		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	112		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	106		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	112		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	109		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	85		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	124		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	101		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	106		71-120		
Batch number: 13213A20A	Sample number(s): 7146675									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	105	100	75-135	4	30
Batch number: 13217B16A	Sample number(s): 7146672,7146674									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	73	71	67-119	3	30
Batch number: 132180024A	Sample number(s): 7146669-7146674									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	70	69	36-106	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	97		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408356
Reported: 08/13/13 at 02:22 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	102		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132140001A	Sample number(s): 7146671-7146674									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	99		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	102		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	105		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	104		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	86		49-107		
Batch number: 132170637002	Sample number(s): 7146671-7146674									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	106		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	106		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	98		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	105		80-120		
Calcium	5.74	J	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	108		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	105		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	105		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	101		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	107		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.54	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	107		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	105		80-120		
Zinc	0.284	J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132170637002A	Sample number(s): 7146671-7146674									
Silver	0.200	U	0.200	0.0260	mg/kg	103		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	103		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	113		80-120		
Batch number: 132170637002B	Sample number(s): 7146671-7146674									
Selenium	0.400	U	0.400	0.100	mg/kg	110		80-120		
Batch number: 132170638002	Sample number(s): 7146671-7146674									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	120		85-120		
Batch number: 13213039401A	Sample number(s): 7146671-7146674									
15a pH by 9045D						100		95-105		
Batch number: 13221162401A	Sample number(s): 7146667-7146674									

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408356
Reported: 08/13/13 at 02:22 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13220001	Sample number(s): 7146669-7146674								
2378-TCDD	1.00 U	1.00	0.0191	ng/kg	90		67-158		
12378-PeCDD	0.0480 J	5.00	0.0196	ng/kg	94		70-142		
123478-HxCDD	0.0477 J	5.00	0.0149	ng/kg	99		70-164		
123678-HxCDD	0.0420 J	5.00	0.0160	ng/kg	96		76-134		
123789-HxCDD	0.0352 J	5.00	0.0151	ng/kg	96		64-162		
1234678-HpCDD	0.0719 J	5.00	0.0147	ng/kg	96		70-140		
OCDD	0.322 J	10.0	0.0147	ng/kg	96		78-144		
2378-TCDF	0.0184 J	1.00	0.0168	ng/kg	92		75-158		
12378-PeCDF	0.0644 J	5.00	0.0120	ng/kg	95		80-134		
23478-PeCDF	5.00 U	5.00	0.0112	ng/kg	96		68-160		
123478-HxCDF	0.0376 J	5.00	0.00880	ng/kg	99		72-134		
123678-HxCDF	0.0498 J	5.00	0.00790	ng/kg	96		84-130		
123789-HxCDF	0.0646 J	5.00	0.00970	ng/kg	98		78-130		
234678-HxCDF	0.0470 J	5.00	0.00800	ng/kg	98		70-156		
1234678-HpCDF	0.0373 J	5.00	0.00600	ng/kg	97		82-122		
1234789-HpCDF	0.0456 J	5.00	0.00970	ng/kg	97		78-138		
OCDF	0.148 J	10.0	0.0232	ng/kg	98		63-170		
TEQ WHO 2005 - EDLx0.0	0.00770			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13217SLG026	Sample number(s): 7146667-7146668,7146671-7146674 UNSPK: 7146667								
Acenaphthene	84	93	48-127	10	30				
Acenaphthylene	82	48*	49-121	52*	30				
Anthracene	80	80	52-126	0	30				
Benzo(a)anthracene	91	88	32-135	3	30				
Benzo(a)pyrene	86	87	36-138	1	30				
Benzo(b)fluoranthene	107	101	26-142	5	30				
Benzo(e)pyrene	88	90	70-130	2	30				
Benzo(g,h,i)perylene	44	42	33-141	6	30				
Benzo(k)fluoranthene	99	114	47-129	14	30				
Butylbenzylphthalate	140	169*	59-153	10	30				
Di-n-butylphthalate	113	126	62-154	9	30				
Chrysene	87	88	29-148	1	30				
Dibenz(a,h)anthracene	60	66	34-125	8	30				
Diethylphthalate	116	152*	76-127	27	30				
Dimethylphthalate	94	60*	62-136	45*	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408356
Reported: 08/13/13 at 02:22 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Bis(2-Ethylhexyl)phthalate	130	117	39-167	7	30				
Fluoranthene	89	97	47-135	8	30				
Fluorene	84	89	50-129	6	30				
Indeno(1,2,3-cd)pyrene	58	59	17-136	1	30				
1-Methylnaphthalene	91	96	50-131	6	30				
2-Methylnaphthalene	88	93	28-144	5	30				
Naphthalene	84	88	31-148	4	30				
N-Nitrosodimethylamine	69	67	48-113	3	30				
Di-n-octylphthalate	156	325*	52-162	70*	30				
Phenanthrene	93	84	29-142	10	30				
Pyrene	89	91	26-143	2	30				
Batch number: 132180024A	Sample number(s): 7146669-7146674 UNSPK: 7146669								
PCB-1016	93	97	16-146	4	50				
PCB-1260	103	109	40-134	6	50				
Batch number: 132140001A	Sample number(s): 7146671-7146674 UNSPK: P145272								
EFH (C12-C14)	100	96	49-123	5	20				
EFH (C15-C20)	110	108	49-123	2	20				
EFH (C21-C30)	91	106	49-123	9	20				
EFH (C30-C40)	151*	165*	49-123	4	20				
EFH (C8-C11)	96	97	49-123	1	20				
Batch number: 132170637002	Sample number(s): 7146671-7146674 UNSPK: 7146671 BKG: 7146671								
Aluminum	3726 (2)	3086 (2)	75-125	4	20	26,100	25,100	4	20
Antimony	45*	45*	75-125	2	20	3.92 U	3.92 U	0 (1)	20
Arsenic	91	94	75-125	2	20	5.44	5.10	7 (1)	20
Barium	99	96	75-125	2	20	115	120	4	20
Beryllium	100	97	75-125	2	20	0.917 J	0.894 J	2 (1)	20
Boron	95	93	75-125	2	20	18.5	18.3	1 (1)	20
Cadmium	90	92	75-125	2	20	0.167 J	0.229 J	32* (1)	20
Calcium	150 (2)	2494 (2)	75-125	65*	20	8,910	9,220	3	20
Chromium	128*	116	75-125	4	20	36.5	35.1	4	20
Cobalt	91	92	75-125	1	20	8.94	9.41	5	20
Copper	106	104	75-125	1	20	18.8	18.8	0	20
Iron	2733 (2)	968 (2)	75-125	5	20	32,400	34,000	5	20
Lead	88	83	75-125	3	20	12.3	12.2	1 (1)	20
Lithium	105	104	75-125	0	20	23.4	22.8	2	20
Magnesium	425 (2)	322 (2)	75-125	3	20	7,000	6,800	3	20
Manganese	114 (2)	340 (2)	75-125	20	20	455	472	4	20
Molybdenum	88	86	75-125	2	20	0.497 J	0.296 J	51* (1)	20
Nickel	93	93	75-125	0	20	17.7	17.9	1	20
Phosphorus	85 (2)	69 (2)	75-125	3	20	422	427	1	20
Potassium	169 (2)	138 (2)	75-125	5	20	4,510	4,430	2	20
Sodium	101	101	75-125	0	20	84.3 J	81.0 J	4 (1)	20
Tin	85	83	75-125	3	20	1.42 J	1.55 J	8 (1)	20
Titanium	469 (2)	350 (2)	75-125	7	20	1,180	1,090	7	20
Vanadium	126*	116	75-125	4	20	62.7	60.8	3	20
Zinc	97	94	75-125	1	20	68.6	68.8	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408356
Reported: 08/13/13 at 02:22 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Zirconium	90	89	75-125	1	20	5.26	5.14	2 (1)	20
Batch number: 132170637002A	Sample number(s): 7146671-7146674 UNSPK: 7146671 BKG: 7146671								
Silver	103	100	75-125	2	20	0.0533 J	0.0529 J	1 (1)	20
Strontium	101	121	75-125	4	20	29.3	27.9	5	20
Thallium	97	97	75-125	0	20	0.306	0.304	1 (1)	20
Batch number: 132170637002B	Sample number(s): 7146671-7146674 UNSPK: 7146671 BKG: 7146671								
Selenium	89	96	75-125	7	20	0.231 J	0.202 J	14 (1)	20
Batch number: 132170638002	Sample number(s): 7146671-7146674 UNSPK: P148145 BKG: P148145								
3a Mercury 7471A	117	120	65-135	3	20	0.0163 J	0.0136 J	18 (1)	20
Batch number: 13213039401A	Sample number(s): 7146671-7146674 BKG: 7146671								
15a pH by 9045D						7.63	7.65	0	3
Batch number: 13221162401A	Sample number(s): 7146667-7146674 BKG: 7146672								
14a Moisture Content by 160.3						9.6	10.4	8	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13217SLG026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7146667	82	77	90
7146668	82	87	100
7146671	79	81	96
7146672	80	85	96
7146673	81	81	94
7146674	80	82	94
Blank	81	83	97
LCS	86	91	103
MS	72	78	85
MSD	75	76	88
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13213A20A

	Trifluorotoluene-F
7146675	87
Blank	88
LCS	117

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408356
Reported: 08/13/13 at 02:22 PM

Surrogate Quality Control

LCSD	118					
Limits:	63-135					

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13217B16A

	Trifluorotoluene-F
7146672	65
7146674	70
Blank	83
LCS	80
LCSD	77
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132180024A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7146669	97	96
7146670	101	99
7146671	101	94
7146672	103	102
7146673	102	92
7146674	104	100
Blank	114	105
LCS	108	111
LCSD	108	111
MS	95	95
MSD	98	91
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132140001A

	Chlorobenzene	Orthoterphenyl
7146671	92	99
7146672	95	100
7146673	91	99
7146674	91	95
Blank	91	96
LCS	99	106
MS	97	99
MSD	92	98
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13220001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7146669	70	63	69	73	69	69
7146670	61	60	65	70	66	66
7146671	72	67	70	74	72	71

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408356
Reported: 08/13/13 at 02:22 PM

Surrogate Quality Control

7146672	68	61	67	71	68	68
7146673	80	68	73	76	73	77
7146674	70	62	67	71	69	66
Blank	62	62	66	72	68	66
OPR	68	70	75	79	77	78
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7146669	76	65	60	69	72	76
7146670	77	59	54	66	69	74
7146671	80	66	61	73	76	78
7146672	75	64	60	68	72	77
7146673	81	69	68	75	79	81
7146674	80	60	58	70	73	79
Blank	81	60	57	65	67	71
OPR	88	71	70	72	75	79
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7146669	73	71	68	60	63	
7146670	71	68	64	53	60	
7146671	77	74	72	61	67	
7146672	73	71	67	56	61	
7146673	78	78	77	65	68	
7146674	75	73	70	57	63	
Blank	68	67	65	55	63	
OPR	77	76	77	62	69	
Limits:	28-130	23-140	17-157	24-169	24-185	

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13013 1408356 7146667-75

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/31/2013
CarrierName: FedEx
AirbillNo: 796364456557

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130731-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Formaldehyde 8315	Cyanide 9012	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-598-SA8-SB-0.0-0.5	7/31/13 09:15	SO	None	1 - SS-Sleeve	10 day							X																								
SL-598-SA8-SB-4.5-5.5	7/31/13 09:40	SO	None	1 - SS-Sleeve	10 day							X																								
SL-599-SA8-SB-0.0-0.5	7/31/13 07:40	SO	None	2 - SS-Sleeve	10 day									X	X																					
SL-599-SA8-SB-3.0-4.0	7/31/13 08:05	SO	None	1 - SS-Sleeve	10 day									X	X																					
SL-536-SA8-SB-0.0-0.5	7/31/13 11:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-536-SA8-SB-0.0-0.5	7/31/13 11:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-536-SA8-SB-4.0-5.0	7/31/13 12:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-536-SA8-SB-4.0-5.0	7/31/13 12:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-536-SA8-SB-4.0-5.0	7/31/13 12:35	SO	None	2 - Encore	10 day																			X												
SL-537-SA8-SB-0.0-0.5	7/31/13 13:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-537-SA8-SB-0.0-0.5	7/31/13 13:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-537-SA8-SB-4.0-5.0	7/31/13 13:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-537-SA8-SB-4.0-5.0	7/31/13 13:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-537-SA8-SB-4.0-5.0	7/31/13 13:40	SO	None	2 - Encore	10 day																			X												
TB-073113	7/31/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												

Special Instructions:

Sampler: A Bennett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Mysel	07/31/2013	1600									
									[illegible]	8/1/13	0915

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1408356

Client/Project: CDM Smith

Date of Receipt: 8/1/13

Time of Receipt: 0915

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	1.3	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: C Eshler 3647 **Date/Time:** 8/1/13 1000

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH082

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 21, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/02/2013
Group Number: 1408723
SDG: PH082
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB1-080113 Water	7148140
EB2-080113 Water	7148141
SL-610-SA8-SB-0.0-0.5 Soil	7148142
SL-610-SA8-SB-4.0-5.0 Soil	7148143
SL-610-SA8-SB-6.8-7.8 Soil	7148144
SL-608-SA8-SB-0.0-0.5 Soil	7148145
SL-608-SA8-SB-4.0-5.0 Soil	7148146
SL-608-SA8-SB-7.0-8.0 Soil	7148147
TB-080113 Water	7148148

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,



Natalie R. Luciano
Senior Specialist

(717) 556-7258

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: EB1-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148140
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:00 by PH

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81EB1 SDG#: PH082-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	1.0	U	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.43	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	1.0	U	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.051	U	0.051	0.010	1
12971	Naphthalene	91-20-3	0.051	U	0.051	0.030	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.030	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Pesticides/PCBs	**SW-846 8082A**		ug/l		ug/l	ug/l	
10591	Aroclor 5432	63496-31-1	0.42	U	0.42	0.085	1
10591	Aroclor 5442	12642-23-8	0.42	U	0.42	0.085	1
10591	Aroclor 5460	11126-42-4	0.42	U	0.42	0.093	1
10591	PCB-1016	12674-11-2	0.42	U	0.42	0.085	1
10591	PCB-1221	11104-28-2	0.42	U	0.42	0.085	1
10591	PCB-1232	11141-16-5	0.42	U	0.42	0.17	1
10591	PCB-1242	53469-21-9	0.42	U	0.42	0.085	1
10591	PCB-1248	12672-29-6	0.42	U	0.42	0.085	1
10591	PCB-1254	11097-69-1	0.42	U	0.42	0.085	1
10591	PCB-1260	11096-82-5	0.42	U	0.42	0.13	1
10591	PCB-1262	37324-23-5	0.42	U	0.42	0.17	1
10591	PCB-1268	11100-14-4	0.42	U	0.42	0.14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/l		mg/l	mg/l	
10365	EFH (C12-C14)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C15-C20)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C21-C30)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C30 - C40)	n.a.	0.50	U	0.50	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148140
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:00 by PH

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81EB1 SDG#: PH082-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C8-C11)	n.a.	0.10 U	0.10	0.050	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.					
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.00039 J	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.9	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148140
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:00 by PH

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81EB1 SDG#: PH082-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.96	U	1.96	0.187	1
10915	12378-PeCDD	40321-76-4	0.175	JBQ	9.79	0.163	1
10915	123478-HxCDD	39227-28-6	0.269	JB	9.79	0.120	1
10915	123678-HxCDD	57653-85-7	0.172	JB	9.79	0.127	1
10915	123789-HxCDD	19408-74-3	9.79	U	9.79	0.127	1
10915	1234678-HpCDD	35822-46-9	0.535	JBQ	9.79	0.145	1
10915	OCDD	3268-87-9	0.883	JBQ	19.6	0.183	1
10915	2378-TCDF	51207-31-9	1.96	U	1.96	0.137	1
10915	12378-PeCDF	57117-41-6	0.300	JBQ	9.79	0.110	1
10915	23478-PeCDF	57117-31-4	0.121	JBQ	9.79	0.0921	1
10915	123478-HxCDF	70648-26-9	0.253	JBQ	9.79	0.0620	1
10915	123678-HxCDF	57117-44-9	0.138	JBQ	9.79	0.0622	1
10915	123789-HxCDF	72918-21-9	0.218	JBQ	9.79	0.104	1
10915	234678-HxCDF	60851-34-5	0.162	JB	9.79	0.0600	1
10915	1234678-HpCDF	67562-39-4	0.187	JBQ	9.79	0.0616	1
10915	1234789-HpCDF	55673-89-7	0.188	JB	9.79	0.0839	1
10915	OCDF	39001-02-0	19.6	U	19.6	0.230	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0622				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	59	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	58	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	49	29 - 147
13C12-1234678-HpCDF	69	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	45	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB1-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148140
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:00 by PH

Submitted: 08/02/2013 09:15
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81EB1 SDG#: PH082-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB1-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148140
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:00 by PH

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3201 Jermantown Road
Suite 400
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81EB1 SDG#: PH082-01EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13215WAD026	08/05/2013 03:18	Brian K Graham	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13215WAD026	08/04/2013 10:45	David S Schrum	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13218A20A	08/07/2013 00:31	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13218A20A	08/07/2013 00:31	Catherine J Schwarz	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	132180008A	08/08/2013 14:02	Monica M Souders	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	132180008A	08/06/2013 17:05	JoElla L Rice	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132170012A	08/07/2013 06:25	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132170012A	08/05/2013 22:50	Karen L Beyer	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224002	08/13/2013 23:41	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	2	13224002	08/12/2013 14:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07044	Antimony	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07035	Arsenic	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07046	Barium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07047	Beryllium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
08014	Boron	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07049	Cadmium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
01750	Calcium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07051	Chromium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07052	Cobalt	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07053	Copper	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
01754	Iron	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07055	Lead	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
01756	Lithium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
01757	Magnesium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07058	Manganese	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07060	Molybdenum	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07061	Nickel	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
10143	Phosphorus	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
01762	Potassium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
01767	Sodium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07069	Tin	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07070	Titanium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07071	Vanadium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
07072	Zinc	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1
10144	Zirconium	SW-846 6010C	1	132190635001	08/10/2013 20:32	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148140
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:00 by PH

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Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81EB1 SDG#: PH082-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06041	Selenium	SW-846 6020A	1	132190639001B	08/08/2013 18:55	David K Beck	1
06042	Silver	SW-846 6020A	1	132190639001A	08/08/2013 18:55	David K Beck	1
06044	Strontium	SW-846 6020A	1	132190639001A	08/08/2013 18:55	David K Beck	1
06045	Thallium	SW-846 6020A	1	132190639001A	08/08/2013 18:55	David K Beck	1
00259	3b Mercury 7470A	SW-846 7470A	1	132185713003	08/07/2013 10:22	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132190635001	08/08/2013 11:00	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132190639001	08/08/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713003	08/06/2013 17:45	Nelli S Markaryan	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13214002102A	08/02/2013 19:59	Clayton C Litchmore	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148141
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:30 by PH

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81EB2 SDG#: PH082-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.18	J	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.49	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.16	J	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.051	U	0.051	0.010	1
12971	Naphthalene	91-20-3	0.033	J	0.051	0.030	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.030	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	
10407	2,4-D	94-75-7	0.49	U	0.49	0.16	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.98	U	0.98	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.078	1
10407	Dinoseb	88-85-7	0.49	U	0.49	0.12	1

The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.

10407	2,4-DP (Dichlorprop)	120-36-5	0.49	U	0.49	0.16	1
10407	MCPA	94-74-6	200	U	200	49	1
10407	MCPP	93-65-2	200	U	200	49	1
10407	2,4,5-T	93-76-5	0.049	U	0.049	0.015	1
10407	2,4,5-TP	93-72-1	0.049	U	0.049	0.0098	1

The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is

*=This limit was used in the evaluation of the final result

Sample Description: EB2-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148141
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:30 by PH

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

81EB2 SDG#: PH082-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
reported.							
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0085	U	0.0085	0.0017	1
10589	Alpha BHC	319-84-6	0.0085	U	0.0085	0.0026	1
10589	Beta BHC	319-85-7	0.0085	U	0.0085	0.0029	1
10589	Gamma BHC - Lindane	58-89-9	0.0085	U	0.0085	0.0017	1
10589	Chlordane	57-74-9	0.43	U	0.43	0.14	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0043	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0043	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0044	1
10589	Delta BHC	319-86-8	0.0085	U	0.0085	0.0029	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0045	1
10589	Endosulfan I	959-98-8	0.0085	U	0.0085	0.0037	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0049	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0069	1
10589	Endrin Aldehyde	7421-93-4	0.085	U	0.085	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0043	1
10589	Heptachlor	76-44-8	0.0085	U	0.0085	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0085	U	0.0085	0.0020	1
10589	Methoxychlor	72-43-5	0.085	U	0.085	0.026	1
10589	Mirex	2385-85-5	0.21	U	0.21	0.072	1
10589	Toxaphene	8001-35-2	2.6	U	2.6	0.85	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.43	U	0.43	0.085	1
10591	Aroclor 5442	12642-23-8	0.43	U	0.43	0.085	1
10591	Aroclor 5460	11126-42-4	0.43	U	0.43	0.094	1
10591	PCB-1016	12674-11-2	0.43	U	0.43	0.085	1
10591	PCB-1221	11104-28-2	0.43	U	0.43	0.085	1
10591	PCB-1232	11141-16-5	0.43	U	0.43	0.17	1
10591	PCB-1242	53469-21-9	0.43	U	0.43	0.085	1
10591	PCB-1248	12672-29-6	0.43	U	0.43	0.085	1
10591	PCB-1254	11097-69-1	0.43	U	0.43	0.085	1
10591	PCB-1260	11096-82-5	0.43	U	0.43	0.13	1
10591	PCB-1262	37324-23-5	0.43	U	0.43	0.17	1
10591	PCB-1268	11100-14-4	0.43	U	0.43	0.14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C15-C20)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C21-C30)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C30 - C40)	n.a.	0.48	U	0.48	0.097	1
10365	EFH (C8-C11)	n.a.	0.097	U	0.097	0.048	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148141
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:30 by PH

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

81EB2 SDG#: PH082-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.9	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148141
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

81EB2 SDG#: PH082-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.270	JBQ	1.92	0.202	1
10915	12378-PeCDD	40321-76-4	1.84	JB	9.62	0.197	1
10915	123478-HxCDD	39227-28-6	1.74	JBQ	9.62	0.174	1
10915	123678-HxCDD	57653-85-7	1.45	JBQ	9.62	0.195	1
10915	123789-HxCDD	19408-74-3	1.77	JBQ	9.62	0.193	1
10915	1234678-HpCDD	35822-46-9	1.92	JB	9.62	0.176	1
10915	OCDD	3268-87-9	3.88	JB	19.2	0.205	1
10915	2378-TCDF	51207-31-9	1.92	U	1.92	0.153	1
10915	12378-PeCDF	57117-41-6	1.94	JBQ	9.62	0.122	1
10915	23478-PeCDF	57117-31-4	1.58	JB	9.62	0.103	1
10915	123478-HxCDF	70648-26-9	1.90	JBQ	9.62	0.103	1
10915	123678-HxCDF	57117-44-9	1.48	JB	9.62	0.102	1
10915	123789-HxCDF	72918-21-9	1.68	JB	9.62	0.131	1
10915	234678-HxCDF	60851-34-5	1.48	JBQ	9.62	0.0975	1
10915	1234678-HpCDF	67562-39-4	1.65	JB	9.62	0.0803	1
10915	1234789-HpCDF	55673-89-7	1.47	JBQ	9.62	0.122	1
10915	OCDF	39001-02-0	4.13	JB	19.2	0.280	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	2.66				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB2-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148141
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:30 by PH

Submitted: 08/02/2013 09:15
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CDM Federal Programs Corp.
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81EB2 SDG#: PH082-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB2-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148141
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:30 by PH

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3201 Jermantown Road
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81EB2 SDG#: PH082-02EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220WAE026	08/12/2013 16:49	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	2	13220WAE026	08/08/2013 16:00	David S Schrum	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13218A20A	08/07/2013 00:53	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13218A20A	08/07/2013 00:53	Catherine J Schwarz	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132190003A	08/09/2013 23:41	Melissa McDermott	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132180009A	08/07/2013 15:19	Jamie L Brillhart	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	132180008A	08/08/2013 14:21	Monica M Souders	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	132180008A	08/06/2013 17:05	JoElla L Rice	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132180009A	08/06/2013 17:05	JoElla L Rice	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132190003A	08/07/2013 15:00	Seth A Farrier	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132170012A	08/07/2013 06:46	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132170012A	08/05/2013 22:50	Karen L Beyer	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218003	08/09/2013 21:27	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13218003	08/07/2013 14:30	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07044	Antimony	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07035	Arsenic	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07046	Barium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07047	Beryllium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
08014	Boron	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07049	Cadmium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
01750	Calcium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07051	Chromium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07052	Cobalt	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07053	Copper	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
01754	Iron	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07055	Lead	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
01756	Lithium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
01757	Magnesium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07058	Manganese	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07060	Molybdenum	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07061	Nickel	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1

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Sample Description: EB2-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148141
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 15:30 by PH

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Fairfax VA 22030

81EB2 SDG#: PH082-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10143	Phosphorus	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
01762	Potassium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
01767	Sodium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07069	Tin	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07070	Titanium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07071	Vanadium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
07072	Zinc	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
10144	Zirconium	SW-846 6010C	1	132190635001	08/10/2013 20:36	John P Hook	1
06041	Selenium	SW-846 6020A	1	132190639001B	08/08/2013 18:58	David K Beck	1
06042	Silver	SW-846 6020A	1	132190639001A	08/08/2013 18:58	David K Beck	1
06044	Strontium	SW-846 6020A	1	132190639001A	08/08/2013 18:58	David K Beck	1
06045	Thallium	SW-846 6020A	1	132190639001A	08/08/2013 18:58	David K Beck	1
00259	3b Mercury 7470A	SW-846 7470A	1	132185713003	08/07/2013 10:24	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132190635001	08/08/2013 11:00	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132190639001	08/08/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713003	08/06/2013 17:45	Nelli S Markaryan	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13214002102A	08/02/2013 20:02	Clayton C Litchmore	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148142
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61000 SDG#: PH082-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	0.35	J	1.7	0.34	1
12969	Anthracene	120-12-7	0.70	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.0	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	0.91	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	2.6		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.1	J	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.2	1
12969	Di-n-butylphthalate	84-74-2	16	J	18	6.2	1
12969	Chrysene	218-01-9	2.2		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.2	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.3	J	18	6.2	1
12969	Fluoranthene	206-44-0	2.2		1.7	0.68	1
12969	Fluorene	86-73-7	2.4		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	0.80	J	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.1	J	1.7	0.68	1
12969	Naphthalene	91-20-3	1.4	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.2	1
12969	Phenanthrene	85-01-8	6.6		1.7	0.68	1
12969	Pyrene	129-00-0	2.0		1.7	0.68	1
	The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken: The sample was re-analyzed and internal standard areas are again outside of the QC acceptance limits, indicating a matrix effect. The reported data is from the initial analysis of the sample.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	93	U	93	45	1
10401	2,4-DB	94-82-6	28		18	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.86	U	0.86	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148142
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61000 SDG#: PH082-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Alpha BHC	319-84-6	0.86	U	0.86	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.86	U	0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	1.8	1
10590	p,p-DDT	50-29-3	12	U	12	12	1
10590	Delta BHC	319-86-8	0.86	U	0.86	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.75	1
10590	Endosulfan I	959-98-8	0.86	U	0.86	0.23	1
10590	Endosulfan II	33213-65-9	1.1	J	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	1.4	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.99	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.86	U	0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.86	U	0.86	0.37	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.8	1
10590	Mirex	2385-85-5	2.6	U	2.6	2.6	1
10590	Toxaphene	8001-35-2	34	U	34	15	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	53		17	4.5	1
10592	PCB-1260	11096-82-5	31		17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	10	U	10	4.1	2
12952	EFH (C15-C20)	n.a.	4.7	J	10	4.1	2
12952	EFH (C21-C30)	n.a.	46		10	4.1	2
12952	EFH (C30-C40)	n.a.	110		21	8.3	2
12952	EFH (C8-C11)	n.a.	10	U	10	4.1	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,300		41.2	7.43	1
06944	Antimony	7440-36-0	4.12	U	4.12	0.762	1
06935	Arsenic	7440-38-2	4.26		4.12	0.721	1
06946	Barium	7440-39-3	88.1		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.618	J	1.03	0.0690	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148142
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61000 SDG#: PH082-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
07914	Boron	7440-42-8	21.2		10.3	0.865	1
06949	Cadmium	7440-43-9	0.282	J	1.03	0.0783	1
01650	Calcium	7440-70-2	75,500		41.2	6.88	2
06951	Chromium	7440-47-3	29.5		3.09	0.165	1
06952	Cobalt	7440-48-4	7.90		1.03	0.102	1
06953	Copper	7440-50-8	17.1		2.06	0.299	1
01654	Iron	7439-89-6	30,800		82.4	7.46	2
06955	Lead	7439-92-1	13.1		3.09	0.515	1
01656	Lithium	7439-93-2	21.6		4.1	0.35	1
01657	Magnesium	7439-95-4	6,990		10.3	1.72	1
06958	Manganese	7439-96-5	360		1.03	0.0855	1
06960	Molybdenum	7439-98-7	0.218	J	2.06	0.175	1
06961	Nickel	7440-02-0	15.3		2.06	0.134	1
10145	Phosphorus	7723-14-0	673		10.3	2.98	1
01662	Potassium	7440-09-7	5,990		103	8.59	1
01667	Sodium	7440-23-5	113		103	17.2	1
06969	Tin	7440-31-5	1.36	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,060		1.03	0.175	1
06971	Vanadium	7440-62-2	57.4		1.03	0.134	1
06972	Zinc	7440-66-6	75.4		4.12	0.206	1
10146	Zirconium	7440-67-7	2.14	J	5.15	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.353	J	0.412	0.103	2
06142	Silver	7440-22-4	0.206	U	0.206	0.0268	2
06144	Strontium	7440-24-6	123		1.03	0.175	5
06145	Thallium	7440-28-0	0.284		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0228		0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.51		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148142
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61000 SDG#: PH082-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0674	1
11031	12378-PeCDD	40321-76-4	0.158	JBQ	5.11	0.125	1
11031	123478-HxCDD	39227-28-6	0.106	JQ	5.11	0.0493	1
11031	123678-HxCDD	57653-85-7	0.279	JBQ	5.11	0.0566	1
11031	123789-HxCDD	19408-74-3	0.202	J	5.11	0.0544	1
11031	1234678-HpCDD	35822-46-9	5.59	B	5.11	0.0968	1
11031	OCDD	3268-87-9	51.3	B	10.2	0.0489	1
11650	2378-TCDF-Conf	51207-31-9	1.31	C	1.02	0.123	1
11031	12378-PeCDF	57117-41-6	10.3		5.11	0.0908	1
11031	23478-PeCDF	57117-31-4	0.411	JB	5.11	0.0931	1
11031	123478-HxCDF	70648-26-9	0.376	J	5.11	0.0578	1
11031	123678-HxCDF	57117-44-9	0.757	JQ	5.11	0.0573	1
11031	123789-HxCDF	72918-21-9	5.11	U	5.11	0.0776	1
11031	234678-HxCDF	60851-34-5	0.399	J	5.11	0.0531	1
11031	1234678-HpCDF	67562-39-4	1.24	JB	5.11	0.0355	1
11031	1234789-HpCDF	55673-89-7	0.0791	JBQ	5.11	0.0642	1
11031	OCDF	39001-02-0	2.49	JB	10.2	0.0775	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.746				1

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148142
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61000 SDG#: PH082-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 09:50	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132200020A	08/13/2013 08:21	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 16:23	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 19:34	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	2	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132200020A	08/09/2013 07:30	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/09/2013 18:41	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/13/2013 22:34	Joseph D Anderson	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	13224001	08/15/2013 05:25	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/12/2013 09:41	Eric L Eby	2
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 09:41	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148142
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61000 SDG#: PH082-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 18:55	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:42	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:42	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 20:52	David K Beck	5
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:42	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 06:36	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13214039401A	08/02/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148143
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:20 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61045 SDG#: PH082-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.2	J	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	0.99	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.4	U	1.4	0.3	31.81
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	100	U	100	49	1
10401	2,4-DB	94-82-6	19	U	19	6.9	1
10401	Dicamba	1918-00-9	13	U	13	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	850	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	840	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.92	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.84	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.93	U	0.93	0.19	1
10590	Alpha BHC	319-84-6	0.93	U	0.93	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.93	U	0.93	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148143
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:20 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61045 SDG#: PH082-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.93	U	0.93	0.51	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.93	U	0.93	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.93	U	0.93	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.93	U	0.93	0.19	1
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	12	J	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	6.3		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,800		44.2	7.97	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.818	1
06935	Arsenic	7440-38-2	6.53		4.42	0.774	1
06946	Barium	7440-39-3	116		1.11	0.0365	1
06947	Beryllium	7440-41-7	0.875	J	1.11	0.0741	1
07914	Boron	7440-42-8	20.8		11.1	0.928	1
06949	Cadmium	7440-43-9	0.216	J	1.11	0.0840	1
01650	Calcium	7440-70-2	43,100		22.1	3.69	1
06951	Chromium	7440-47-3	38.2		3.32	0.177	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148143
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:20 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61045 SDG#: PH082-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	10.3		1.11	0.109	1
06953	Copper	7440-50-8	20.0		2.21	0.321	1
01654	Iron	7439-89-6	38,000		88.4	8.00	2
06955	Lead	7439-92-1	11.7		3.32	0.553	1
01656	Lithium	7439-93-2	26.5		4.4	0.38	1
01657	Magnesium	7439-95-4	8,050		11.1	1.85	1
06958	Manganese	7439-96-5	413		1.11	0.0917	1
06960	Molybdenum	7439-98-7	0.202	J	2.21	0.188	1
06961	Nickel	7440-02-0	19.4		2.21	0.144	1
10145	Phosphorus	7723-14-0	864		11.1	3.19	1
01662	Potassium	7440-09-7	5,160		111	9.22	1
01667	Sodium	7440-23-5	124		111	18.5	1
06969	Tin	7440-31-5	1.38	J	11.1	0.243	1
06970	Titanium	7440-32-6	1,330		1.11	0.188	1
06971	Vanadium	7440-62-2	76.0		1.11	0.144	1
06972	Zinc	7440-66-6	78.5		4.42	0.221	1
10146	Zirconium	7440-67-7	3.46	J	5.53	0.928	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.280	J	0.442	0.111	2
06142	Silver	7440-22-4	0.0517	J	0.221	0.0287	2
06144	Strontium	7440-24-6	89.5		0.442	0.0752	2
06145	Thallium	7440-28-0	0.364		0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0132	J	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.18		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148143
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:20 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61045 SDG#: PH082-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.11	U	1.11	0.0914	1
11031	12378-PeCDD	40321-76-4	5.55	U	5.55	0.0886	1
11031	123478-HxCDD	39227-28-6	5.55	U	5.55	0.0384	1
11031	123678-HxCDD	57653-85-7	0.0483	JBQ	5.55	0.0446	1
11031	123789-HxCDD	19408-74-3	5.55	U	5.55	0.0445	1
11031	1234678-HpCDD	35822-46-9	0.187	JBQ	5.55	0.0635	1
11031	OCDD	3268-87-9	1.62	JB	11.1	0.0574	1
11031	2378-TCDF	51207-31-9	1.11	U	1.11	0.0995	1
11031	12378-PeCDF	57117-41-6	0.0546	JQ	5.55	0.0454	1
11031	23478-PeCDF	57117-31-4	5.55	U	5.55	0.0457	1
11031	123478-HxCDF	70648-26-9	0.0370	JQ	5.55	0.0278	1
11031	123678-HxCDF	57117-44-9	5.55	U	5.55	0.0263	1
11031	123789-HxCDF	72918-21-9	0.0505	JQ	5.55	0.0441	1
11031	234678-HxCDF	60851-34-5	5.55	U	5.55	0.0264	1
11031	1234678-HpCDF	67562-39-4	0.0296	JBQ	5.55	0.0172	1
11031	1234789-HpCDF	55673-89-7	5.55	U	5.55	0.0381	1
11031	OCDF	39001-02-0	0.223	JBQ	11.1	0.0820	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.000451				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	56	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	51	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148143
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:20 by TB

Submitted: 08/02/2013 09:15
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61045 SDG#: PH082-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148143
LL Group # 1408723
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Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:20 by TB

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3201 Jermantown Road
Suite 400
Fairfax VA 22030

61045 SDG#: PH082-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 07:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 16:23	Laura M Krieger	31.81
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321431927	08/02/2013 15:49	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321431927	08/02/2013 15:50	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 11:22	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 16:53	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 19:53	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	2	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	2	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 18:35	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/13/2013 23:30	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 09:45	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148143
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:20 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
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61045 SDG#: PH082-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 18:59	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:45	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:45	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 20:54	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:45	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 06:38	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13214039401A	08/02/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-6.8-7.8 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148144
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 09:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61068 SDG#: PH082-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.6	U	1.6	0.3	35.71
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	99	U	99	49	1
10401	2,4-DB	94-82-6	19	U	19	6.8	1
10401	Dicamba	1918-00-9	13	U	13	4.4	1
10401	Dinoseb	88-85-7	26	U	26	9.9	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	9.9	1
10401	MCPA	94-74-6	2,800	U	2,800	840	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	830	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.90	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.83	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-6.8-7.8 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148144
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 09:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61068 SDG#: PH082-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.38	1
10590	Delta BHC	319-86-8	0.91	U	0.91	0.49	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1
10590	Methoxychlor	72-43-5	7.4	U	7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	6.3	J	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	4.4	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	8.4	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,800		43.8	7.90	1
06944	Antimony	7440-36-0	4.38	U	4.38	0.810	1
06935	Arsenic	7440-38-2	4.99		4.38	0.767	1
06946	Barium	7440-39-3	108		1.10	0.0361	1
06947	Beryllium	7440-41-7	0.689	J	1.10	0.0734	1
07914	Boron	7440-42-8	19.1		11.0	0.920	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-6.8-7.8 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148144
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 09:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61068 SDG#: PH082-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.216	J	1.10	0.0832	1
01650	Calcium	7440-70-2	89,600		43.8	7.32	2
06951	Chromium	7440-47-3	33.5		3.29	0.175	1
06952	Cobalt	7440-48-4	8.62		1.10	0.108	1
06953	Copper	7440-50-8	15.9		2.19	0.318	1
01654	Iron	7439-89-6	32,500		87.6	7.93	2
06955	Lead	7439-92-1	9.92		3.29	0.548	1
01656	Lithium	7439-93-2	23.8		4.4	0.37	1
01657	Magnesium	7439-95-4	6,950		11.0	1.83	1
06958	Manganese	7439-96-5	366		1.10	0.0909	1
06960	Molybdenum	7439-98-7	2.19	U	2.19	0.186	1
06961	Nickel	7440-02-0	16.2		2.19	0.142	1
10145	Phosphorus	7723-14-0	467		11.0	3.17	1
01662	Potassium	7440-09-7	3,020		110	9.13	1
01667	Sodium	7440-23-5	115		110	18.3	1
06969	Tin	7440-31-5	1.43	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,170		1.10	0.186	1
06971	Vanadium	7440-62-2	64.9		1.10	0.142	1
06972	Zinc	7440-66-6	64.2		4.38	0.219	1
10146	Zirconium	7440-67-7	3.34	J	5.48	0.920	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.238	J	0.438	0.110	2
06142	Silver	7440-22-4	0.0475	J	0.219	0.0285	2
06144	Strontium	7440-24-6	108		1.10	0.186	5
06145	Thallium	7440-28-0	0.255		0.219	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0135	J	0.0181	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.30		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-6.8-7.8 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148144
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 09:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61068 SDG#: PH082-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 07:41	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 17:01	Laura M Krieger	35.71
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321431927	08/02/2013 15:54	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321431927	08/02/2013 15:54	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132200020A	08/13/2013 10:08	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 17:08	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 20:11	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	2	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132200020A	08/09/2013 07:30	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 18:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/12/2013 09:49	Eric L Eby	2
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 09:49	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 19:04	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:47	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:47	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-610-SA8-SB-6.8-7.8 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148144
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 09:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61068 SDG#: PH082-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 20:56	David K Beck	5
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:47	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 06:40	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13214039401A	08/02/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148145
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 12:10 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60800 SDG#: PH082-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	0.86	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.99	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.0	J	19	6.2	1
12969	Fluoranthene	206-44-0	0.82	J	1.7	0.69	1
12969	Fluorene	86-73-7	1.2	J	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	0.69	J	1.7	0.69	1
12969	Naphthalene	91-20-3	0.75	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	0.86	J	1.7	0.69	1
12969	Pyrene	129-00-0	0.74	J	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	670	U	670	200	20
10592	Aroclor 5442	12642-23-8	670	U	670	200	20
10592	Aroclor 5460	11126-42-4	670	U	670	200	20
10592	PCB-1016	12674-11-2	340	U	340	67	20
10592	PCB-1221	11104-28-2	340	U	340	100	20
10592	PCB-1232	11141-16-5	340	U	340	83	20
10592	PCB-1242	53469-21-9	340	U	340	83	20
10592	PCB-1248	12672-29-6	340	U	340	67	20
10592	PCB-1254	11097-69-1	340	U	340	89	20
10592	PCB-1260	11096-82-5	340	U	340	79	20
10592	PCB-1262	37324-23-5	340	U	340	67	20
10592	PCB-1268	11100-14-4	340	U	340	67	20
	Reporting limits were raised due to interference from the sample matrix.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	20		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	47		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148145
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 12:10 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60800 SDG#: PH082-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,100		39.6	7.13	1
06944	Antimony	7440-36-0	3.96	U	3.96	0.732	1
06935	Arsenic	7440-38-2	4.88		3.96	0.692	1
06946	Barium	7440-39-3	100		0.989	0.0326	1
06947	Beryllium	7440-41-7	0.721	J	0.989	0.0663	1
07914	Boron	7440-42-8	21.1		9.89	0.831	1
06949	Cadmium	7440-43-9	0.193	J	0.989	0.0752	1
01650	Calcium	7440-70-2	58,800		39.6	6.61	2
06951	Chromium	7440-47-3	33.4		2.97	0.158	1
06952	Cobalt	7440-48-4	9.01		0.989	0.0979	1
06953	Copper	7440-50-8	18.6		1.98	0.287	1
01654	Iron	7439-89-6	32,900		79.1	7.16	2
06955	Lead	7439-92-1	11.2		2.97	0.495	1
01656	Lithium	7439-93-2	25.8		4.0	0.34	1
01657	Magnesium	7439-95-4	8,070		9.89	1.65	1
06958	Manganese	7439-96-5	367		0.989	0.0821	1
06960	Molybdenum	7439-98-7	1.98	U	1.98	0.168	1
06961	Nickel	7440-02-0	16.3		1.98	0.129	1
10145	Phosphorus	7723-14-0	673		9.89	2.86	1
01662	Potassium	7440-09-7	6,190		98.9	8.25	1
01667	Sodium	7440-23-5	136		98.9	16.5	1
06969	Tin	7440-31-5	1.38	J	9.89	0.218	1
06970	Titanium	7440-32-6	1,210		0.989	0.168	1
06971	Vanadium	7440-62-2	65.2		0.989	0.129	1
06972	Zinc	7440-66-6	78.6		3.96	0.198	1
10146	Zirconium	7440-67-7	2.17	J	4.95	0.831	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.363	J	0.396	0.0989	2
06142	Silver	7440-22-4	0.0309	J	0.198	0.0257	2
06144	Strontium	7440-24-6	143		0.989	0.168	5
06145	Thallium	7440-28-0	0.340		0.198	0.0297	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	J	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.00		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148145
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 12:10 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60800 SDG#: PH082-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0784	1
11031	12378-PeCDD	40321-76-4	5.02	U	5.02	0.111	1
11031	123478-HxCDD	39227-28-6	5.02	U	5.02	0.0421	1
11031	123678-HxCDD	57653-85-7	0.129	JBQ	5.02	0.0461	1
11031	123789-HxCDD	19408-74-3	0.105	J	5.02	0.0485	1
11031	1234678-HpCDD	35822-46-9	1.73	JB	5.02	0.0844	1
11031	OCDD	3268-87-9	21.5	B	10.0	0.0547	1
11031	2378-TCDF	51207-31-9	0.194	JQ	1.00	0.187	1
11031	12378-PeCDF	57117-41-6	4.47	J	5.02	0.0704	1
11031	23478-PeCDF	57117-31-4	0.221	JBQ	5.02	0.0789	1
11031	123478-HxCDF	70648-26-9	0.161	JQ	5.02	0.0483	1
11031	123678-HxCDF	57117-44-9	0.203	JQ	5.02	0.0421	1
11031	123789-HxCDF	72918-21-9	5.02	U	5.02	0.0698	1
11031	234678-HxCDF	60851-34-5	0.215	JQ	5.02	0.0464	1
11031	1234678-HpCDF	67562-39-4	0.460	JB	5.02	0.0278	1
11031	1234789-HpCDF	55673-89-7	0.0732	JB	5.02	0.0596	1
11031	OCDF	39001-02-0	0.858	JB	10.0	0.0797	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.174				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	59	28 - 136
13C12-123789-HxCDF	54	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148145
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 12:10 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60800 SDG#: PH082-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148145
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 12:10 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60800 SDG#: PH082-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 08:13	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 20:48	Monica M Souders	20
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 19:57	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 00:27	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/12/2013 10:00	Eric L Eby	2
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 10:00	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 19:08	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:49	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:49	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 20:58	David K Beck	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148145
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 12:10 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60800 SDG#: PH082-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:49	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 06:42	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13214039401A	08/02/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148146
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60845 SDG#: PH082-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	0.55	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	24		19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	0.92	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.6	U	1.6	0.3	36.76
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	360	U	360	110	10
10592	Aroclor 5442	12642-23-8	360	U	360	110	10
10592	Aroclor 5460	11126-42-4	360	U	360	110	10
10592	PCB-1016	12674-11-2	180	U	180	36	10
10592	PCB-1221	11104-28-2	180	U	180	55	10
10592	PCB-1232	11141-16-5	180	U	180	44	10
10592	PCB-1242	53469-21-9	180	U	180	44	10
10592	PCB-1248	12672-29-6	180	U	180	36	10
10592	PCB-1254	11097-69-1	180	U	180	47	10
10592	PCB-1260	11096-82-5	180	U	180	42	10
10592	PCB-1262	37324-23-5	180	U	180	36	10
10592	PCB-1268	11100-14-4	180	U	180	36	10
Reporting limits were raised due to interference from the sample matrix.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148146
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60845 SDG#: PH082-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	2.2	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	12		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	30		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,800		43.4	7.83	1
06944	Antimony	7440-36-0	4.34	U	4.34	0.803	1
06935	Arsenic	7440-38-2	5.68		4.34	0.760	1
06946	Barium	7440-39-3	115		1.09	0.0358	1
06947	Beryllium	7440-41-7	0.837	J	1.09	0.0727	1
07914	Boron	7440-42-8	20.5		10.9	0.912	1
06949	Cadmium	7440-43-9	0.172	J	1.09	0.0825	1
01650	Calcium	7440-70-2	48,100		21.7	3.63	1
06951	Chromium	7440-47-3	36.5		3.26	0.174	1
06952	Cobalt	7440-48-4	9.78		1.09	0.107	1
06953	Copper	7440-50-8	20.3		2.17	0.315	1
01654	Iron	7439-89-6	37,500		86.9	7.86	2
06955	Lead	7439-92-1	11.4		3.26	0.543	1
01656	Lithium	7439-93-2	30.7		4.3	0.37	1
01657	Magnesium	7439-95-4	8,650		10.9	1.81	1
06958	Manganese	7439-96-5	382		1.09	0.0901	1
06960	Molybdenum	7439-98-7	0.229	J	2.17	0.185	1
06961	Nickel	7440-02-0	18.4		2.17	0.141	1
10145	Phosphorus	7723-14-0	640		10.9	3.14	1
01662	Potassium	7440-09-7	5,580		109	9.05	1
01667	Sodium	7440-23-5	226		109	18.1	1
06969	Tin	7440-31-5	1.32	J	10.9	0.239	1
06970	Titanium	7440-32-6	1,250		1.09	0.185	1
06971	Vanadium	7440-62-2	70.7		1.09	0.141	1
06972	Zinc	7440-66-6	81.0		4.34	0.217	1
10146	Zirconium	7440-67-7	3.32	J	5.43	0.912	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.339	J	0.434	0.109	2
06142	Silver	7440-22-4	0.0454	J	0.217	0.0282	2
06144	Strontium	7440-24-6	111		1.09	0.185	5
06145	Thallium	7440-28-0	0.352		0.217	0.0326	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0117	J	0.0179	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.13		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148146
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60845 SDG#: PH082-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	8.8	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148146
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:00 by TB

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60845 SDG#: PH082-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0659	1
11031	12378-PeCDD	40321-76-4	0.218	JBQ	5.33	0.0661	1
11031	123478-HxCDD	39227-28-6	0.0654	JQ	5.33	0.0326	1
11031	123678-HxCDD	57653-85-7	0.0809	JBQ	5.33	0.0353	1
11031	123789-HxCDD	19408-74-3	0.0692	JQ	5.33	0.0351	1
11031	1234678-HpCDD	35822-46-9	0.423	JBQ	5.33	0.0541	1
11031	OCDD	3268-87-9	3.56	JB	10.7	0.0456	1
11031	2378-TCDF	51207-31-9	0.128	JQ	1.07	0.0860	1
11031	12378-PeCDF	57117-41-6	1.18	J	5.33	0.0457	1
11031	23478-PeCDF	57117-31-4	0.376	JBQ	5.33	0.0438	1
11031	123478-HxCDF	70648-26-9	0.163	JQ	5.33	0.0247	1
11031	123678-HxCDF	57117-44-9	0.0906	JQ	5.33	0.0237	1
11031	123789-HxCDF	72918-21-9	0.0397	J	5.33	0.0336	1
11031	234678-HxCDF	60851-34-5	0.102	JQ	5.33	0.0249	1
11031	1234678-HpCDF	67562-39-4	0.124	JBQ	5.33	0.0168	1
11031	1234789-HpCDF	55673-89-7	0.0541	JBQ	5.33	0.0314	1
11031	OCDF	39001-02-0	0.190	JBQ	10.7	0.0693	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0405				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148146
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60845 SDG#: PH082-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148146
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60845 SDG#: PH082-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 08:45	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 17:39	Laura M Krieger	36.76
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321431927	08/02/2013 15:55	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321431927	08/02/2013 15:56	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 21:07	Monica M Souders	10
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 20:18	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 01:24	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 10:04	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148146
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:00 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60845 SDG#: PH082-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 19:13	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:52	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:52	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 20:59	David K Beck	5
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:52	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 06:52	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13214039401A	08/02/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148147
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:45 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60878 SDG#: PH082-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	0.61	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	20	6.5	1
12969	Fluoranthene	206-44-0	0.75	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	0.79	J	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1

The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken: The sample was re-analyzed and internal standard areas are again outside of the QC acceptance limits, indicating a matrix effect. The reported data is from the initial analysis of the sample.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.6	U	1.6	0.3	35.61
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	360	U	360	110	10
10592	Aroclor 5442	12642-23-8	360	U	360	110	10
10592	Aroclor 5460	11126-42-4	360	U	360	110	10
10592	PCB-1016	12674-11-2	180	U	180	36	10
10592	PCB-1221	11104-28-2	180	U	180	55	10
10592	PCB-1232	11141-16-5	180	U	180	44	10
10592	PCB-1242	53469-21-9	180	U	180	44	10
10592	PCB-1248	12672-29-6	180	U	180	36	10
10592	PCB-1254	11097-69-1	180	U	180	47	10
10592	PCB-1260	11096-82-5	180	U	180	42	10

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148147
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:45 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60878 SDG#: PH082-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1262	37324-23-5	180	U	180	36	10
10592	PCB-1268	11100-14-4	180	U	180	36	10
	Reporting limits were raised due to interference from the sample matrix.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	17		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	34		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,100		43.0	7.74	1
06944	Antimony	7440-36-0	4.30	U	4.30	0.795	1
06935	Arsenic	7440-38-2	5.73		4.30	0.752	1
06946	Barium	7440-39-3	112		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.787	J	1.07	0.0719	1
07914	Boron	7440-42-8	20.6		10.7	0.902	1
06949	Cadmium	7440-43-9	0.226	J	1.07	0.0816	1
01650	Calcium	7440-70-2	66,100		43.0	7.17	2
06951	Chromium	7440-47-3	37.2		3.22	0.172	1
06952	Cobalt	7440-48-4	9.37		1.07	0.106	1
06953	Copper	7440-50-8	19.1		2.15	0.311	1
01654	Iron	7439-89-6	35,500		85.9	7.77	2
06955	Lead	7439-92-1	10.4		3.22	0.537	1
01656	Lithium	7439-93-2	30.9		4.3	0.37	1
01657	Magnesium	7439-95-4	8,680		10.7	1.79	1
06958	Manganese	7439-96-5	391		1.07	0.0891	1
06960	Molybdenum	7439-98-7	2.15	U	2.15	0.183	1
06961	Nickel	7440-02-0	18.1		2.15	0.140	1
10145	Phosphorus	7723-14-0	645		10.7	3.10	1
01662	Potassium	7440-09-7	5,340		107	8.96	1
01667	Sodium	7440-23-5	238		107	17.9	1
06969	Tin	7440-31-5	1.25	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,310		1.07	0.183	1
06971	Vanadium	7440-62-2	70.0		1.07	0.140	1
06972	Zinc	7440-66-6	78.6		4.30	0.215	1
10146	Zirconium	7440-67-7	3.60	J	5.37	0.902	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.326	J	0.430	0.107	2
06142	Silver	7440-22-4	0.0361	J	0.215	0.0279	2
06144	Strontium	7440-24-6	137		1.07	0.183	5
06145	Thallium	7440-28-0	0.368		0.215	0.0322	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	J	0.0181	0.0108	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148147
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:45 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60878 SDG#: PH082-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	8.04	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	8.7	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148147
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:45 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60878 SDG#: PH082-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0670	1
11031	12378-PeCDD	40321-76-4	5.44	U	5.44	0.152	1
11031	123478-HxCDD	39227-28-6	5.44	U	5.44	0.0640	1
11031	123678-HxCDD	57653-85-7	5.44	U	5.44	0.0727	1
11031	123789-HxCDD	19408-74-3	5.44	U	5.44	0.0645	1
11031	1234678-HpCDD	35822-46-9	0.483	JBQ	5.44	0.101	1
11031	OCDD	3268-87-9	6.83	JB	10.9	0.0965	1
11031	2378-TCDF	51207-31-9	0.145	J	1.09	0.142	1
11031	12378-PeCDF	57117-41-6	0.943	JQ	5.44	0.0884	1
11031	23478-PeCDF	57117-31-4	5.44	U	5.44	0.0975	1
11031	123478-HxCDF	70648-26-9	0.169	JQ	5.44	0.0596	1
11031	123678-HxCDF	57117-44-9	0.0967	J	5.44	0.0516	1
11031	123789-HxCDF	72918-21-9	5.44	U	5.44	0.0666	1
11031	234678-HxCDF	60851-34-5	0.0529	JQ	5.44	0.0486	1
11031	1234678-HpCDF	67562-39-4	0.136	JBQ	5.44	0.0321	1
11031	1234789-HpCDF	55673-89-7	5.44	U	5.44	0.0783	1
11031	OCDF	39001-02-0	0.289	JB	10.9	0.180	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0264				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	49	25 - 181
13C12-123478-HxCDD	39	32 - 141
13C12-123678-HxCDD	42	28 - 130
13C12-123789-HxCDD	47	28 - 130
13C12-1234678-HpCDD	43	23 - 140
13C12-OCDD	44	17 - 157
13C12-2378-TCDF	49	24 - 169
13C12-12378-PeCDF	51	24 - 185
13C12-23478-PeCDF	43	21 - 178
13C12-123478-HxCDF	31	26 - 152
13C12-123678-HxCDF	37	26 - 123
13C12-234678-HxCDF	37	28 - 136
13C12-123789-HxCDF	38	29 - 147
13C12-1234678-HpCDF	48	28 - 143
13C12-1234789-HpCDF	27	26 - 138
13C12-OCDF	24	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148147
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:45 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60878 SDG#: PH082-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148147
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:45 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60878 SDG#: PH082-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13217SLG026	08/10/2013 09:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13217SLG026	08/06/2013 09:00	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 18:18	Laura M Krieger	35.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321431927	08/02/2013 15:57	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321431927	08/02/2013 15:58	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132180024A	08/08/2013 21:44	Monica M Souders	10
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132180024A	08/07/2013 09:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 20:39	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 02:21	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/12/2013 10:08	Eric L Eby	2
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 10:08	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-608-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7148147
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 13:45 by TB

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60878 SDG#: PH082-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 19:17	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:54	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:54	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 21:01	David K Beck	5
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:54	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 06:58	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13214039401A	08/02/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401A	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-080113 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7148148
LL Group # 1408723
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/01/2013 08:00

Submitted: 08/02/2013 09:15
Reported: 08/21/2013 14:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

801TB SDG#: PH082-09TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13218A20A	08/06/2013 23:26	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13218A20A	08/06/2013 23:26	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13215WAD026	Sample number(s): 7148140									
Acenaphthene	0.050	U	0.050	0.010	ug/l	103	102	65-124	1	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	111	109	72-113	2	30
Anthracene	0.050	U	0.050	0.010	ug/l	111	110	70-117	1	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	96	95	75-115	1	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	99	99	72-120	0	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	94	94	74-130	0	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	88	89	70-130	1	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	96	97	63-121	1	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	109	110	74-118	1	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	161*	159*	40-138	1	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	100	100	70-145	1	30
Chrysene	0.050	U	0.050	0.010	ug/l	98	97	75-112	1	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	94	94	66-122	1	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	102	100	74-129	2	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	87	85	40-119	2	30
Bis(2-Ethylhexyl)phthalate	1.0	U	1.0	0.050	ug/l	170*	168*	70-143	1	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	111	112	73-116	1	30
Fluorene	0.050	U	0.050	0.010	ug/l	101	99	74-115	2	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	89	89	66-122	0	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	114	110	71-120	3	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	110	109	74-119	1	30
Naphthalene	0.050	U	0.050	0.030	ug/l	100	99	67-118	2	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	75	75	36-120	1	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	159*	156*	57-145	2	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	98	100	72-109	1	30
Pyrene	0.050	U	0.050	0.010	ug/l	93	92	71-116	1	30
Batch number: 13217SLG026	Sample number(s): 7148142-7148147									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	111		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	101		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	103		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	109		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	108		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	113		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	102		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	109		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	126		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	130		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	107		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	111		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	133*		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	112		70-130		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	120		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	112		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	106		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	112		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	109		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	85		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	124		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	101		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	106		71-120		
Batch number: 13220WAE026	Sample number(s): 7148141									
Acenaphthene	0.050	U	0.050	0.010	ug/l	101	102	77-118	1	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	108	109	80-123	1	30
Anthracene	0.050	U	0.050	0.010	ug/l	105	105	78-123	0	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	102	102	73-127	1	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	103	99	72-120	4	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	112	108	79-136	3	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	94	90	70-130	4	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	112	110	64-130	2	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	106	102	73-131	4	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	93	90	40-138	3	30
Di-n-butylphthalate	0.076	J	1.0	0.050	ug/l	117	105	64-141	11	30
Chrysene	0.050	U	0.050	0.010	ug/l	104	105	76-125	1	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	114	107	58-131	6	30
Diethylphthalate	0.069	J	1.0	0.050	ug/l	108	107	64-128	1	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	89	88	23-139	1	30
Bis(2-Ethylhexyl)phthalate	0.17	J	1.0	0.050	ug/l	101	94	70-143	7	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	102	103	79-124	1	30
Fluorene	0.050	U	0.050	0.010	ug/l	101	102	74-115	1	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	109	103	62-130	6	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	104	105	80-126	1	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	99	100	81-124	1	30
Naphthalene	0.050	U	0.050	0.030	ug/l	102	103	75-120	1	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	76	79	36-120	3	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	102	87	57-145	16	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	100	101	75-120	0	30
Pyrene	0.050	U	0.050	0.010	ug/l	109	108	71-130	0	30
Batch number: 13217B16A	Sample number(s): 7148143-7148144,7148146-7148147									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	73	71	67-119	3	30
Batch number: 13218A20A	Sample number(s): 7148140-7148141,7148148									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	100	105	75-135	6	30
Batch number: 132190003A	Sample number(s): 7148141									
2,4-D	0.50	U	0.50	0.16	ug/l	116	105	68-155	10	30
Dalapon	1.3	U	1.3	0.25	ug/l	80	59	39-115	30	30
2,4-DB	1.0	U	1.0	0.30	ug/l	112	106	50-163	6	30
Dicamba	0.30	U	0.30	0.080	ug/l	103	91	55-163	13	30
Dinoseb	0.50	U	0.50	0.12	ug/l	102	87	16-163	15	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	137	123	89-162	11	30
MCPA	200	U	200.	50	ug/l	103	88	68-154	15	30
MCPP	200		200.	50	ug/l	95	88	46-173	7	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,4,5-T	0.076	U	0.050	0.015	ug/l	112	100	55-169	11	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	124	105	58-155	17	30
Batch number: 132200020A	Sample number(s): 7148142,7148144									
2,4-D	36	U	36.	12	ug/kg	108		59-122		
Dalapon	90	U	90.	44	ug/kg	76		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	125		54-131		
Dicamba	12	U	12.	4.0	ug/kg	87		60-123		
Dinoseb	24	U	24.	9.0	ug/kg	11		10-36		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	126		65-158		
MCPA	2,500	U	2,500.	760	ug/kg	88		60-127		
MCPP (Mecoprop)	2,500	U	2,500.	750	ug/kg	85		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	107		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	116		63-130		
Batch number: 132250009A	Sample number(s): 7148143									
2,4-D	36	U	36.	12	ug/kg	103		59-122		
Dalapon	90	U	90.	44	ug/kg	45		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	108		54-131		
Dicamba	12	U	12.	4.0	ug/kg	83		60-123		
Dinoseb	24	U	24.	9.0	ug/kg	12		10-36		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	132		65-158		
MCPA	2,500	U	2,500.	760	ug/kg	85		60-127		
MCPP (Mecoprop)	2,500	U	2,500.	750	ug/kg	93		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	105		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	111		63-130		
Batch number: 132180008A	Sample number(s): 7148140-7148141									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	56	52	35-84	8	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	86	88	69-120	2	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	92	89	69-128	3	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132180009A	Sample number(s): 7148141									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	72	79	55-126	10	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	80	88	63-132	9	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	81	88	63-132	9	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	80	88	68-128	9	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	82	90	62-143	9	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	81	88	56-137	9	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	79	87	45-134	9	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	80	88	63-131	9	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dieldrin	0.016	U	0.016	0.0042	ug/l	84	91	65-135	9	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	77	83	48-124	7	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	78	86	53-123	9	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	77	85	60-129	10	30
Endrin	0.016	U	0.016	0.0065	ug/l	77	83	43-139	7	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	72	81	55-123	12	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	78	85	51-138	9	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	76	84	57-126	10	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	79	87	65-128	10	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	80	86	46-134	7	30
Mirex	0.20	U	0.20	0.068	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132180024A	Sample number(s): 7148142-7148147									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	70	69	36-106	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	97		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	102		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132250011A	Sample number(s): 7148142-7148144									
Aldrin	0.83	U	0.83	0.17	ug/kg	107		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	110		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	116		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	111		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	119		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	121		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	118		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	117		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	115		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	109		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	118		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	126		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	108		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	112		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	121		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	107		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	114		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	117		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132170012A	Sample number(s): 7148140-7148141									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	100	104	70-130	3	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	114	117	70-130	2	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	117	119	70-130	2	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	111	93	70-130	18	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	88	86	70-130	3	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132190015A	Sample number(s): 7148142-7148147									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	109		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	111		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	116		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	88		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	91		49-107		
Batch number: 132170637002	Sample number(s): 7148142-7148147									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	106		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	106		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	98		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	105		80-120		
Calcium	5.74	J	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	108		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	105		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	105		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	101		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	107		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.54	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	107		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	105		80-120		
Zinc	0.284	J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132170637002A	Sample number(s): 7148142-7148147									
Silver	0.200	U	0.200	0.0260	mg/kg	103		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	103		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	113		80-120		
Batch number: 132170637002B	Sample number(s): 7148142-7148147									
Selenium	0.400	U	0.400	0.100	mg/kg	110		80-120		
Batch number: 132170638002	Sample number(s): 7148142-7148147									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	120		85-120		
Batch number: 132185713003	Sample number(s): 7148140-7148141									
3b Mercury 7470A	0.00020	U	0.00020	0.00006 0	mg/l	92	95	90-115	2	20
Batch number: 132190635001	Sample number(s): 7148140-7148141									
Aluminum	0.400	U	0.400	0.0828	mg/l	98	100	90-112	2	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	99	99	88-111	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Arsenic	0.0400 U	0.0400	0.0068	mg/l	99	101	90-113	2	20
Barium	0.0100 U	0.0100	0.00033	mg/l	101	104	90-110	3	20
Beryllium	0.0100 U	0.0100	0.00067	mg/l	99	102	88-110	2	20
Boron	0.100 U	0.100	0.0084	mg/l	92	95	89-110	3	20
Cadmium	0.0100 U	0.0100	0.00076	mg/l	102	102	90-112	0	20
Calcium	0.400 U	0.400	0.0334	mg/l	100	102	90-110	2	20
Chromium	0.0300 U	0.0300	0.0016	mg/l	99	101	90-110	2	20
Cobalt	0.0100 U	0.0100	0.0013	mg/l	103	104	90-110	1	20
Copper	0.0200 U	0.0200	0.0027	mg/l	103	106	90-112	3	20
Iron	0.400 U	0.400	0.0430	mg/l	99	101	90-112	2	20
Lead	0.0300 U	0.0300	0.0047	mg/l	106	105	88-110	1	20
Lithium	0.0400 U	0.0400	0.0047	mg/l	100	103	90-110	3	20
Magnesium	0.200 U	0.200	0.0167	mg/l	99	101	90-110	3	20
Manganese	0.0100 U	0.0100	0.00083	mg/l	102	105	90-110	3	20
Molybdenum	0.0200 U	0.0200	0.0017	mg/l	102	103	90-110	1	20
Nickel	0.0200 U	0.0200	0.0015	mg/l	105	106	90-111	1	20
Phosphorus	0.200 U	0.200	0.0418	mg/l	101	102	90-110	1	20
Potassium	1.00 U	1.00	0.0980	mg/l	99	102	85-115	3	20
Sodium	2.00 U	2.00	0.167	mg/l	98	101	87-114	3	20
Tin	0.0400 U	0.0400	0.0029	mg/l	99	99	90-110	0	20
Titanium	0.0200 U	0.0200	0.0017	mg/l	101	103	90-113	2	20
Vanadium	0.0100 U	0.0100	0.0020	mg/l	96	98	90-110	3	20
Zinc	0.0400 U	0.0400	0.0020	mg/l	101	102	90-110	1	20
Zirconium	0.100 U	0.100	0.0084	mg/l	100	104	90-110	3	20
Batch number: 132190639001A	Sample number(s): 7148140-7148141								
Silver	0.0010 U	0.0010	0.00011	mg/l	103	101	90-115	2	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	100	98	80-120	2	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	102	105	80-120	3	20
Batch number: 132190639001B	Sample number(s): 7148140-7148141								
Selenium	0.0040 U	0.0040	0.00050	mg/l	98	106	80-120	8	20
Batch number: 13214002102A	Sample number(s): 7148140-7148141								
28b pH (9040B and 9040C)					99		99-103		
Batch number: 13214039401A	Sample number(s): 7148142-7148147								
15a pH by 9045D					99		95-105		
Batch number: 13221162401A	Sample number(s): 7148142-7148147								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13218003	Sample number(s): 7148141								
2378-TCDD	0.332 J	2.00	0.202	pg/l	85		60-150		
12378-PeCDD	0.362 J	10.0	0.192	pg/l	91		60-150		
123478-HxCDD	0.338 J	10.0	0.132	pg/l	96		60-150		
123678-HxCDD	0.329 J	10.0	0.142	pg/l	92		60-150		
123789-HxCDD	0.446 J	10.0	0.143	pg/l	94		60-150		
1234678-HpCDD	0.282 J	10.0	0.120	pg/l	92		60-150		
OCDD	1.13 J	20.0	0.148	pg/l	94		60-150		
2378-TCDF	0.183 J	2.00	0.127	pg/l	88		60-150		
12378-PeCDF	0.538 J	10.0	0.135	pg/l	91		60-150		

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Quality Control Summary

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Reported: 08/21/13 at 02:06 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
23478-PeCDF	0.395	J	10.0	0.116	pg/l	93		60-150		
123478-HxCDF	0.518	J	10.0	0.0737	pg/l	96		60-150		
123678-HxCDF	0.361	J	10.0	0.0791	pg/l	94		60-150		
123789-HxCDF	0.526	J	10.0	0.0816	pg/l	95		60-150		
234678-HxCDF	0.413	J	10.0	0.0748	pg/l	95		60-150		
1234678-HpCDF	0.366	J	10.0	0.0494	pg/l	95		60-150		
1234789-HpCDF	0.419	J	10.0	0.0624	pg/l	94		60-150		
OCDF	0.930	J	20.0	0.148	pg/l	92		60-150		
Batch number: 13224001	Sample number(s): 7148142-7148143,7148145-7148147									
2378-TCDD	1.00	U	1.00	0.0847	ng/kg	112		67-158		
12378-PeCDD	0.0780	J	5.00	0.0697	ng/kg	107		70-142		
123478-HxCDD	5.00	U	5.00	0.0276	ng/kg	103		70-164		
123678-HxCDD	0.0377	J	5.00	0.0296	ng/kg	99		76-134		
123789-HxCDD	5.00	U	5.00	0.0314	ng/kg	98		64-162		
1234678-HpCDD	0.0637	J	5.00	0.0424	ng/kg	96		70-140		
OCDD	0.252	J	10.0	0.0359	ng/kg	98		78-144		
2378-TCDF	1.00	U	1.00	0.0768	ng/kg	105		75-158		
2378-TCDF-Conf	1.00	U	1.00	0.0353	ng/kg	105		75-158		
12378-PeCDF	5.00	U	5.00	0.0383	ng/kg	98		80-134		
23478-PeCDF	0.0474	J	5.00	0.0383	ng/kg	101		68-160		
123478-HxCDF	5.00	U	5.00	0.0235	ng/kg	97		72-134		
123678-HxCDF	5.00	U	5.00	0.0222	ng/kg	100		84-130		
123789-HxCDF	5.00	U	5.00	0.0320	ng/kg	95		78-130		
234678-HxCDF	5.00	U	5.00	0.0215	ng/kg	97		70-156		
1234678-HpCDF	0.0267	J	5.00	0.0139	ng/kg	96		82-122		
1234789-HpCDF	0.0434	J	5.00	0.0326	ng/kg	94		78-138		
OCDF	0.202	J	10.0	0.0706	ng/kg	94		63-170		
Batch number: 13224002	Sample number(s): 7148140									
2378-TCDD	2.00	U	2.00	0.235	pg/l	92		60-150		
12378-PeCDD	0.446	J	10.0	0.204	pg/l	96		60-150		
123478-HxCDD	0.259	J	10.0	0.158	pg/l	102		60-150		
123678-HxCDD	0.295	J	10.0	0.177	pg/l	99		60-150		
123789-HxCDD	10.0	U	10.0	0.156	pg/l	101		60-150		
1234678-HpCDD	0.639	J	10.0	0.139	pg/l	99		60-150		
OCDD	0.829	J	20.0	0.179	pg/l	99		60-150		
2378-TCDF	2.00	U	2.00	0.145	pg/l	96		60-150		
12378-PeCDF	0.588	J	10.0	0.125	pg/l	99		60-150		
23478-PeCDF	0.334	J	10.0	0.107	pg/l	99		60-150		
123478-HxCDF	0.211	J	10.0	0.0799	pg/l	104		60-150		
123678-HxCDF	0.198	J	10.0	0.0771	pg/l	99		60-150		
123789-HxCDF	0.460	J	10.0	0.0843	pg/l	102		60-150		
234678-HxCDF	0.194	J	10.0	0.0696	pg/l	101		60-150		
1234678-HpCDF	0.344	J	10.0	0.0679	pg/l	102		60-150		
1234789-HpCDF	0.295	J	10.0	0.0812	pg/l	102		60-150		
OCDF	20.0	U	20.0	0.216	pg/l	100		60-150		
Batch number: 13218003	Sample number(s): 7148141									
TEQ WHO 2005 - EDLx0.0	0.134				pg/l					
Batch number: 13224001	Sample number(s): 7148142-7148143,7148145-7148147									
TEQ WHO 2005 - EDLx0.0	U				ng/kg					
Batch number: 13224002	Sample number(s): 7148140									
TEQ WHO 2005 - EDLx0.0	0.0200				pg/l					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13217SLG026	Sample number(s): 7148142-7148147 UNSPK: P146667								
Acenaphthene	84	93	48-127	10	30				
Acenaphthylene	82	48*	49-121	52*	30				
Anthracene	80	80	52-126	0	30				
Benzo(a)anthracene	91	88	32-135	3	30				
Benzo(a)pyrene	86	87	36-138	1	30				
Benzo(b)fluoranthene	107	101	26-142	5	30				
Benzo(e)pyrene	88	90	70-130	2	30				
Benzo(g,h,i)perylene	44	42	33-141	6	30				
Benzo(k)fluoranthene	99	114	47-129	14	30				
Butylbenzylphthalate	140	169*	59-153	10	30				
Di-n-butylphthalate	113	126	62-154	9	30				
Chrysene	87	88	29-148	1	30				
Dibenz(a,h)anthracene	60	66	34-125	8	30				
Diethylphthalate	116	152*	76-127	27	30				
Dimethylphthalate	94	60*	62-136	45*	30				
Bis(2-Ethylhexyl)phthalate	130	117	39-167	7	30				
Fluoranthene	89	97	47-135	8	30				
Fluorene	84	89	50-129	6	30				
Indeno(1,2,3-cd)pyrene	58	59	17-136	1	30				
1-Methylnaphthalene	91	96	50-131	6	30				
2-Methylnaphthalene	88	93	28-144	5	30				
Naphthalene	84	88	31-148	4	30				
N-Nitrosodimethylamine	69	67	48-113	3	30				
Di-n-octylphthalate	156	325*	52-162	70*	30				
Phenanthrene	93	84	29-142	10	30				
Pyrene	89	91	26-143	2	30				
Batch number: 132200020A	Sample number(s): 7148142,7148144 UNSPK: 7148142								
2,4-D	109	110	42-143	0	35				
Dalapon	34	39	19-109	16	50				
2,4-DB	101	104	10-179	2	50				
Dicamba	54	58	45-147	7	50				
Dinoseb	41	23	10-52	57*	35				
2,4-DP (Dichlorprop)	107	111	32-171	3	50				
MCPA	81	84	23-169	3	50				
MCPP (Mecoprop)	74	78	24-164	4	50				
2,4,5-T	113	115	12-172	1	35				
2,4,5-TP	116	121	10-142	4	35				
Batch number: 132250009A	Sample number(s): 7148143 UNSPK: P152828								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2,4-D	79	79	42-143	0	35				
Dalapon	29	0*	19-109	200*	50				
2,4-DB	121	116	10-179	4	50				
Dicamba	98	92	45-147	6	50				
Dinoseb	26	26	10-52	1	35				
2,4-DP (Dichlorprop)	133	130	32-171	2	50				
MCPA	94	89	23-169	5	50				
MCPP (Mecoprop)	82	82	24-164	1	50				
2,4,5-T	91	87	12-172	4	35				
2,4,5-TP	112	106	10-142	6	35				
Batch number: 132180024A	Sample number(s): 7148142-7148147 UNSPK: P146669								
PCB-1016	93	97	16-146	4	50				
PCB-1260	103	109	40-134	6	50				
Batch number: 132250011A	Sample number(s): 7148142-7148144 UNSPK: P152828								
Aldrin	109	97	16-126	11	50				
Alpha BHC	102	95	14-140	7	50				
Beta BHC	107	100	10-173	6	50				
Gamma BHC - Lindane	112	96	30-137	15	50				
p,p-DDD	114	105	43-149	8	50				
p,p-DDE	136	119	18-161	13	50				
p,p-DDT	188	147	12-193	25	50				
Delta BHC	112	115	13-153	2	50				
Dieldrin	116	105	19-154	10	50				
Endosulfan I	106	96	16-137	10	50				
Endosulfan II	135	117	10-156	14	50				
Endosulfan Sulfate	117	107	10-181	9	50				
Endrin	112	101	30-152	11	50				
Endrin Aldehyde	106	95	10-152	11	35				
Endrin Ketone	107	100	10-160	7	50				
Heptachlor	118	97	16-152	20	50				
Heptachlor Epoxide	138	113	17-167	20	50				
Methoxychlor	111	104	34-168	7	50				
Batch number: 132190015A	Sample number(s): 7148142-7148147 UNSPK: 7148144								
EFH (C12-C14)	105	99	49-123	6	20				
EFH (C15-C20)	121	123	49-123	2	20				
EFH (C21-C30)	104	113	49-123	4	20				
EFH (C30-C40)	92	123	49-123	12	20				
EFH (C8-C11)	95	85	49-123	10	20				
Batch number: 132170637002	Sample number(s): 7148142-7148147 UNSPK: P146671 BKG: P146671								
Aluminum	3726 (2)	3086 (2)	75-125	4	20	26,100	25,100	4	20
Antimony	45*	45*	75-125	2	20	3.92 U	3.92 U	0 (1)	20
Arsenic	91	94	75-125	2	20	5.44	5.10	7 (1)	20
Barium	99	96	75-125	2	20	115	120	4	20
Beryllium	100	97	75-125	2	20	0.917 J	0.894 J	2 (1)	20
Boron	95	93	75-125	2	20	18.5	18.3	1 (1)	20
Cadmium	90	92	75-125	2	20	0.167 J	0.229 J	32* (1)	20
Calcium	150 (2)	2494	75-125	65*	20	8,910	9,220	3	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
		(2)							
Chromium	128*	116	75-125	4	20	36.5	35.1	4	20
Cobalt	91	92	75-125	1	20	8.94	9.41	5	20
Copper	106	104	75-125	1	20	18.8	18.8	0	20
Iron	2733 (2)	968 (2)	75-125	5	20	32,400	34,000	5	20
Lead	88	83	75-125	3	20	12.3	12.2	1 (1)	20
Lithium	105	104	75-125	0	20	23.4	22.8	2	20
Magnesium	425 (2)	322 (2)	75-125	3	20	7,000	6,800	3	20
Manganese	114 (2)	340 (2)	75-125	20	20	455	472	4	20
Molybdenum	88	86	75-125	2	20	0.497 J	0.296 J	51* (1)	20
Nickel	93	93	75-125	0	20	17.7	17.9	1	20
Phosphorus	85 (2)	69 (2)	75-125	3	20	422	427	1	20
Potassium	169 (2)	138 (2)	75-125	5	20	4,510	4,430	2	20
Sodium	101	101	75-125	0	20	84.3 J	81.0 J	4 (1)	20
Tin	85	83	75-125	3	20	1.42 J	1.55 J	8 (1)	20
Titanium	469 (2)	350 (2)	75-125	7	20	1,180	1,090	7	20
Vanadium	126*	116	75-125	4	20	62.7	60.8	3	20
Zinc	97	94	75-125	1	20	68.6	68.8	0	20
Zirconium	90	89	75-125	1	20	5.26	5.14	2 (1)	20
Batch number: 132170637002A	Sample number(s): 7148142-7148147 UNSPK: P146671 BKG: P146671								
Silver	103	100	75-125	2	20	0.0533 J	0.0529 J	1 (1)	20
Strontium	101	121	75-125	4	20	29.3	27.9	5	20
Thallium	97	97	75-125	0	20	0.306	0.304	1 (1)	20
Batch number: 132170637002B	Sample number(s): 7148142-7148147 UNSPK: P146671 BKG: P146671								
Selenium	89	96	75-125	7	20	0.231 J	0.202 J	14 (1)	20
Batch number: 132170638002	Sample number(s): 7148142-7148147 UNSPK: 7148145 BKG: 7148145								
3a Mercury 7471A	117	120	65-135	3	20	0.0163 J	0.0136 J	18 (1)	20
Batch number: 13214002102A	Sample number(s): 7148140-7148141 BKG: P148128								
28b pH (9040B and 9040C)						7.8	8.1	3	3
Batch number: 13214039401A	Sample number(s): 7148142-7148147 BKG: 7148142								
15a pH by 9045D						7.51	7.48	0	3
Batch number: 13221162401A	Sample number(s): 7148142-7148147 BKG: P146672								
14a Moisture Content by 160.3						9.6	10.4	8	20
Batch number: 13224001	Sample number(s): 7148142-7148143,7148145-7148147 UNSPK: P152828								
2378-TCDD	102	102	40-135	1	20				
12378-PeCDD	105	105	40-135	1	20				
123478-HxCDD	95	94	40-135	2	20				
123678-HxCDD	96	94	40-135	2	20				
123789-HxCDD	92	94	40-135	0	20				
1234678-HpCDD	91	101	40-135	8	20				
OCDD	90	143*	40-135	29*	20				
2378-TCDF	97	97	40-135	1	20				
2378-TCDF-Conf	97	97	40-135	1	20				
12378-PeCDF	93	96	40-135	2	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
23478-PeCDF	94	95	40-135	1	20				
123478-HxCDF	92	89	40-135	5	20				
123678-HxCDF	92	89	40-135	5	20				
123789-HxCDF	88	87	40-135	2	20				
234678-HxCDF	90	88	40-135	3	20				
1234678-HpCDF	87	89	40-135	1	20				
1234789-HpCDF	87	87	40-135	1	20				
OCDF	88	87	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13215WAD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7148140	100	103	110
Blank	95	95	104
LCS	103	104	113
LCSD	104	104	110
Limits:	64-120	62-141	58-134

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13217SLG026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7148142	79	75	100
7148143	82	85	99
7148144	81	86	96
7148145	79	83	96
7148146	81	84	98
7148147	148*	81	98
Blank	81	83	97
LCS	86	91	103
MS	72	78	85
MSD	75	76	88
Limits:	54-129	61-134	55-129

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13220WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Surrogate Quality Control

7148141	92	98	100
Blank	94	99	101
LCS	94	103	105
LCSD	94	101	105
Limits:	44-137	62-141	51-136

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13217B16A

	Trifluorotoluene-F
7148143	75
7148144	73
7148146	74
7148147	76
Blank	83
LCS	80
LCSD	77
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13218A20A

	Trifluorotoluene-F
7148140	87
7148141	86
7148148	87
Blank	85
LCS	118
LCSD	123
Limits:	63-135

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132180008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7148140	103	92
7148141	103	98
Blank	98	59
LCS	98	64
LCSD	100	55
Limits:	45-120	45-120

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132180009A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7148141	74	88
Blank	79	53
LCS	80	68
LCSD	85	67

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Surrogate Quality Control

Limits: 60-140 20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132180024A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7148142	98	88
7148143	101	97
7148144	98	99
7148145	83	107
7148146	91	120
7148147	98	118
Blank	114	105
LCS	108	111
LCSD	108	111
MS	95	95
MSD	98	91
Limits:	45-120	45-120

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 132190003A

	2,4-Dichlorophenylacetic acid
7148141	84
Blank	79
LCS	105
LCSD	92
Limits:	50-150

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132200020A

	2,4-Dichlorophenylacetic acid
7148142	45*
7148144	54
Blank	53
LCS	71
MS	56
MSD	57
Limits:	50-150

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132250009A

	2,4-Dichlorophenylacetic acid
7148143	64
Blank	61
LCS	71
MS	66

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Surrogate Quality Control

MSD 64

Limits: 50-150

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132250011A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7148142	93	107
7148143	98	118
7148144	105	125*
Blank	109	130*
LCS	110	133*
MS	103	114
MSD	95	107
Limits:	50-130	20-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132170012A

	Chlorobenzene	Orthoterphenyl
7148140	106	104
7148141	118	105
Blank	115	117
LCS	116	118
LCSD	117	119
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132190015A

	Chlorobenzene	Orthoterphenyl
7148142	92	95
7148143	96	98
7148144	101	107
7148145	93	101
7148146	98	105
7148147	98	104
Blank	101	103
LCS	108	113
MS	97	103
MSD	99	103
Limits:	37-125	66-123

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13218003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7148141	74	78	79	79	78	72
Blank	53	62	67	68	69	73
OPR	60	70	73	73	74	78
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Surrogate Quality Control

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7148141	75	59	54	77	76	78
Blank	68	65	66	62	65	70
OPR	74	72	74	69	71	74
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7148141	73	70	64	67	73
Blank	65	65	64	51	58
OPR	71	71	71	56	66
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13224001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7148142	65	81	63	73	68	66
7148143	56	72	58	71	64	55
7148145	61	72	56	67	59	54
7148146	64	82	67	74	68	67
7148147	59	43	31	37	37	38
Blank	51	64	55	65	62	58
MS	62	74	62	70	64	58
MSD	62	76	59	63	62	67
OPR	43	59	52	59	55	49
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7148142	89	64	64	83	71	73
7148143	87	54	51	79	71	74
7148145	84	54	49	75	67	74
7148146	86	62	56	85	73	74
7148147	48	27	24	49	39	42
Blank	86	51	48	67	68	74
MS	81	58	56	77	75	77
MSD	77	64	59	81	73	77
OPR	78	51	48	64	61	66
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	13C12-2378-TCDF-Conf
7148142	74	81	84		88	63
7148143	73	76	77	55	77	
7148145	70	74	76	60	85	
7148146	76	75	78	68	89	
7148147	47	43	44	49	51	
Blank	71	75	74	48	69	50
MS	77	79	80	62	80	62

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408723
Reported: 08/21/13 at 02:06 PM

Surrogate Quality Control

MSD	74	80	79	65	84	65
OPR	65	69	68	41	64	41
Limits:	28-130	23-140	17-157	24-169	24-185	24-169

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13224002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7148140	58	62	68	70	71	49
Blank	54	61	69	70	75	74
OPR	40	57	65	66	71	70
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7148140	69	55	45	64	71	71
Blank	71	66	63	63	73	73
OPR	70	67	67	59	69	71
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7148140	68	66	59	54	58
Blank	77	69	66	50	57
OPR	72	70	69	37	49
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1408723 7148140-48

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/1/2013
CarrierName: FedEx
AirbillNo: 796373064397

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130801-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-080113	8/1/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																					X											
EB1-080113	8/1/13 15:00	WQ	None	2 - 1 L Amber	10 day									X																							
EB2-080113	8/1/13 15:30	WQ	HCl	2 - 1 L Amber	10 day																					X											
EB2-080113	8/1/13 15:30	WQ	None	2 - 1 L Amber	10 day									X																							

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Myers	08/01/2013	1600									
										8/2/13	0915

COC Rev 2

COC: 20130801-01, Page 1 of 1

1 of 1

13013 1408723- 7148140-48

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/1/2013
CarrierName: FedEx
AirbillNo: 796373064397

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130801-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-080113	8/1/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB1-080113	8/1/13 15:00	WQ	None	2 - 250 mL Amber	10 day							X			X																					
EB1-080113	8/1/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																	
EB1-080113	8/1/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
EB2-080113	8/1/13 15:30	WQ	None	3 - 250 mL Amber	10 day							X			X							X														
EB2-080113	8/1/13 15:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB2-080113	8/1/13 15:30	WQ	None	1 - 250 mL Poly	10 day														X																	
EB2-080113	8/1/13 15:30	WQ	HCl	3 - 40 mL Vial	10 day																			X												
EB2-080113	8/1/13 15:30	WQ	None	2 - 1 L Amber	10 day																X															

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Pope	08/01/2013	16000									
									CCash	8/2/13	0915

13013 1408723 7148140-48

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/1/2013
CarrierName: FedEx
AirbillNo: 796373064397

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130801-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-610-SA8-SB-0.0-0.5	8/1/13 08:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X	X				X											
SL-610-SA8-SB-0.0-0.5	8/1/13 08:00	SO	None	1 - 4 oz glass	10 day													X																			
SL-610-SA8-SB-4.0-5.0	8/1/13 08:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X	X				X											
SL-610-SA8-SB-4.0-5.0	8/1/13 08:20	SO	None	1 - 4 oz glass	10 day													X																			
SL-610-SA8-SB-6.8-7.8	8/1/13 09:00	SO	None	2 - SS-Sleeve	10 day	X	X					X			X						X	X				X											
SL-610-SA8-SB-6.8-7.8	8/1/13 09:00	SO	None	1 - 4 oz glass	10 day													X																			
SL-610-SA8-SB-4.0-5.0	8/1/13 08:20	SO	None	2 - Encore	10 day																			X													
SL-610-SA8-SB-6.8-7.8	8/1/13 09:00	SO	None	2 - Encore	10 day																			X													
SL-608-SA8-SB-0.0-0.5	8/1/13 12:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-608-SA8-SB-0.0-0.5	8/1/13 12:10	SO	None	1 - 4 oz glass	10 day													X																			
SL-608-SA8-SB-4.0-5.0	8/1/13 13:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-608-SA8-SB-4.0-5.0	8/1/13 13:00	SO	None	1 - 4 oz glass	10 day													X																			
SL-608-SA8-SB-4.0-5.0	8/1/13 13:00	SO	None	2 - Encore	10 day																			X													
SL-608-SA8-SB-7.0-8.0	8/1/13 13:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-608-SA8-SB-7.0-8.0	8/1/13 13:45	SO	None	1 - 4 oz glass	10 day													X																			
SL-608-SA8-SB-7.0-8.0	8/1/13 13:45	SO	None	2 - Encore	10 day																			X													

Special Instructions:

Sampler: O'Bennett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Mupel	08/01/2013	1600									
									C Esler	8/2/13	0915

COC Rev 2

COC: 20130801-03, Page 1 of 1

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/1/2013
CarrierName: FedEx
AirbillNo: 796373064397

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130801-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Herbicides 8151	Hex Cr 7196/7199	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EPH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-610-SA8-SB-0.0-0.5	8/1/13 08:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X					X		X	X			X										
SL-610-SA8-SB-0.0-0.5	8/1/13 08:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-610-SA8-SB-4.0-5.0	8/1/13 08:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X					X		X	X			X										
SL-610-SA8-SB-4.0-5.0	8/1/13 08:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-610-SA8-SB-6.8-7.8	8/1/13 09:00	SO	None	2 - SS-Sleeve	10 day	X	X					X			X					X		X	X			X										
SL-610-SA8-SB-6.8-7.8	8/1/13 09:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-610-SA8-SB-4.0-5.0	8/1/13 08:20	SO	None	2 - Encore	10 day																				X											
SL-610-SA8-SB-6.8-7.8	8/1/13 09:00	SO	None	2 - Encore	10 day																				X											
SL-608-SA8-SB-0.0-0.5	8/1/13 12:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-608-SA8-SB-0.0-0.5	8/1/13 12:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-608-SA8-SB-4.0-5.0	8/1/13 13:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-608-SA8-SB-4.0-5.0	8/1/13 13:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-608-SA8-SB-4.0-5.0	8/1/13 13:00	SO	None	2 - Encore	10 day																				X											
SL-608-SA8-SB-7.0-8.0	8/1/13 13:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-608-SA8-SB-7.0-8.0	8/1/13 13:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-608-SA8-SB-7.0-8.0	8/1/13 13:45	SO	None	2 - Encore	10 day																				X											
TB-080113	8/1/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											

Revised COC received 8/5/13 mkg 8/5/13

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/1/2013
CarrierName: FedEx
AirbillNo: 796373064397

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130801-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: [signature]

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Myers	08/01/2013	1600									

Revised COC received 8/5/13 mrs 8/5/13

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1408723

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 8/2/13

Time of Receipt: 0915

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	2.4	TB	WI	Y	B	
2	↓	1.5	↓	↓	↓	↓	
3	↓	4.3	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 3

Paperwork Discrepancy/Unpacking Problems:

Received 1 broken amber bottle for EB-2

Received TB-080113@0800 not on COC (3)

Unpacker Signature/Emp#: [signature] 3647 **Date/Time:** 8/2/13 1005

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH083

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 15, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/03/2013
Group Number: 1409042
SDG: PH083
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-080213 Water	7149850
SL-552-SA8-SB-0.0-0.5 Soil	7149851
SL-552-SA8-SB-4.0-5.0 Soil	7149852
SL-552-SA8-SB-7.5-8.5 Soil	7149853
SL-559-SA8-SB-0.0-0.5 Soil	7149854
SL-559-SA8-SB-4.0-5.0 Soil	7149855
SL-558-SA8-SB-0.0-0.5 Soil	7149856
SL-558-SA8-SB-4.0-5.0 Soil	7149857
SL-558-SA8-SB-9.0-10.0 Soil	7149858
SL-558-SA8-SB-12.5-13.5 Soil	7149859

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB-080213 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7149850
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 08:00

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TRB82 SDG#: PH083-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13218A20A	08/06/2013 23:48	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13218A20A	08/06/2013 23:48	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149851
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 07:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55200 SDG#: PH083-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	7.0	10
12969	Acenaphthylene	208-96-8	17	U	17	3.5	10
12969	Anthracene	120-12-7	17	U	17	3.5	10
12969	Benzo(a)anthracene	56-55-3	17	U	17	7.0	10
12969	Benzo(a)pyrene	50-32-8	7.6	J	17	7.0	10
12969	Benzo(b)fluoranthene	205-99-2	15	J	17	7.0	10
12969	Benzo(e)pyrene	192-97-2	180	U	180	35	10
12969	Benzo(g,h,i)perylene	191-24-2	17	J	17	7.0	10
12969	Benzo(k)fluoranthene	207-08-9	17	U	17	7.0	10
12969	Butylbenzylphthalate	85-68-7	190	U	190	63	10
12969	Di-n-butylphthalate	84-74-2	190	U	190	63	10
12969	Chrysene	218-01-9	13	J	17	3.5	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	7.0	10
12969	Diethylphthalate	84-66-2	190	U	190	63	10
12969	Dimethylphthalate	131-11-3	190	U	190	63	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	73	J	190	63	10
12969	Fluoranthene	206-44-0	9.1	J	17	7.0	10
12969	Fluorene	86-73-7	17	U	17	7.0	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	16	J	17	7.0	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	7.0	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	7.0	10
12969	Naphthalene	91-20-3	17	U	17	7.0	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	7.0	10
12969	Di-n-octylphthalate	117-84-0	190	U	190	63	10
12969	Phenanthrene	85-01-8	9.0	J	17	7.0	10
12969	Pyrene	129-00-0	7.9	J	17	7.0	10

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
bis(2-ethylhexyl)phthalate

Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	8.6	J	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	10	U	10	4.2	2
12952	EFH (C15-C20)	n.a.	4.8	J	10	4.2	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149851
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 07:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55200 SDG#: PH083-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	52		10	4.2	2
12952	EFH (C30-C40)	n.a.	130		21	8.4	2
12952	EFH (C8-C11)	n.a.	10	U	10	4.2	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,100		40.7	7.34	1
06944	Antimony	7440-36-0	4.07	U	4.07	0.753	1
06935	Arsenic	7440-38-2	3.58	J	4.07	0.712	1
06946	Barium	7440-39-3	99.5		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.603	J	1.02	0.0682	1
07914	Boron	7440-42-8	14.7		10.2	0.855	1
06949	Cadmium	7440-43-9	0.992	J	1.02	0.0773	1
01650	Calcium	7440-70-2	7,790		20.4	3.40	1
06951	Chromium	7440-47-3	29.8		3.05	0.163	1
06952	Cobalt	7440-48-4	7.12		1.02	0.101	1
06953	Copper	7440-50-8	28.1		2.04	0.295	1
01654	Iron	7439-89-6	29,300		81.4	7.37	2
06955	Lead	7439-92-1	21.2		3.05	0.509	1
01656	Lithium	7439-93-2	21.8		4.1	0.35	1
01657	Magnesium	7439-95-4	5,330		10.2	1.70	1
06958	Manganese	7439-96-5	372		1.02	0.0845	1
06960	Molybdenum	7439-98-7	0.885	J	2.04	0.173	1
06961	Nickel	7440-02-0	17.1		2.04	0.132	1
10145	Phosphorus	7723-14-0	458		10.2	2.94	1
01662	Potassium	7440-09-7	4,630		102	8.49	1
01667	Sodium	7440-23-5	92.7	J	102	17.0	1
06969	Tin	7440-31-5	1.96	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,080		1.02	0.173	1
06971	Vanadium	7440-62-2	47.3		1.02	0.132	1
06972	Zinc	7440-66-6	119		4.07	0.204	1
10146	Zirconium	7440-67-7	2.51	J	5.09	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.209	J	0.407	0.102	2
06142	Silver	7440-22-4	0.461		0.204	0.0265	2
06144	Strontium	7440-24-6	33.0		0.407	0.0692	2
06145	Thallium	7440-28-0	0.234		0.204	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0484		0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.3 C.	n.a.	7.45		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149851
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 07:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55200 SDG#: PH083-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149851
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 07:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55200 SDG#: PH083-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0913	1
11031	12378-PeCDD	40321-76-4	0.616	JBQ	5.18	0.152	1
11031	123478-HxCDD	39227-28-6	1.02	J	5.18	0.196	1
11031	123678-HxCDD	57653-85-7	4.21	JB	5.18	0.221	1
11031	123789-HxCDD	19408-74-3	1.94	J	5.18	0.224	1
11031	1234678-HpCDD	35822-46-9	92.6	B	5.18	0.168	1
11031	OCDD	3268-87-9	835	B	10.4	0.117	1
11031	2378-TCDF	51207-31-9	0.570	JQ	1.04	0.210	1
11031	12378-PeCDF	57117-41-6	1.18	J	5.18	0.106	1
11031	23478-PeCDF	57117-31-4	0.497	JB	5.18	0.0998	1
11031	123478-HxCDF	70648-26-9	0.781	J	5.18	0.103	1
11031	123678-HxCDF	57117-44-9	0.638	JQ	5.18	0.105	1
11031	123789-HxCDF	72918-21-9	0.395	J	5.18	0.143	1
11031	234678-HxCDF	60851-34-5	0.758	J	5.18	0.100	1
11031	1234678-HpCDF	67562-39-4	11.7	B	5.18	0.102	1
11031	1234789-HpCDF	55673-89-7	1.54	JB	5.18	0.150	1
11031	OCDF	39001-02-0	26.5	B	10.4	0.0807	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.41				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	62	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	71	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149851
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 07:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55200 SDG#: PH083-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149851
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 07:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55200 SDG#: PH083-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 14:03	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/11/2013 21:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/09/2013 19:01	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 03:17	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 10:11	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 19:22	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:56	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:56	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 21:03	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149851
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 07:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55200 SDG#: PH083-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:56	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 07:00	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13215039401A	08/03/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149852
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 08:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55240 SDG#: PH083-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	30		20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
bis(2-ethylhexyl)phthalate

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.4	U	1.4	0.3	29.76
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149852
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 08:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55240 SDG#: PH083-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	3.8	J	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11		11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,700		43.8	7.89	1
06944	Antimony	7440-36-0	4.38	U	4.38	0.809	1
06935	Arsenic	7440-38-2	5.15		4.38	0.766	1
06946	Barium	7440-39-3	141		1.09	0.0361	1
06947	Beryllium	7440-41-7	0.905	J	1.09	0.0733	1
07914	Boron	7440-42-8	18.8		10.9	0.919	1
06949	Cadmium	7440-43-9	0.213	J	1.09	0.0831	1
01650	Calcium	7440-70-2	20,700		21.9	3.65	1
06951	Chromium	7440-47-3	39.7		3.28	0.175	1
06952	Cobalt	7440-48-4	10.1		1.09	0.108	1
06953	Copper	7440-50-8	19.4		2.19	0.317	1
01654	Iron	7439-89-6	38,100		87.5	7.92	2
06955	Lead	7439-92-1	10.8		3.28	0.547	1
01656	Lithium	7439-93-2	30.7		4.4	0.37	1
01657	Magnesium	7439-95-4	8,440		10.9	1.83	1
06958	Manganese	7439-96-5	434		1.09	0.0908	1
06960	Molybdenum	7439-98-7	2.19	U	2.19	0.186	1
06961	Nickel	7440-02-0	20.6		2.19	0.142	1
10145	Phosphorus	7723-14-0	364		10.9	3.16	1
01662	Potassium	7440-09-7	4,320		109	9.12	1
01667	Sodium	7440-23-5	160		109	18.3	1
06969	Tin	7440-31-5	1.25	J	10.9	0.241	1
06970	Titanium	7440-32-6	1,360		1.09	0.186	1
06971	Vanadium	7440-62-2	73.4		1.09	0.142	1
06972	Zinc	7440-66-6	79.3		4.38	0.219	1
10146	Zirconium	7440-67-7	4.98	J	5.47	0.919	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.172	J	0.438	0.109	2
06142	Silver	7440-22-4	0.0508	J	0.219	0.0284	2
06144	Strontium	7440-24-6	60.9		0.438	0.0744	2
06145	Thallium	7440-28-0	0.332		0.219	0.0328	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0142	J	0.0186	0.0112	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.84		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149852
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 08:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55240 SDG#: PH083-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	12.1	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149852
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 08:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55240 SDG#: PH083-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0775 JQ	1.13	0.0603	1
11031	12378-PeCDD	40321-76-4	0.237 JBQ	5.63	0.0658	1
11031	123478-HxCDD	39227-28-6	0.0977 JQ	5.63	0.0336	1
11031	123678-HxCDD	57653-85-7	0.119 JBQ	5.63	0.0348	1
11031	123789-HxCDD	19408-74-3	0.130 J	5.63	0.0364	1
11031	1234678-HpCDD	35822-46-9	0.928 JBQ	5.63	0.0651	1
11031	OCDD	3268-87-9	8.37 JB	11.3	0.0540	1
11031	2378-TCDF	51207-31-9	0.0702 JQ	1.13	0.0563	1
11031	12378-PeCDF	57117-41-6	0.267 JQ	5.63	0.0303	1
11031	23478-PeCDF	57117-31-4	0.198 JB	5.63	0.0306	1
11031	123478-HxCDF	70648-26-9	0.136 JQ	5.63	0.0212	1
11031	123678-HxCDF	57117-44-9	0.113 JQ	5.63	0.0208	1
11031	123789-HxCDF	72918-21-9	0.153 J	5.63	0.0311	1
11031	234678-HxCDF	60851-34-5	0.0662 J	5.63	0.0200	1
11031	1234678-HpCDF	67562-39-4	0.173 JB	5.63	0.0165	1
11031	1234789-HpCDF	55673-89-7	0.0574 JBQ	5.63	0.0344	1
11031	OCDF	39001-02-0	0.355 JB	11.3	0.0689	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0986			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	47	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149852
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 08:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55240 SDG#: PH083-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149852
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 08:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55240 SDG#: PH083-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 09:48	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 19:34	Laura M Krieger	29.76
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321531950	08/03/2013 18:25	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321531950	08/03/2013 18:25	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/11/2013 22:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 20:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 04:14	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 10:15	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149852
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 08:45 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55240 SDG#: PH083-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 19:26	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/06/2013 23:59	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/06/2013 23:59	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 21:05	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637002A	08/06/2013 23:59	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 07:02	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13215039401A	08/03/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149853
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:00 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55275 SDG#: PH083-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	0.93	J	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	0.57	J	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.3	J	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	J	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
bis(2-ethylhexyl)phthalate

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.4	U	1.4	0.3	31.97
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149853
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:00 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55275 SDG#: PH083-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	3.0	J	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	9.3	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,600		43.3	7.81	1
06944	Antimony	7440-36-0	4.33	U	4.33	0.801	1
06935	Arsenic	7440-38-2	4.96		4.33	0.758	1
06946	Barium	7440-39-3	101		1.08	0.0357	1
06947	Beryllium	7440-41-7	0.649	J	1.08	0.0725	1
07914	Boron	7440-42-8	12.8		10.8	0.910	1
06949	Cadmium	7440-43-9	0.327	J	1.08	0.0823	1
01650	Calcium	7440-70-2	156,000		108	18.1	5
06951	Chromium	7440-47-3	26.0		3.25	0.173	1
06952	Cobalt	7440-48-4	6.83		1.08	0.107	1
06953	Copper	7440-50-8	10.3		2.17	0.314	1
01654	Iron	7439-89-6	22,300		43.3	3.92	1
06955	Lead	7439-92-1	8.12		3.25	0.541	1
01656	Lithium	7439-93-2	21.4		4.3	0.37	1
01657	Magnesium	7439-95-4	6,140		10.8	1.81	1
06958	Manganese	7439-96-5	301		1.08	0.0899	1
06960	Molybdenum	7439-98-7	2.17	U	2.17	0.184	1
06961	Nickel	7440-02-0	15.5		2.17	0.141	1
10145	Phosphorus	7723-14-0	241		10.8	3.13	1
01662	Potassium	7440-09-7	1,800		108	9.03	1
01667	Sodium	7440-23-5	296		108	18.1	1
06969	Tin	7440-31-5	1.35	J	10.8	0.238	1
06970	Titanium	7440-32-6	859		1.08	0.184	1
06971	Vanadium	7440-62-2	46.3		1.08	0.141	1
06972	Zinc	7440-66-6	43.3		4.33	0.217	1
10146	Zirconium	7440-67-7	3.78	J	5.41	0.910	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.433	U	0.433	0.108	2
06142	Silver	7440-22-4	0.0446	J	0.217	0.0282	2
06144	Strontium	7440-24-6	223		2.17	0.368	10
06145	Thallium	7440-28-0	0.218		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0201		0.0181	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.93		0.0100	0.0100	1
	The pH was measured in water at 21.3 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149853
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:00 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55275 SDG#: PH083-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	11.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 10:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 20:12	Laura M Krieger	31.97
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321531950	08/03/2013 18:26	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321531950	08/03/2013 18:26	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/11/2013 22:40	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 21:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/12/2013 10:19	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-552-SA8-SB-7.5-8.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149853
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:00 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55275 SDG#: PH083-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 19:31	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/07/2013 00:01	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/07/2013 00:01	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 21:06	David K Beck	10
06145	Thallium	SW-846 6020A	1	132170637002A	08/07/2013 00:01	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 07:04	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13215039401A	08/03/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149854
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:30 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH083-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	0.70	J	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	0.93	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.1	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	2.8		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.81	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	0.86	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	5.3		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	15	J	19	6.3	1
12969	Fluoranthene	206-44-0	4.0		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.0	J	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	2.0		1.7	0.69	1
12969	Naphthalene	91-20-3	2.2		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	4.1		1.7	0.69	1
12969	Pyrene	129-00-0	3.3		1.7	0.69	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
bis(2-ethylhexyl)phthalate

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	13	J	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	240		17	3.4	1
10592	PCB-1254	11097-69-1	190		17	4.5	1
10592	PCB-1260	11096-82-5	31		17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149854
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:30 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH083-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	23		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	54		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,600		41.3	7.44	1
06944	Antimony	7440-36-0	4.13	U	4.13	0.763	1
06935	Arsenic	7440-38-2	3.69	J	4.13	0.722	1
06946	Barium	7440-39-3	116		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.762	J	1.03	0.0691	1
07914	Boron	7440-42-8	16.4		10.3	0.866	1
06949	Cadmium	7440-43-9	0.414	J	1.03	0.0784	1
01650	Calcium	7440-70-2	8,840		20.6	3.44	1
06951	Chromium	7440-47-3	31.3		3.09	0.165	1
06952	Cobalt	7440-48-4	8.65		1.03	0.102	1
06953	Copper	7440-50-8	117		2.06	0.299	1
01654	Iron	7439-89-6	30,300		82.5	7.47	2
06955	Lead	7439-92-1	16.1		3.09	0.516	1
01656	Lithium	7439-93-2	22.8		4.1	0.35	1
01657	Magnesium	7439-95-4	6,490		10.3	1.72	1
06958	Manganese	7439-96-5	423		1.03	0.0856	1
06960	Molybdenum	7439-98-7	0.358	J	2.06	0.175	1
06961	Nickel	7440-02-0	18.0		2.06	0.134	1
10145	Phosphorus	7723-14-0	480		10.3	2.98	1
01662	Potassium	7440-09-7	5,950		103	8.60	1
01667	Sodium	7440-23-5	92.8	J	103	17.2	1
06969	Tin	7440-31-5	3.85	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,120		1.03	0.175	1
06971	Vanadium	7440-62-2	57.2		1.03	0.134	1
06972	Zinc	7440-66-6	78.6		4.13	0.206	1
10146	Zirconium	7440-67-7	3.33	J	5.16	0.866	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.263	J	0.413	0.103	2
06142	Silver	7440-22-4	0.0854	J	0.206	0.0268	2
06144	Strontium	7440-24-6	34.6		0.413	0.0701	2
06145	Thallium	7440-28-0	0.310		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0616		0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.05		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149854
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:30 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH083-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	4.0	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149854
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:30 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH083-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0821	1
11031	12378-PeCDD	40321-76-4	0.617	JB	5.10	0.168	1
11031	123478-HxCDD	39227-28-6	1.34	J	5.10	0.191	1
11031	123678-HxCDD	57653-85-7	5.80	B	5.10	0.226	1
11031	123789-HxCDD	19408-74-3	3.31	J	5.10	0.223	1
11031	1234678-HpCDD	35822-46-9	172	B	5.10	0.233	1
11031	OCDD	3268-87-9	1,980	B	10.2	0.123	1
11031	2378-TCDF	51207-31-9	1.51	C	1.02	0.347	1
11031	12378-PeCDF	57117-41-6	6.79		5.10	0.116	1
11031	23478-PeCDF	57117-31-4	1.50	JB	5.10	0.125	1
11031	123478-HxCDF	70648-26-9	1.44	J	5.10	0.137	1
11031	123678-HxCDF	57117-44-9	1.83	J	5.10	0.126	1
11031	123789-HxCDF	72918-21-9	0.349	JQ	5.10	0.207	1
11031	234678-HxCDF	60851-34-5	1.87	J	5.10	0.135	1
11031	1234678-HpCDF	67562-39-4	29.6	B	5.10	0.0769	1
11031	1234789-HpCDF	55673-89-7	2.68	JB	5.10	0.174	1
11031	OCDF	39001-02-0	65.5	B	10.2	0.0930	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	5.64				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	62	28 - 136
13C12-123789-HxCDF	54	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149854
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:30 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH083-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149854
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:30 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH083-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 10:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/11/2013 22:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 23:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 05:11	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 10:23	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 19:43	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/07/2013 00:08	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/07/2013 00:08	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 21:12	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149854
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:30 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55900 SDG#: PH083-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637002A	08/07/2013 00:08	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 07:06	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13215039401A	08/03/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149855
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:50 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55940 SDG#: PH083-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.7	J	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	4.0		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	0.99	J	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.6	J	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	4.6		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	44		20	6.8	1
12969	Fluoranthene	206-44-0	5.0		1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.1	J	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.2	J	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	2.8		1.9	0.75	1
12969	Naphthalene	91-20-3	2.6		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	3.1		1.9	0.75	1
12969	Pyrene	129-00-0	3.4		1.9	0.75	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
bis(2-ethylhexyl)phthalate

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.3	U	1.3	0.3	28.34
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	85		19	4.9	1
10592	PCB-1260	11096-82-5	14	J	19	4.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149855
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:50 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55940 SDG#: PH083-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	7.4		5.6	2.3	1
12952	EFH (C30-C40)	n.a.	16		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,700		44.2	7.96	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.817	1
06935	Arsenic	7440-38-2	3.78	J	4.42	0.773	1
06946	Barium	7440-39-3	139		1.10	0.0364	1
06947	Beryllium	7440-41-7	0.913	J	1.10	0.0740	1
07914	Boron	7440-42-8	18.7		11.0	0.927	1
06949	Cadmium	7440-43-9	0.176	J	1.10	0.0839	1
01650	Calcium	7440-70-2	9,240		22.1	3.69	1
06951	Chromium	7440-47-3	36.6		3.31	0.177	1
06952	Cobalt	7440-48-4	10.5		1.10	0.109	1
06953	Copper	7440-50-8	20.1		2.21	0.320	1
01654	Iron	7439-89-6	37,100		88.3	7.99	2
06955	Lead	7439-92-1	11.7		3.31	0.552	1
01656	Lithium	7439-93-2	27.8		4.4	0.38	1
01657	Magnesium	7439-95-4	7,880		11.0	1.84	1
06958	Manganese	7439-96-5	443		1.10	0.0916	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	19.6		2.21	0.144	1
10145	Phosphorus	7723-14-0	418		11.0	3.19	1
01662	Potassium	7440-09-7	5,160		110	9.21	1
01667	Sodium	7440-23-5	124		110	18.4	1
06969	Tin	7440-31-5	1.81	J	11.0	0.243	1
06970	Titanium	7440-32-6	1,080		1.10	0.188	1
06971	Vanadium	7440-62-2	63.4		1.10	0.144	1
06972	Zinc	7440-66-6	81.3		4.42	0.221	1
10146	Zirconium	7440-67-7	3.61	J	5.52	0.927	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.214	J	0.442	0.110	2
06142	Silver	7440-22-4	0.0459	J	0.221	0.0287	2
06144	Strontium	7440-24-6	45.9		0.442	0.0751	2
06145	Thallium	7440-28-0	0.362		0.221	0.0331	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0159	J	0.0183	0.0110	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149855
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:50 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55940 SDG#: PH083-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D	n.a.	7.79	0.0100	0.0100	1
	The pH was measured in water at 21.1 C.					
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	11.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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Sample Description: SL-559-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149855
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

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Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55940 SDG#: PH083-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.12	U	1.12	0.0784	1
11031	12378-PeCDD	40321-76-4	5.60	U	5.60	0.202	1
11031	123478-HxCDD	39227-28-6	0.426	JQ	5.60	0.167	1
11031	123678-HxCDD	57653-85-7	1.89	JB	5.60	0.174	1
11031	123789-HxCDD	19408-74-3	1.07	J	5.60	0.166	1
11031	1234678-HpCDD	35822-46-9	50.4	B	5.60	0.318	1
11031	OCDD	3268-87-9	570	B	11.2	0.144	1
11650	2378-TCDF-Conf	51207-31-9	0.528	JC	1.12	0.273	1
11031	12378-PeCDF	57117-41-6	1.53	J	5.60	0.131	1
11031	23478-PeCDF	57117-31-4	0.640	JBQ	5.60	0.129	1
11031	123478-HxCDF	70648-26-9	0.684	J	5.60	0.137	1
11031	123678-HxCDF	57117-44-9	0.648	J	5.60	0.124	1
11031	123789-HxCDF	72918-21-9	0.347	J	5.60	0.161	1
11031	234678-HxCDF	60851-34-5	0.422	J	5.60	0.121	1
11031	1234678-HpCDF	67562-39-4	8.84	B	5.60	0.107	1
11031	1234789-HpCDF	55673-89-7	0.655	JB	5.60	0.205	1
11031	OCDF	39001-02-0	19.1	B	11.2	0.108	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.38				1

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149855
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:50 by TB

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55940 SDG#: PH083-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 11:23	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 20:50	Laura M Krieger	28.34
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321531950	08/03/2013 18:27	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321531950	08/03/2013 18:27	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/11/2013 23:17	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 22:43	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 09:05	Joseph D Anderson	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	13224001	08/15/2013 07:25	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 10:26	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-559-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149855
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 09:50 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55940 SDG#: PH083-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 19:47	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/07/2013 00:10	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/07/2013 00:10	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 21:13	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637002A	08/07/2013 00:10	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 07:08	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13215039401A	08/03/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149856
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:20 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55800 SDG#: PH083-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	0.72	J	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	0.70	J	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	2.7		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	19	6.3	1
12969	Fluoranthene	206-44-0	2.3		1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	0.72	J	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	2.0		1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	2.0		1.7	0.70	1
12969	Pyrene	129-00-0	1.8		1.7	0.70	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
bis(2-ethylhexyl)phthalate

Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	82		18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.5	J	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149856
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:20 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55800 SDG#: PH083-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	28		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	52		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,600		40.7	7.33	1
06944	Antimony	7440-36-0	4.07	U	4.07	0.752	1
06935	Arsenic	7440-38-2	4.01	J	4.07	0.712	1
06946	Barium	7440-39-3	127		1.02	0.0335	1
06947	Beryllium	7440-41-7	0.831	J	1.02	0.0681	1
07914	Boron	7440-42-8	17.7		10.2	0.854	1
06949	Cadmium	7440-43-9	0.255	J	1.02	0.0773	1
01650	Calcium	7440-70-2	6,700		20.3	3.40	1
06951	Chromium	7440-47-3	34.1		3.05	0.163	1
06952	Cobalt	7440-48-4	9.39		1.02	0.101	1
06953	Copper	7440-50-8	20.7		2.03	0.295	1
01654	Iron	7439-89-6	34,400		81.3	7.36	2
06955	Lead	7439-92-1	13.3		3.05	0.508	1
01656	Lithium	7439-93-2	25.1		4.1	0.35	1
01657	Magnesium	7439-95-4	6,750		10.2	1.70	1
06958	Manganese	7439-96-5	471		1.02	0.0844	1
06960	Molybdenum	7439-98-7	0.327	J	2.03	0.173	1
06961	Nickel	7440-02-0	18.5		2.03	0.132	1
10145	Phosphorus	7723-14-0	445		10.2	2.94	1
01662	Potassium	7440-09-7	5,890		102	8.48	1
01667	Sodium	7440-23-5	89.0	J	102	17.0	1
06969	Tin	7440-31-5	1.79	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,260		1.02	0.173	1
06971	Vanadium	7440-62-2	63.4		1.02	0.132	1
06972	Zinc	7440-66-6	76.9		4.07	0.203	1
10146	Zirconium	7440-67-7	3.57	J	5.08	0.854	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.274	J	0.407	0.102	2
06142	Silver	7440-22-4	0.0712	J	0.203	0.0264	2
06144	Strontium	7440-24-6	33.7		0.407	0.0691	2
06145	Thallium	7440-28-0	0.309		0.203	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0308		0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.37		0.0100	0.0100	1
	The pH was measured in water at 21.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149856
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:20 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55800 SDG#: PH083-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149856
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:20 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55800 SDG#: PH083-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0482	1
11031	12378-PeCDD	40321-76-4	0.201	JB	5.01	0.0935	1
11031	123478-HxCDD	39227-28-6	0.607	J	5.01	0.109	1
11031	123678-HxCDD	57653-85-7	2.26	JB	5.01	0.121	1
11031	123789-HxCDD	19408-74-3	1.36	J	5.01	0.124	1
11031	1234678-HpCDD	35822-46-9	64.2	B	5.01	0.147	1
11031	OCDD	3268-87-9	746	B	10.0	0.0955	1
11031	2378-TCDF	51207-31-9	1.02		1.00	0.194	1
11031	12378-PeCDF	57117-41-6	2.92	J	5.01	0.0735	1
11031	23478-PeCDF	57117-31-4	0.918	JB	5.01	0.0723	1
11031	123478-HxCDF	70648-26-9	0.664	J	5.01	0.0729	1
11031	123678-HxCDF	57117-44-9	0.667	J	5.01	0.0677	1
11031	123789-HxCDF	72918-21-9	0.394	J	5.01	0.0905	1
11031	234678-HxCDF	60851-34-5	0.643	J	5.01	0.0682	1
11031	1234678-HpCDF	67562-39-4	10.8	B	5.01	0.0514	1
11031	1234789-HpCDF	55673-89-7	0.738	JB	5.01	0.106	1
11031	OCDF	39001-02-0	24.6	B	10.0	0.0598	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.31				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149856
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:20 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55800 SDG#: PH083-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149856
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:20 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55800 SDG#: PH083-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 11:55	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/11/2013 23:36	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 23:04	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 10:02	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 10:30	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 19:51	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/07/2013 00:12	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/07/2013 00:12	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 21:15	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149856
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:20 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55800 SDG#: PH083-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132170637002A	08/07/2013 00:12	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 07:11	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13215039401A	08/03/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149857
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:40 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55840 SDG#: PH083-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.78	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.78	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	J	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.78	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.4	J	1.9	0.78	1
12969	2-Methylnaphthalene	91-57-6	2.2		1.9	0.78	1
12969	Naphthalene	91-20-3	2.8		1.9	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	0.95	J	1.9	0.78	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.78	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
bis(2-ethylhexyl)phthalate

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.4	U	1.4	0.3	30.05
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	11	1
10592	Aroclor 5442	12642-23-8	38	U	38	11	1
10592	Aroclor 5460	11126-42-4	38	U	38	11	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	9.6	J	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149857
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:40 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55840 SDG#: PH083-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	4.5	J	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	11	J	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,400		46.3	8.34	1
06944	Antimony	7440-36-0	4.63	U	4.63	0.856	1
06935	Arsenic	7440-38-2	5.14		4.63	0.810	1
06946	Barium	7440-39-3	134		1.16	0.0382	1
06947	Beryllium	7440-41-7	0.885	J	1.16	0.0775	1
07914	Boron	7440-42-8	21.5		11.6	0.972	1
06949	Cadmium	7440-43-9	0.256	J	1.16	0.0879	1
01650	Calcium	7440-70-2	24,600		23.1	3.86	1
06951	Chromium	7440-47-3	37.6		3.47	0.185	1
06952	Cobalt	7440-48-4	11.6		1.16	0.115	1
06953	Copper	7440-50-8	20.8		2.31	0.335	1
01654	Iron	7439-89-6	38,000		92.5	8.37	2
06955	Lead	7439-92-1	12.4		3.47	0.578	1
01656	Lithium	7439-93-2	29.6		4.6	0.39	1
01657	Magnesium	7439-95-4	8,120		11.6	1.93	1
06958	Manganese	7439-96-5	597		1.16	0.0960	1
06960	Molybdenum	7439-98-7	2.31	U	2.31	0.197	1
06961	Nickel	7440-02-0	24.2		2.31	0.150	1
10145	Phosphorus	7723-14-0	438		11.6	3.34	1
01662	Potassium	7440-09-7	4,680		116	9.65	1
01667	Sodium	7440-23-5	205		116	19.3	1
06969	Tin	7440-31-5	1.59	J	11.6	0.254	1
06970	Titanium	7440-32-6	1,300		1.16	0.197	1
06971	Vanadium	7440-62-2	71.9		1.16	0.150	1
06972	Zinc	7440-66-6	80.5		4.63	0.231	1
10146	Zirconium	7440-67-7	4.80	J	5.78	0.972	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.204	J	0.463	0.116	2
06142	Silver	7440-22-4	0.0486	J	0.231	0.0301	2
06144	Strontium	7440-24-6	67.2		0.463	0.0787	2
06145	Thallium	7440-28-0	0.344		0.231	0.0347	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0161	J	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.09		0.0100	0.0100	1

The pH was measured in water at 21.5 C.

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149857
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:40 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55840 SDG#: PH083-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	14.4	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149857
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:40 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55840 SDG#: PH083-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.17	U	1.17	0.0688	1
11031	12378-PeCDD	40321-76-4	5.84	U	5.84	0.0741	1
11031	123478-HxCDD	39227-28-6	5.84	U	5.84	0.0306	1
11031	123678-HxCDD	57653-85-7	5.84	U	5.84	0.0350	1
11031	123789-HxCDD	19408-74-3	0.0560	JQ	5.84	0.0375	1
11031	1234678-HpCDD	35822-46-9	0.412	JB	5.84	0.0533	1
11031	OCDD	3268-87-9	5.38	JB	11.7	0.0429	1
11031	2378-TCDF	51207-31-9	1.17	U	1.17	0.0480	1
11031	12378-PeCDF	57117-41-6	5.84	U	5.84	0.0303	1
11031	23478-PeCDF	57117-31-4	5.84	U	5.84	0.0290	1
11031	123478-HxCDF	70648-26-9	0.0366	J	5.84	0.0188	1
11031	123678-HxCDF	57117-44-9	0.0324	JQ	5.84	0.0188	1
11031	123789-HxCDF	72918-21-9	5.84	U	5.84	0.0244	1
11031	234678-HxCDF	60851-34-5	0.0258	JQ	5.84	0.0186	1
11031	1234678-HpCDF	67562-39-4	0.0875	JB	5.84	0.0217	1
11031	1234789-HpCDF	55673-89-7	0.0496	JBQ	5.84	0.0377	1
11031	OCDF	39001-02-0	0.298	JBQ	11.7	0.0593	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0102				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	66	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	54	26 - 152
13C12-123678-HxCDF	62	26 - 123
13C12-234678-HxCDF	58	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	48	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149857
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:40 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55840 SDG#: PH083-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149857
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:40 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55840 SDG#: PH083-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 12:27	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 21:28	Laura M Krieger	30.05
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321531950	08/03/2013 18:28	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321531950	08/03/2013 18:29	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/11/2013 23:54	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 22:02	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 10:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 10:34	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149857
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 12:40 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55840 SDG#: PH083-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 19:56	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/07/2013 00:15	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/07/2013 00:15	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 21:17	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637002A	08/07/2013 00:15	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 07:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13215039401A	08/03/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149858
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 13:00 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55890 SDG#: PH083-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.78	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.78	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.1	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.1	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.1	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.1	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.78	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.78	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.78	1
12969	2-Methylnaphthalene	91-57-6	2.0	U	2.0	0.78	1
12969	Naphthalene	91-20-3	2.0	U	2.0	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.1	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.78	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.3	U	1.3	0.3	27.06
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C15-C20)	n.a.	5.9	U	5.9	2.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149858
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 13:00 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55890 SDG#: PH083-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	3.5	J	5.9	2.4	1
12952	EFH (C30-C40)	n.a.	8.5	J	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.9	U	5.9	2.4	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,600		46.1	8.31	1
06944	Antimony	7440-36-0	4.61	U	4.61	0.853	1
06935	Arsenic	7440-38-2	6.38		4.61	0.806	1
06946	Barium	7440-39-3	132		1.15	0.0380	1
06947	Beryllium	7440-41-7	0.926	J	1.15	0.0772	1
07914	Boron	7440-42-8	17.9		11.5	0.968	1
06949	Cadmium	7440-43-9	0.227	J	1.15	0.0876	1
01650	Calcium	7440-70-2	59,500		23.0	3.85	1
06951	Chromium	7440-47-3	34.6		3.46	0.184	1
06952	Cobalt	7440-48-4	11.8		1.15	0.114	1
06953	Copper	7440-50-8	14.9		2.30	0.334	1
01654	Iron	7439-89-6	33,800		92.2	8.34	2
06955	Lead	7439-92-1	11.8		3.46	0.576	1
01656	Lithium	7439-93-2	32.8		4.6	0.39	1
01657	Magnesium	7439-95-4	7,280		11.5	1.92	1
06958	Manganese	7439-96-5	557		1.15	0.0956	1
06960	Molybdenum	7439-98-7	2.30	U	2.30	0.196	1
06961	Nickel	7440-02-0	23.2		2.30	0.150	1
10145	Phosphorus	7723-14-0	171		11.5	3.33	1
01662	Potassium	7440-09-7	2,000		115	9.61	1
01667	Sodium	7440-23-5	377		115	19.2	1
06969	Tin	7440-31-5	1.66	J	11.5	0.253	1
06970	Titanium	7440-32-6	1,180		1.15	0.196	1
06971	Vanadium	7440-62-2	68.7		1.15	0.150	1
06972	Zinc	7440-66-6	53.3		4.61	0.230	1
10146	Zirconium	7440-67-7	4.41	J	5.76	0.968	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.461	U	0.461	0.115	2
06142	Silver	7440-22-4	0.0629	J	0.230	0.0300	2
06144	Strontium	7440-24-6	89.4		0.461	0.0783	2
06145	Thallium	7440-28-0	0.294		0.230	0.0346	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0268		0.0193	0.0116	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.25		0.0100	0.0100	1
	The pH was measured in water at 20.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149858
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 13:00 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55890 SDG#: PH083-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 12:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 22:06	Laura M Krieger	27.06
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321531950	08/03/2013 18:30	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321531950	08/03/2013 18:30	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/12/2013 00:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 21:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/12/2013 10:45	Eric L Eby	2
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149858
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 13:00 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55890 SDG#: PH083-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 20:00	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/07/2013 00:17	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/07/2013 00:17	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 21:19	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637002A	08/07/2013 00:17	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 07:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13215039401A	08/03/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-12.5-13.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149859
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 13:40 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55812 SDG#: PH083-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	0.49	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
bis(2-ethylhexyl)phthalate

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.4	U	1.4	0.3	30.49
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	7.1	J	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-12.5-13.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149859
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 13:40 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55812 SDG#: PH083-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	3.9	J	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	9.9	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,800		43.6	7.86	1
06944	Antimony	7440-36-0	4.36	U	4.36	0.806	1
06935	Arsenic	7440-38-2	4.92		4.36	0.763	1
06946	Barium	7440-39-3	90.3		1.09	0.0360	1
06947	Beryllium	7440-41-7	0.563	J	1.09	0.0730	1
07914	Boron	7440-42-8	9.94	J	10.9	0.915	1
06949	Cadmium	7440-43-9	0.121	J	1.09	0.0828	1
01650	Calcium	7440-70-2	72,400		43.6	7.28	2
06951	Chromium	7440-47-3	22.2		3.27	0.174	1
06952	Cobalt	7440-48-4	5.95		1.09	0.108	1
06953	Copper	7440-50-8	10.7		2.18	0.316	1
01654	Iron	7439-89-6	22,600		43.6	3.94	1
06955	Lead	7439-92-1	5.63		3.27	0.545	1
01656	Lithium	7439-93-2	24.4		4.4	0.37	1
01657	Magnesium	7439-95-4	5,550		10.9	1.82	1
06958	Manganese	7439-96-5	266		1.09	0.0904	1
06960	Molybdenum	7439-98-7	2.18	U	2.18	0.185	1
06961	Nickel	7440-02-0	11.7		2.18	0.142	1
10145	Phosphorus	7723-14-0	460		10.9	3.15	1
01662	Potassium	7440-09-7	2,530		109	9.09	1
01667	Sodium	7440-23-5	246		109	18.2	1
06969	Tin	7440-31-5	1.53	J	10.9	0.240	1
06970	Titanium	7440-32-6	1,240		1.09	0.185	1
06971	Vanadium	7440-62-2	40.8		1.09	0.142	1
06972	Zinc	7440-66-6	58.8		4.36	0.218	1
10146	Zirconium	7440-67-7	3.37	J	5.45	0.915	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.436	U	0.436	0.109	2
06142	Silver	7440-22-4	0.0639	J	0.218	0.0283	2
06144	Strontium	7440-24-6	116		1.09	0.185	5
06145	Thallium	7440-28-0	0.248		0.218	0.0327	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173	J	0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.34		0.0100	0.0100	1

The pH was measured in water at 20.6 C.

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-12.5-13.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149859
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 13:40 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55812 SDG#: PH083-10*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	10.9	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 13:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13217B16A	08/06/2013 22:44	Laura M Krieger	30.49
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321531950	08/03/2013 18:31	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321531950	08/03/2013 18:31	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/12/2013 00:31	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132190015A	08/08/2013 22:23	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132190015A	08/08/2013 02:00	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06944	Antimony	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06946	Barium	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
07914	Boron	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
01650	Calcium	SW-846 6010C	1	132170637002	08/12/2013 10:49	Eric L Eby	2
06951	Chromium	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06953	Copper	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
01654	Iron	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06955	Lead	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
01656	Lithium	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06958	Manganese	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06961	Nickel	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-558-SA8-SB-12.5-13.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7149859
LL Group # 1409042
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/02/2013 13:40 by TB

Submitted: 08/03/2013 09:30
Reported: 08/15/2013 19:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55812 SDG#: PH083-10*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
01667	Sodium	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06969	Tin	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06970	Titanium	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06972	Zinc	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132170637002	08/10/2013 20:05	John P Hook	1
06141	Selenium	SW-846 6020A	1	132170637002B	08/07/2013 00:19	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637002A	08/07/2013 00:19	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637002A	08/08/2013 21:20	David K Beck	5
06145	Thallium	SW-846 6020A	1	132170637002A	08/07/2013 00:19	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132170638002	08/06/2013 07:17	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637002	08/05/2013 23:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132170638002	08/06/2013 03:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13215039401A	08/03/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409042
Reported: 08/15/13 at 07:50 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13220SLC026	Sample number(s): 7149851-7149859									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	112		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	98		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	99		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	109		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	109		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	123		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	122*		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	117		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	105		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	116		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	127*		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	104		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	111		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	134*		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	115		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	135*		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	109		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	107		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	112		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	113		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	107		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	106		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	74		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	118		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	100		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	96		79-112		
Batch number: 13217B16A	Sample number(s): 7149852-7149853,7149855,7149857-7149859									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	73	71	67-119	3	30
Batch number: 13218A20A	Sample number(s): 7149850									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	100	105	75-135	6	30
Batch number: 132200026A	Sample number(s): 7149851-7149859									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	70	74	36-106	6	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409042
Reported: 08/15/13 at 07:50 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	100		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132190015A	Sample number(s): 7149851-7149859									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	109		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	111		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	116		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	88		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	91		49-107		
Batch number: 132170637002	Sample number(s): 7149851-7149859									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	106		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	106		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	101		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	98		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	105		80-120		
Calcium	5.74	J	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	108		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	105		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	105		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	101		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	107		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.54	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	107		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	105		80-120		
Zinc	0.284	J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132170637002A	Sample number(s): 7149851-7149859									
Silver	0.200	U	0.200	0.0260	mg/kg	103		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	103		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	113		80-120		
Batch number: 132170637002B	Sample number(s): 7149851-7149859									
Selenium	0.400	U	0.400	0.100	mg/kg	110		80-120		
Batch number: 132170638002	Sample number(s): 7149851-7149859									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	120		85-120		
Batch number: 13215039401A	Sample number(s): 7149851-7149859									
15a pH by 9045D						99		95-105		
Batch number: 13221162402A	Sample number(s): 7149851-7149859									

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409042
Reported: 08/15/13 at 07:50 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13224001	Sample number(s): 7149851-7149852,7149854-7149857								
2378-TCDD	1.00 U	1.00	0.0847	ng/kg	112		67-158		
12378-PeCDD	0.0780 J	5.00	0.0697	ng/kg	107		70-142		
123478-HxCDD	5.00 U	5.00	0.0276	ng/kg	103		70-164		
123678-HxCDD	0.0377 J	5.00	0.0296	ng/kg	99		76-134		
123789-HxCDD	5.00 U	5.00	0.0314	ng/kg	98		64-162		
1234678-HpCDD	0.0637 J	5.00	0.0424	ng/kg	96		70-140		
OCDD	0.252 J	10.0	0.0359	ng/kg	98		78-144		
2378-TCDF	1.00 U	1.00	0.0768	ng/kg	105		75-158		
2378-TCDF-Conf	1.00 U	1.00	0.0353	ng/kg	105		75-158		
12378-PeCDF	5.00 U	5.00	0.0383	ng/kg	98		80-134		
23478-PeCDF	0.0474 J	5.00	0.0383	ng/kg	101		68-160		
123478-HxCDF	5.00 U	5.00	0.0235	ng/kg	97		72-134		
123678-HxCDF	5.00 U	5.00	0.0222	ng/kg	100		84-130		
123789-HxCDF	5.00 U	5.00	0.0320	ng/kg	95		78-130		
234678-HxCDF	5.00 U	5.00	0.0215	ng/kg	97		70-156		
1234678-HpCDF	0.0267 J	5.00	0.0139	ng/kg	96		82-122		
1234789-HpCDF	0.0434 J	5.00	0.0326	ng/kg	94		78-138		
OCDF	0.202 J	10.0	0.0706	ng/kg	94		63-170		
TEQ WHO 2005 - EDLx0.0	U			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13220SLC026	Sample number(s): 7149851-7149859 UNSPK: 7149851								
Acenaphthene	89	87	48-127	2	30				
Acenaphthylene	87	69	49-121	23	30				
Anthracene	82	126	52-126	42*	30				
Benzo(a)anthracene	108	109	44-143	1	30				
Benzo(a)pyrene	89	93	44-140	3	30				
Benzo(b)fluoranthene	75	101	26-142	20	30				
Benzo(e)pyrene	121	137*	70-130	12	30				
Benzo(g,h,i)perylene	51	58	33-141	7	30				
Benzo(k)fluoranthene	96	110	54-142	14	30				
Butylbenzylphthalate	0*	0*	49-151	0	30				
Di-n-butylphthalate	0*	0*	52-147	0	30				
Chrysene	82	92	29-148	8	30				
Dibenz(a,h)anthracene	71	83	20-137	16	30				
Diethylphthalate	0*	0*	43-145	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409042
Reported: 08/15/13 at 07:50 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dimethylphthalate	0*	0*	58-129	0	30				
Bis(2-Ethylhexyl)phthalate	0*	0*	39-167	0	30				
Fluoranthene	97	150*	40-148	35*	30				
Fluorene	88	93	51-137	5	30				
Indeno(1,2,3-cd)pyrene	44	71	17-136	26	30				
1-Methylnaphthalene	98	84	50-131	16	30				
2-Methylnaphthalene	108	89	35-152	19	30				
Naphthalene	93	95	31-148	2	30				
N-Nitrosodimethylamine	73	61	48-113	17	30				
Di-n-octylphthalate	0*	0*	52-162	0	30				
Phenanthrene	77	83	29-142	5	30				
Pyrene	94	98	26-143	3	30				
Batch number: 132200026A	Sample number(s): 7149851-7149859 UNSPK: 7149851								
PCB-1016	94	94	16-146	0	50				
PCB-1260	81	86	40-134	6	50				
Batch number: 132190015A	Sample number(s): 7149851-7149859 UNSPK: P148144								
EFH (C12-C14)	105	99	49-123	6	20				
EFH (C15-C20)	121	123	49-123	2	20				
EFH (C21-C30)	104	113	49-123	4	20				
EFH (C30-C40)	92	123	49-123	12	20				
EFH (C8-C11)	95	85	49-123	10	20				
Batch number: 132170637002	Sample number(s): 7149851-7149859 UNSPK: P146671 BKG: P146671								
Aluminum	3726 (2)	3086 (2)	75-125	4	20	26,100	25,100	4	20
Antimony	45*	45*	75-125	2	20	3.92 U	3.92 U	0 (1)	20
Arsenic	91	94	75-125	2	20	5.44	5.10	7 (1)	20
Barium	99	96	75-125	2	20	115	120	4	20
Beryllium	100	97	75-125	2	20	0.917 J	0.894 J	2 (1)	20
Boron	95	93	75-125	2	20	18.5	18.3	1 (1)	20
Cadmium	90	92	75-125	2	20	0.167 J	0.229 J	32* (1)	20
Calcium	150 (2)	2494 (2)	75-125	65*	20	8,910	9,220	3	20
Chromium	128*	116	75-125	4	20	36.5	35.1	4	20
Cobalt	91	92	75-125	1	20	8.94	9.41	5	20
Copper	106	104	75-125	1	20	18.8	18.8	0	20
Iron	2733 (2)	968 (2)	75-125	5	20	32,400	34,000	5	20
Lead	88	83	75-125	3	20	12.3	12.2	1 (1)	20
Lithium	105	104	75-125	0	20	23.4	22.8	2	20
Magnesium	425 (2)	322 (2)	75-125	3	20	7,000	6,800	3	20
Manganese	114 (2)	340 (2)	75-125	20	20	455	472	4	20
Molybdenum	88	86	75-125	2	20	0.497 J	0.296 J	51* (1)	20
Nickel	93	93	75-125	0	20	17.7	17.9	1	20
Phosphorus	85 (2)	69 (2)	75-125	3	20	422	427	1	20
Potassium	169 (2)	138 (2)	75-125	5	20	4,510	4,430	2	20
Sodium	101	101	75-125	0	20	84.3 J	81.0 J	4 (1)	20
Tin	85	83	75-125	3	20	1.42 J	1.55 J	8 (1)	20
Titanium	469 (2)	350 (2)	75-125	7	20	1,180	1,090	7	20
Vanadium	126*	116	75-125	4	20	62.7	60.8	3	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409042
Reported: 08/15/13 at 07:50 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Zinc	97	94	75-125	1	20	68.6	68.8	0	20
Zirconium	90	89	75-125	1	20	5.26	5.14	2 (1)	20
Batch number: 132170637002A	Sample number(s): 7149851-7149859 UNSPK: P146671 BKG: P146671								
Silver	103	100	75-125	2	20	0.0533 J	0.0529 J	1 (1)	20
Strontium	101	121	75-125	4	20	29.3	27.9	5	20
Thallium	97	97	75-125	0	20	0.306	0.304	1 (1)	20
Batch number: 132170637002B	Sample number(s): 7149851-7149859 UNSPK: P146671 BKG: P146671								
Selenium	89	96	75-125	7	20	0.231 J	0.202 J	14 (1)	20
Batch number: 132170638002	Sample number(s): 7149851-7149859 UNSPK: P148145 BKG: P148145								
3a Mercury 7471A	117	120	65-135	3	20	0.0163 J	0.0136 J	18 (1)	20
Batch number: 13215039401A	Sample number(s): 7149851-7149859 BKG: 7149859								
15a pH by 9045D						8.34	8.52	2	3
Batch number: 13221162402A	Sample number(s): 7149851-7149859 BKG: P152828								
14a Moisture Content by 160.3						1.9	1.7	8	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13220SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7149851	61	61	86
7149852	101	107	96
7149853	82	94	101
7149854	83	70	128*
7149855	78	80	138*
7149856	78	71	122
7149857	81	89	116
7149858	97	92	125
7149859	96	81	77
Blank	91	97	110
LCS	96	103	105
MS	82	85	102
MSD	106	84	79
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13217B16A

	Trifluorotoluene-F

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409042
Reported: 08/15/13 at 07:50 PM

Surrogate Quality Control

7149852	72	
7149853	72	
7149855	68	
7149857	73	
7149858	71	
7149859	72	
Blank	83	
LCS	80	
LCSD	77	
Limits:	61-122	

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13218A20A

	Trifluorotoluene-F
7149850	88
Blank	85
LCS	118
LCSD	123
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132200026A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7149851	106	81
7149852	106	101
7149853	109	99
7149854	102	98
7149855	101	95
7149856	101	93
7149857	102	92
7149858	102	100
7149859	104	95
Blank	109	104
LCS	104	103
LCSD	115	118
MS	100	79
MSD	99	84
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132190015A

	Chlorobenzene	Orthoterphenyl
7149851	99	107
7149852	95	98
7149853	89	94
7149854	100	105
7149855	104	101
7149856	93	103
7149857	89	90

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409042
Reported: 08/15/13 at 07:50 PM

Surrogate Quality Control

7149858	96	84
7149859	97	104
Blank	101	103
LCS	108	113
MS	97	103
MSD	99	103
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13224001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7149851	63	76	60	64	62	58
7149852	61	77	61	70	65	58
7149854	63	78	60	73	62	54
7149855	64	55	42	48	47	51
7149856	67	76	61	69	63	63
7149857	52	67	54	62	58	59
Blank	51	64	55	65	62	58
OPR	43	59	52	59	55	49
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7149851	71	64	60	73	66	67
7149852	86	57	47	73	69	73
7149854	90	57	49	80	70	71
7149855	55	40	39	56	49	55
7149856	85	55	50	77	70	73
7149857	75	58	48	69	65	67
Blank	86	51	48	67	68	74
OPR	78	51	48	64	61	66
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	13C12-2378-TCDF-Conf
7149851	67	72	73	64	74	
7149852	73	74	70	62	81	
7149854	72	76	81	65	88	
7149855	58	55	59	56	58	54
7149856	72	75	73	64	80	
7149857	66	70	68	53	70	
Blank	71	75	74	48	69	50
OPR	65	69	68	41	64	41
Limits:	28-130	23-140	17-157	24-169	24-185	24-169

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Gp# 1409042 Sample# 7149850-59

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/2/2013
CarrierName: FedEx
AirbillNo: 796384004859

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130802-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-080213	8/2/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X												
SL-552-SA8-SB-0.0-0.5	8/2/13 07:45	SO	None	2 - SS-Sleeve	10 day	X	X					X			X	X										X											
SL-552-SA8-SB-0.0-0.5	8/2/13 07:45	SO	None	1 - 4 oz glass	10 day													X																			
SL-552-SA8-SB-4.0-5.0	8/2/13 08:45	SO	None	2 - SS-Sleeve	10 day	X	X					X			X	X										X											
SL-552-SA8-SB-4.0-5.0	8/2/13 08:45	SO	None	1 - 4 oz glass	10 day													X																			
SL-552-SA8-SB-7.5-8.5	8/2/13 09:00	SO	None	2 - SS-Sleeve	10 day	X	X					X			X											X											
SL-552-SA8-SB-7.5-8.5	8/2/13 09:00	SO	None	1 - 4 oz glass	10 day													X																			
SL-552-SA8-SB-4.0-5.0	8/2/13 08:45	SO	None	2 - Encore	10 day																				X												
SL-552-SA8-SB-7.5-8.5	8/2/13 09:00	SO	None	2 - Encore	10 day																				X												
SL-559-SA8-SB-0.0-0.5	8/2/13 09:30	SO	None	2 - SS-Sleeve	10 day	X	X					X			X	X										X											
SL-559-SA8-SB-0.0-0.5	8/2/13 09:30	SO	None	1 - 4 oz glass	10 day													X																			
SL-559-SA8-SB-4.0-5.0	8/2/13 09:50	SO	None	2 - SS-Sleeve	10 day	X	X					X			X	X										X											
SL-559-SA8-SB-4.0-5.0	8/2/13 09:50	SO	None	1 - 4 oz glass	10 day													X																			
SL-559-SA8-SB-4.0-5.0	8/2/13 09:50	SO	None	2 - Encore	10 day																				X												
SL-558-SA8-SB-0.0-0.5	8/2/13 12:20	SO	None	2 - SS-Sleeve	10 day	X	X					X			X	X										X											
SL-558-SA8-SB-0.0-0.5	8/2/13 12:20	SO	None	1 - 4 oz glass	10 day													X																			
SL-558-SA8-SB-4.0-5.0	8/2/13 12:40	SO	None	2 - SS-Sleeve	10 day	X	X					X			X	X										X											
SL-558-SA8-SB-4.0-5.0	8/2/13 12:40	SO	None	1 - 4 oz glass	10 day													X																			
SL-558-SA8-SB-4.0-5.0	8/2/13 12:40	SO	None	2 - Encore	10 day																				X												
SL-558-SA8-SB-9.0-10.0	8/2/13 13:00	SO	None	2 - SS-Sleeve	10 day	X	X					X			X											X											
SL-558-SA8-SB-9.0-10.0	8/2/13 13:00	SO	None	1 - 4 oz glass	10 day													X																			
SL-558-SA8-SB-9.0-10.0	8/2/13 13:00	SO	None	2 - Encore	10 day																				X												
SL-558-SA8-SB-12.5-13.5	8/2/13 13:40	SO	None	2 - SS-Sleeve	10 day	X	X					X			X											X											
SL-558-SA8-SB-12.5-13.5	8/2/13 13:40	SO	None	1 - 4 oz glass	10 day													X																			
SL-558-SA8-SB-12.5-13.5	8/2/13 13:40	SO	None	2 - Encore	10 day																				X												

acct# 13013 Grp# 1409042 sample# 7149850-59

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/2/2013
CarrierName: FedEx
AirbillNo: 796384004859

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130802-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: O Bennett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Mypel	08/02/2013	1600									
			8-3-13	0930							

COC Rev 2

COC: 20130802-01, Page 2 of 2

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C# 1409042

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 8-3-13

Time of Receipt: 0930

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.1	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 5200 **Date/Time:** 8-3-13 1120

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH084

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 16, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/06/2013
Group Number: 1409284
SDG: PH084
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-080513 Water	7150954
SL-568-SA8-SB-0.0-0.5 Soil	7150955
SL-568-SA8-SB-4.0-5.0 Soil	7150956
SL-569-SA8-SB-0.0-0.5 Soil	7150957
SL-569-SA8-SB-4.0-5.0 Soil	7150958
SL-569-SA8-SB-7.0-8.0 Soil	7150959

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB-080513 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7150954
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:00

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB8-5 SDG#: PH084-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13218A20A	08/07/2013 00:10	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13218A20A	08/07/2013 00:10	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150955
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:10 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH084-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	19	U	19	7.6	10
12969	Acenaphthylene	208-96-8	19	U	19	3.8	10
12969	Anthracene	120-12-7	19	U	19	3.8	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.6	10
12969	Benzo(a)pyrene	50-32-8	19	U	19	7.6	10
12969	Benzo(b)fluoranthene	205-99-2	19	U	19	7.6	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	38	10
12969	Benzo(g,h,i)perylene	191-24-2	19	U	19	7.6	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.6	10
12969	Butylbenzylphthalate	85-68-7	200	U	200	68	10
12969	Di-n-butylphthalate	84-74-2	200	U	200	68	10
12969	Chrysene	218-01-9	5.8	J	19	3.8	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.6	10
12969	Diethylphthalate	84-66-2	200	U	200	68	10
12969	Dimethylphthalate	131-11-3	200	U	200	68	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	200	U	200	68	10
12969	Fluoranthene	206-44-0	19	U	19	7.6	10
12969	Fluorene	86-73-7	19	U	19	7.6	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.6	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.6	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.6	10
12969	Naphthalene	91-20-3	19	U	19	7.6	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.6	10
12969	Di-n-octylphthalate	117-84-0	200	U	200	68	10
12969	Phenanthrene	85-01-8	19	U	19	7.6	10
12969	Pyrene	129-00-0	19	U	19	7.6	10
Reporting limits were raised due to interference from the sample matrix.							
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	11	U	11	4.5	2
12952	EFH (C15-C20)	n.a.	11	U	11	4.5	2
12952	EFH (C21-C30)	n.a.	30		11	4.5	2
12952	EFH (C30-C40)	n.a.	92		23	9.0	2
12952	EFH (C8-C11)	n.a.	11	U	11	4.5	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150955
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:10 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH084-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,100		44.5	8.01	1
06944	Antimony	7440-36-0	4.45	U	4.45	0.823	1
06935	Arsenic	7440-38-2	5.39		4.45	0.778	1
06946	Barium	7440-39-3	115		1.11	0.0367	1
06947	Beryllium	7440-41-7	0.889	J	1.11	0.0745	1
07914	Boron	7440-42-8	13.1		11.1	0.934	1
06949	Cadmium	7440-43-9	0.347	J	1.11	0.0845	1
01650	Calcium	7440-70-2	15,000		22.2	3.71	1
06951	Chromium	7440-47-3	36.9		3.33	0.178	1
06952	Cobalt	7440-48-4	8.56		1.11	0.110	1
06953	Copper	7440-50-8	16.6		2.22	0.322	1
01654	Iron	7439-89-6	29,900		44.5	4.02	1
06955	Lead	7439-92-1	8.86		3.33	0.556	1
01656	Lithium	7439-93-2	28.3		4.4	0.38	1
01657	Magnesium	7439-95-4	6,660		11.1	1.86	1
06958	Manganese	7439-96-5	415		1.11	0.0923	1
06960	Molybdenum	7439-98-7	0.353	J	2.22	0.189	1
06961	Nickel	7440-02-0	20.1		2.22	0.145	1
10145	Phosphorus	7723-14-0	315		11.1	3.21	1
01662	Potassium	7440-09-7	4,170		111	9.27	1
01667	Sodium	7440-23-5	94.3	J	111	18.6	1
06969	Tin	7440-31-5	3.03	J	11.1	0.245	1
06970	Titanium	7440-32-6	1,180		1.11	0.189	1
06971	Vanadium	7440-62-2	62.5		1.11	0.145	1
06972	Zinc	7440-66-6	73.6		4.45	0.222	1
10146	Zirconium	7440-67-7	6.85		5.56	0.934	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.150	J	0.445	0.111	2
06142	Silver	7440-22-4	0.0513	J	0.222	0.0289	2
06144	Strontium	7440-24-6	46.3		0.445	0.0756	2
06145	Thallium	7440-28-0	0.366		0.222	0.0333	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0189	U	0.0189	0.0113	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.17		0.0100	0.0100	1
	The pH was measured in water at 22.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150955
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:10 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH084-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0663	JQ	1.09	0.0544	1
11031	12378-PeCDD	40321-76-4	0.173	JBQ	5.44	0.0645	1
11031	123478-HxCDD	39227-28-6	0.113	JQ	5.44	0.0518	1
11031	123678-HxCDD	57653-85-7	0.298	JBQ	5.44	0.0587	1
11031	123789-HxCDD	19408-74-3	0.390	JQ	5.44	0.0505	1
11031	1234678-HpCDD	35822-46-9	3.16	JB	5.44	0.0726	1
11031	OCDD	3268-87-9	26.4	B	10.9	0.0431	1
11031	2378-TCDF	51207-31-9	0.118	JQ	1.09	0.0880	1
11031	12378-PeCDF	57117-41-6	0.517	J	5.44	0.0744	1
11031	23478-PeCDF	57117-31-4	0.320	JB	5.44	0.0638	1
11031	123478-HxCDF	70648-26-9	0.547	J	5.44	0.0486	1
11031	123678-HxCDF	57117-44-9	0.177	J	5.44	0.0483	1
11031	123789-HxCDF	72918-21-9	0.353	J	5.44	0.0446	1
11031	234678-HxCDF	60851-34-5	0.0925	JQ	5.44	0.0466	1
11031	1234678-HpCDF	67562-39-4	0.615	JB	5.44	0.0464	1
11031	1234789-HpCDF	55673-89-7	0.0926	JBQ	5.44	0.0475	1
11031	OCDF	39001-02-0	1.06	JB	10.9	0.0529	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.265				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	59	32 - 141
13C12-123678-HxCDD	58	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	65	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	51	26 - 152
13C12-123678-HxCDF	51	26 - 123
13C12-234678-HxCDF	54	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	53	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150955
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:10 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH084-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150955
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:10 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH084-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 15:39	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/12/2013 00:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/13/2013 02:55	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/15/2013 19:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132180637001	08/08/2013 01:22	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132180637001B	08/08/2013 08:24	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132180637001A	08/08/2013 08:24	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132180637001A	08/08/2013 08:24	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150955
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:10 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56800 SDG#: PH084-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132180637001A	08/08/2013 08:24	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132180638001	08/08/2013 10:41	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132180637001	08/07/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132180638001	08/07/2013 13:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13218039402A	08/06/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401B	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150956
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:30 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56840 SDG#: PH084-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.41	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	15	J	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
bis(2-ethylhexyl)phthalate

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.46
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.5	1
10592	PCB-1242	53469-21-9	18	U	18	4.5	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150956
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:30 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56840 SDG#: PH084-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	11		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	27		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,400		43.7	7.88	1
06944	Antimony	7440-36-0	4.37	U	4.37	0.809	1
06935	Arsenic	7440-38-2	5.56		4.37	0.765	1
06946	Barium	7440-39-3	82.8		1.09	0.0361	1
06947	Beryllium	7440-41-7	0.800	J	1.09	0.0732	1
07914	Boron	7440-42-8	7.93	J	10.9	0.918	1
06949	Cadmium	7440-43-9	0.192	J	1.09	0.0831	1
01650	Calcium	7440-70-2	6,340		21.9	3.65	1
06951	Chromium	7440-47-3	26.3		3.28	0.175	1
06952	Cobalt	7440-48-4	5.85		1.09	0.108	1
06953	Copper	7440-50-8	13.5		2.19	0.317	1
01654	Iron	7439-89-6	26,500		43.7	3.96	1
06955	Lead	7439-92-1	6.95		3.28	0.546	1
01656	Lithium	7439-93-2	27.5		4.4	0.37	1
01657	Magnesium	7439-95-4	5,440		10.9	1.83	1
06958	Manganese	7439-96-5	348		1.09	0.0907	1
06960	Molybdenum	7439-98-7	2.19	U	2.19	0.186	1
06961	Nickel	7440-02-0	14.3		2.19	0.142	1
10145	Phosphorus	7723-14-0	358		10.9	3.16	1
01662	Potassium	7440-09-7	3,030		109	9.11	1
01667	Sodium	7440-23-5	91.9	J	109	18.3	1
06969	Tin	7440-31-5	3.37	J	10.9	0.240	1
06970	Titanium	7440-32-6	1,340		1.09	0.186	1
06971	Vanadium	7440-62-2	50.3		1.09	0.142	1
06972	Zinc	7440-66-6	61.1		4.37	0.219	1
10146	Zirconium	7440-67-7	5.33	J	5.46	0.918	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.437	U	0.437	0.109	2
06142	Silver	7440-22-4	0.0595	J	0.219	0.0284	2
06144	Strontium	7440-24-6	35.7		0.437	0.0743	2
06145	Thallium	7440-28-0	0.426		0.219	0.0328	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.32		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150956
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:30 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56840 SDG#: PH084-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	9.4	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150956
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:30 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56840 SDG#: PH084-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0570	1
11031	12378-PeCDD	40321-76-4	0.109	JBQ	5.45	0.0563	1
11031	123478-HxCDD	39227-28-6	5.45	U	5.45	0.0266	1
11031	123678-HxCDD	57653-85-7	0.0364	JBQ	5.45	0.0302	1
11031	123789-HxCDD	19408-74-3	0.0332	JQ	5.45	0.0294	1
11031	1234678-HpCDD	35822-46-9	0.0856	JBQ	5.45	0.0360	1
11031	OCDD	3268-87-9	0.372	JBQ	10.9	0.0360	1
11031	2378-TCDF	51207-31-9	1.09	U	1.09	0.0430	1
11031	12378-PeCDF	57117-41-6	0.0958	JQ	5.45	0.0264	1
11031	23478-PeCDF	57117-31-4	0.0951	JBQ	5.45	0.0270	1
11031	123478-HxCDF	70648-26-9	0.0797	JQ	5.45	0.0158	1
11031	123678-HxCDF	57117-44-9	0.0340	JQ	5.45	0.0146	1
11031	123789-HxCDF	72918-21-9	0.0406	JQ	5.45	0.0201	1
11031	234678-HxCDF	60851-34-5	0.0249	JQ	5.45	0.0147	1
11031	1234678-HpCDF	67562-39-4	0.0523	JBQ	5.45	0.0145	1
11031	1234789-HpCDF	55673-89-7	5.45	U	5.45	0.0251	1
11031	OCDF	39001-02-0	0.0647	JBQ	10.9	0.0432	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	U				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150956
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:30 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56840 SDG#: PH084-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150956
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:30 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56840 SDG#: PH084-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 16:11	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/12/2013 19:31	Laura M Krieger	25.46
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321831970	08/06/2013 20:04	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321831970	08/06/2013 20:05	Lisa J Cooke	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/12/2013 01:08	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/13/2013 15:47	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 12:52	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-568-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150956
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 08:30 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56840 SDG#: PH084-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132180637001	08/08/2013 01:50	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132180637001B	08/08/2013 08:49	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132180637001A	08/08/2013 08:49	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132180637001A	08/08/2013 08:49	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132180637001A	08/08/2013 08:49	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132180638001	08/08/2013 10:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132180637001	08/07/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132180638001	08/07/2013 13:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13218039402A	08/06/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401B	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150957
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 09:50 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH084-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	0.85	J	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.3	J	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	2.2		1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.2	J	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.1	J	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.4	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.9	J	20	6.7	1
12969	Fluoranthene	206-44-0	1.9		1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	0.79	J	1.9	0.74	1
12969	Pyrene	129-00-0	2.1		1.9	0.74	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: bis(2-ethylhexyl)phthalate						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	15	J	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	55	U	55	22	10
12952	EFH (C15-C20)	n.a.	55	U	55	22	10

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150957
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 09:50 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH084-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	170		55	22	10
12952	EFH (C30-C40)	n.a.	640		110	44	10
12952	EFH (C8-C11)	n.a.	55	U	55	22	10
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,700		42.7	7.70	1
06944	Antimony	7440-36-0	4.27	U	4.27	0.791	1
06935	Arsenic	7440-38-2	5.45		4.27	0.748	1
06946	Barium	7440-39-3	107		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.810	J	1.07	0.0716	1
07914	Boron	7440-42-8	9.97	J	10.7	0.897	1
06949	Cadmium	7440-43-9	0.427	J	1.07	0.0812	1
01650	Calcium	7440-70-2	8,420		21.4	3.57	1
06951	Chromium	7440-47-3	29.4		3.21	0.171	1
06952	Cobalt	7440-48-4	7.23		1.07	0.106	1
06953	Copper	7440-50-8	16.3		2.14	0.310	1
01654	Iron	7439-89-6	26,600		42.7	3.87	1
06955	Lead	7439-92-1	11.2		3.21	0.534	1
01656	Lithium	7439-93-2	22.7		4.3	0.36	1
01657	Magnesium	7439-95-4	5,690		10.7	1.78	1
06958	Manganese	7439-96-5	299		1.07	0.0887	1
06960	Molybdenum	7439-98-7	0.248	J	2.14	0.182	1
06961	Nickel	7440-02-0	15.4		2.14	0.139	1
10145	Phosphorus	7723-14-0	232		10.7	3.09	1
01662	Potassium	7440-09-7	3,140		107	8.91	1
01667	Sodium	7440-23-5	152		107	17.8	1
06969	Tin	7440-31-5	3.39	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,180		1.07	0.182	1
06971	Vanadium	7440-62-2	53.1		1.07	0.139	1
06972	Zinc	7440-66-6	200		4.27	0.214	1
10146	Zirconium	7440-67-7	5.66		5.34	0.897	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.427	U	0.427	0.107	2
06142	Silver	7440-22-4	0.0820	J	0.214	0.0278	2
06144	Strontium	7440-24-6	45.2		0.427	0.0726	2
06145	Thallium	7440-28-0	0.346		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0226		0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.34		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150957
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 09:50 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH084-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150957
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 09:50 by SM

Submitted: 08/06/2013 09:15
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH084-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0547	1
11031	12378-PeCDD	40321-76-4	5.41	U	5.41	0.0606	1
11031	123478-HxCDD	39227-28-6	0.0758	JQ	5.41	0.0354	1
11031	123678-HxCDD	57653-85-7	0.214	JB	5.41	0.0400	1
11031	123789-HxCDD	19408-74-3	0.307	JQ	5.41	0.0400	1
11031	1234678-HpCDD	35822-46-9	1.77	JB	5.41	0.0747	1
11031	OCDD	3268-87-9	13.5	B	10.8	0.0442	1
11031	2378-TCDF	51207-31-9	1.08	U	1.08	0.0573	1
11031	12378-PeCDF	57117-41-6	0.674	J	5.41	0.0331	1
11031	23478-PeCDF	57117-31-4	0.112	JBQ	5.41	0.0294	1
11031	123478-HxCDF	70648-26-9	0.0669	JQ	5.41	0.0257	1
11031	123678-HxCDF	57117-44-9	0.184	JQ	5.41	0.0236	1
11031	123789-HxCDF	72918-21-9	0.288	JQ	5.41	0.0348	1
11031	234678-HxCDF	60851-34-5	0.0457	JQ	5.41	0.0247	1
11031	1234678-HpCDF	67562-39-4	0.238	JB	5.41	0.0212	1
11031	1234789-HpCDF	55673-89-7	0.0388	JBQ	5.41	0.0336	1
11031	OCDF	39001-02-0	0.484	JBQ	10.8	0.0480	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0657				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	60	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150957
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 09:50 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH084-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150957
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 09:50 by SM

Submitted: 08/06/2013 09:15
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH084-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 16:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/12/2013 02:40	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/13/2013 03:57	Heather E Williams	10
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 13:49	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132180637001	08/08/2013 02:01	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132180637001B	08/08/2013 08:52	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132180637001A	08/08/2013 08:52	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132180637001A	08/08/2013 08:52	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150957
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 09:50 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56900 SDG#: PH084-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132180637001A	08/08/2013 08:52	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132180638001	08/08/2013 10:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132180637001	08/07/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132180638001	08/07/2013 13:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13218039402A	08/06/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401B	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150958
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 10:40 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56940 SDG#: PH084-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.5	10
12969	Acenaphthylene	208-96-8	19	U	19	3.8	10
12969	Anthracene	120-12-7	19	U	19	3.8	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.5	10
12969	Benzo(a)pyrene	50-32-8	9.0	J	19	7.5	10
12969	Benzo(b)fluoranthene	205-99-2	12	J	19	7.5	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	38	10
12969	Benzo(g,h,i)perylene	191-24-2	19	U	19	7.5	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.5	10
12969	Butylbenzylphthalate	85-68-7	200	U	200	68	10
12969	Di-n-butylphthalate	84-74-2	200	U	200	68	10
12969	Chrysene	218-01-9	9.4	J	19	3.8	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.5	10
12969	Diethylphthalate	84-66-2	200	U	200	68	10
12969	Dimethylphthalate	131-11-3	200	U	200	68	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	200	U	200	68	10
12969	Fluoranthene	206-44-0	19	U	19	7.5	10
12969	Fluorene	86-73-7	19	U	19	7.5	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.5	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.5	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.5	10
12969	Naphthalene	91-20-3	19	U	19	7.5	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.5	10
12969	Di-n-octylphthalate	117-84-0	200	U	200	68	10
12969	Phenanthrene	85-01-8	19	U	19	7.5	10
12969	Pyrene	129-00-0	19	U	19	7.5	10
Reporting limits were raised due to interference from the sample matrix.							
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.23
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	28	U	28	11	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150958
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 10:40 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56940 SDG#: PH084-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	28	U	28	11	5
12952	EFH (C21-C30)	n.a.	110		28	11	5
12952	EFH (C30-C40)	n.a.	270		56	23	5
12952	EFH (C8-C11)	n.a.	28	U	28	11	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,100		44.4	8.00	1
06944	Antimony	7440-36-0	4.44	U	4.44	0.821	1
06935	Arsenic	7440-38-2	4.57		4.44	0.776	1
06946	Barium	7440-39-3	76.9		1.11	0.0366	1
06947	Beryllium	7440-41-7	0.769	J	1.11	0.0743	1
07914	Boron	7440-42-8	9.02	J	11.1	0.932	1
06949	Cadmium	7440-43-9	0.132	J	1.11	0.0843	1
01650	Calcium	7440-70-2	7,520		22.2	3.70	1
06951	Chromium	7440-47-3	28.1		3.33	0.177	1
06952	Cobalt	7440-48-4	5.43		1.11	0.110	1
06953	Copper	7440-50-8	12.1		2.22	0.322	1
01654	Iron	7439-89-6	27,800		44.4	4.01	1
06955	Lead	7439-92-1	6.52		3.33	0.555	1
01656	Lithium	7439-93-2	19.1		4.4	0.38	1
01657	Magnesium	7439-95-4	5,190		11.1	1.85	1
06958	Manganese	7439-96-5	219		1.11	0.0921	1
06960	Molybdenum	7439-98-7	2.22	U	2.22	0.189	1
06961	Nickel	7440-02-0	13.8		2.22	0.144	1
10145	Phosphorus	7723-14-0	296		11.1	3.21	1
01662	Potassium	7440-09-7	2,380		111	9.25	1
01667	Sodium	7440-23-5	297		111	18.5	1
06969	Tin	7440-31-5	3.03	J	11.1	0.244	1
06970	Titanium	7440-32-6	1,180		1.11	0.189	1
06971	Vanadium	7440-62-2	51.0		1.11	0.144	1
06972	Zinc	7440-66-6	63.8		4.44	0.222	1
10146	Zirconium	7440-67-7	4.89	J	5.55	0.932	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.444	U	0.444	0.111	2
06142	Silver	7440-22-4	0.0326	J	0.222	0.0288	2
06144	Strontium	7440-24-6	43.2		0.444	0.0754	2
06145	Thallium	7440-28-0	0.357		0.222	0.0333	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0180	U	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.44		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150958
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 10:40 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56940 SDG#: PH084-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	11.6	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150958
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56940 SDG#: PH084-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0819	JQ	1.11	0.0402	1
11031	12378-PeCDD	40321-76-4	0.302	JBQ	5.53	0.0456	1
11031	123478-HxCDD	39227-28-6	0.206	J	5.53	0.0505	1
11031	123678-HxCDD	57653-85-7	0.530	JBQ	5.53	0.0523	1
11031	123789-HxCDD	19408-74-3	0.434	J	5.53	0.0505	1
11031	1234678-HpCDD	35822-46-9	7.37	B	5.53	0.0525	1
11031	OCDD	3268-87-9	65.5	B	11.1	0.0528	1
11031	2378-TCDF	51207-31-9	0.102	J	1.11	0.0423	1
11031	12378-PeCDF	57117-41-6	0.240	JQ	5.53	0.0293	1
11031	23478-PeCDF	57117-31-4	0.237	JBQ	5.53	0.0239	1
11031	123478-HxCDF	70648-26-9	0.199	JQ	5.53	0.0319	1
11031	123678-HxCDF	57117-44-9	0.132	JQ	5.53	0.0302	1
11031	123789-HxCDF	72918-21-9	0.110	JQ	5.53	0.0288	1
11031	234678-HxCDF	60851-34-5	0.168	J	5.53	0.0283	1
11031	1234678-HpCDF	67562-39-4	1.41	JB	5.53	0.0680	1
11031	1234789-HpCDF	55673-89-7	0.176	JBQ	5.53	0.0702	1
11031	OCDF	39001-02-0	2.32	JB	11.1	0.0542	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.199				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	100	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	93	24 - 185
13C12-23478-PeCDF	98	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150958
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 10:40 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56940 SDG#: PH084-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150958
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 10:40 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56940 SDG#: PH084-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLC026	08/13/2013 17:15	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLC026	08/08/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/12/2013 20:09	Laura M Krieger	23.23
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321831970	08/06/2013 20:07	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321831970	08/06/2013 20:07	Lisa J Cooke	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/12/2013 02:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/13/2013 03:37	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 14:45	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150958
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 10:40 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56940 SDG#: PH084-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132180637001	08/08/2013 02:05	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132180637001B	08/08/2013 08:54	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132180637001A	08/08/2013 08:54	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132180637001A	08/08/2013 08:54	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132180637001A	08/08/2013 08:54	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132180638001	08/08/2013 10:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132180637001	08/07/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132180638001	08/07/2013 13:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13218039402A	08/06/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401B	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150959
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 13:35 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56970 SDG#: PH084-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	2.1		1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.2	J	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.4	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	16	J	20	6.5	1
12969	Fluoranthene	206-44-0	0.89	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	0.89	J	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.12
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150959
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 13:35 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56970 SDG#: PH084-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	7.1		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	27		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,600		43.0	7.76	1
06944	Antimony	7440-36-0	4.30	U	4.30	0.796	1
06935	Arsenic	7440-38-2	4.65		4.30	0.753	1
06946	Barium	7440-39-3	71.5		1.08	0.0355	1
06947	Beryllium	7440-41-7	0.581	J	1.08	0.0721	1
07914	Boron	7440-42-8	6.95	J	10.8	0.904	1
06949	Cadmium	7440-43-9	0.183	J	1.08	0.0818	1
01650	Calcium	7440-70-2	4,240		21.5	3.59	1
06951	Chromium	7440-47-3	21.1		3.23	0.172	1
06952	Cobalt	7440-48-4	5.03		1.08	0.107	1
06953	Copper	7440-50-8	9.44		2.15	0.312	1
01654	Iron	7439-89-6	21,600		43.0	3.90	1
06955	Lead	7439-92-1	4.19		3.23	0.538	1
01656	Lithium	7439-93-2	19.4		4.3	0.37	1
01657	Magnesium	7439-95-4	4,870		10.8	1.80	1
06958	Manganese	7439-96-5	303		1.08	0.0893	1
06960	Molybdenum	7439-98-7	2.15	U	2.15	0.183	1
06961	Nickel	7440-02-0	11.0		2.15	0.140	1
10145	Phosphorus	7723-14-0	424		10.8	3.11	1
01662	Potassium	7440-09-7	2,840		108	8.98	1
01667	Sodium	7440-23-5	152		108	18.0	1
06969	Tin	7440-31-5	2.75	J	10.8	0.237	1
06970	Titanium	7440-32-6	1,320		1.08	0.183	1
06971	Vanadium	7440-62-2	43.2		1.08	0.140	1
06972	Zinc	7440-66-6	60.2		4.30	0.215	1
10146	Zirconium	7440-67-7	4.38	J	5.38	0.904	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.430	U	0.430	0.108	2
06142	Silver	7440-22-4	0.0339	J	0.215	0.0280	2
06144	Strontium	7440-24-6	25.2		0.430	0.0732	2
06145	Thallium	7440-28-0	0.279		0.215	0.0323	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.38		0.0100	0.0100	1
	The pH was measured in water at 22.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150959
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 13:35 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56970 SDG#: PH084-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13220SLX026	08/14/2013 14:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13220SLX026	08/08/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/12/2013 20:47	Laura M Krieger	22.12
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321831970	08/06/2013 20:08	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321831970	08/06/2013 20:08	Lisa J Cooke	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132200026A	08/12/2013 03:17	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132200026A	08/09/2013 08:30	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/13/2013 16:08	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-569-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7150959
LL Group # 1409284
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/05/2013 13:35 by SM

Submitted: 08/06/2013 09:15
Reported: 08/16/2013 15:22

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56970 SDG#: PH084-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132180637001	08/08/2013 02:09	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132180637001B	08/08/2013 08:56	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132180637001A	08/08/2013 08:56	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132180637001A	08/08/2013 08:56	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132180637001A	08/08/2013 08:56	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132180638001	08/08/2013 11:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132180637001	08/07/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132180638001	08/07/2013 13:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13218039402A	08/06/2013 20:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162401B	08/09/2013 22:50	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409284
Reported: 08/16/13 at 03:22 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13220SLC026	Sample number(s): 7150955-7150958									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	112		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	98		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	99		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	109		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	109		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	123		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	122*		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	117		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	105		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	116		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	127*		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	104		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	111		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	134*		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	115		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	135*		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	109		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	107		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	112		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	113		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	107		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	106		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	74		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	118		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	100		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	96		79-112		
Batch number: 13220SLX026	Sample number(s): 7150959									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	104		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	106		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	104		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	105		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	118		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	104		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	102		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	113		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	130*		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	102		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	108		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	108		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		85-122		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409284
Reported: 08/16/13 at 03:22 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	108		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	106		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	107		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	108		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	104		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	96		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	111		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	101		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	100		79-112		
Batch number: 13218A20A	Sample number(s): 7150954									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	100	105	75-135	6	30
Batch number: 13224A16A	Sample number(s): 7150956,7150958-7150959									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	95		67-119		
Batch number: 132200026A	Sample number(s): 7150955-7150959									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	70	74	36-106	6	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	100		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132220004A	Sample number(s): 7150955-7150959									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	101		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	107		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	110		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	70		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	88		49-107		
Batch number: 132180637001	Sample number(s): 7150955-7150959									
Aluminum	40.0	U	40.0	7.21	mg/kg	108		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	105		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	98		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	105		80-120		
Calcium	7.93	J	20.0	3.34	mg/kg	108		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	106		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	107		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	108		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	105		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	107		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	107		80-120		
Magnesium	1.98	J	10.0	1.67	mg/kg	105		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	106		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409284
Reported: 08/16/13 at 03:22 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Molybdenum	2.00	U	2.00	0.170	mg/kg	106		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	109		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	108		80-120		
Potassium	100 U		100.	8.34	mg/kg	105		80-120		
Sodium	100 U		100.	16.7	mg/kg	104		80-120		
Tin	1.63	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	107		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	103		80-120		
Zinc	0.472	J	4.00	0.200	mg/kg	106		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	106		80-120		
Batch number: 132180637001A	Sample number(s): 7150955-7150959									
Silver	0.200	U	0.200	0.0260	mg/kg	106		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	105		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	110		80-120		
Batch number: 132180637001B	Sample number(s): 7150955-7150959									
Selenium	0.400	U	0.400	0.100	mg/kg	106		80-120		
Batch number: 132180638001	Sample number(s): 7150955-7150959									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	111		85-120		
Batch number: 13218039402A	Sample number(s): 7150955-7150959									
15a pH by 9045D						100		95-105		
Batch number: 13221162401B	Sample number(s): 7150955-7150959									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13224001	Sample number(s): 7150955-7150958									
2378-TCDD	1.00	U	1.00	0.0847	ng/kg	112		67-158		
12378-PeCDD	0.0780	J	5.00	0.0697	ng/kg	107		70-142		
123478-HxCDD	5.00	U	5.00	0.0276	ng/kg	103		70-164		
123678-HxCDD	0.0377	J	5.00	0.0296	ng/kg	99		76-134		
123789-HxCDD	5.00	U	5.00	0.0314	ng/kg	98		64-162		
1234678-HpCDD	0.0637	J	5.00	0.0424	ng/kg	96		70-140		
OCDD	0.252	J	10.0	0.0359	ng/kg	98		78-144		
2378-TCDF	1.00	U	1.00	0.0768	ng/kg	105		75-158		
12378-PeCDF	5.00	U	5.00	0.0383	ng/kg	98		80-134		
23478-PeCDF	0.0474	J	5.00	0.0383	ng/kg	101		68-160		
123478-HxCDF	5.00	U	5.00	0.0235	ng/kg	97		72-134		
123678-HxCDF	5.00	U	5.00	0.0222	ng/kg	100		84-130		
123789-HxCDF	5.00	U	5.00	0.0320	ng/kg	95		78-130		
234678-HxCDF	5.00	U	5.00	0.0215	ng/kg	97		70-156		
1234678-HpCDF	0.0267	J	5.00	0.0139	ng/kg	96		82-122		
1234789-HpCDF	0.0434	J	5.00	0.0326	ng/kg	94		78-138		
OCDF	0.202	J	10.0	0.0706	ng/kg	94		63-170		
TEQ WHO 2005 - EDLx0.0	U				ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409284
Reported: 08/16/13 at 03:22 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13220SLC026	Sample number(s): 7150955-7150958 UNSPK: P149851								
Acenaphthene	89	87	48-127	2	30				
Acenaphthylene	87	69	49-121	23	30				
Anthracene	82	126	52-126	42*	30				
Benzo(a)anthracene	108	109	44-143	1	30				
Benzo(a)pyrene	89	93	44-140	3	30				
Benzo(b)fluoranthene	75	101	26-142	20	30				
Benzo(e)pyrene	121	137*	70-130	12	30				
Benzo(g,h,i)perylene	51	58	33-141	7	30				
Benzo(k)fluoranthene	96	110	54-142	14	30				
Butylbenzylphthalate	0*	0*	49-151	0	30				
Di-n-butylphthalate	0*	0*	52-147	0	30				
Chrysene	82	92	29-148	8	30				
Dibenz(a,h)anthracene	71	83	20-137	16	30				
Diethylphthalate	0*	0*	43-145	0	30				
Dimethylphthalate	0*	0*	58-129	0	30				
Bis(2-Ethylhexyl)phthalate	0*	0*	39-167	0	30				
Fluoranthene	97	150*	40-148	35*	30				
Fluorene	88	93	51-137	5	30				
Indeno(1,2,3-cd)pyrene	44	71	17-136	26	30				
1-Methylnaphthalene	98	84	50-131	16	30				
2-Methylnaphthalene	108	89	35-152	19	30				
Naphthalene	93	95	31-148	2	30				
N-Nitrosodimethylamine	73	61	48-113	17	30				
Di-n-octylphthalate	0*	0*	52-162	0	30				
Phenanthrene	77	83	29-142	5	30				
Pyrene	94	98	26-143	3	30				
Batch number: 13220SLX026	Sample number(s): 7150959 UNSPK: P20LXUS								
Acenaphthene	92	93	48-127	1	30				
Acenaphthylene	90	92	49-121	2	30				
Anthracene	95	100	52-126	5	30				
Benzo(a)anthracene	108	108	44-143	1	30				
Benzo(a)pyrene	86	85	44-140	0	30				
Benzo(b)fluoranthene	94	98	26-142	2	30				
Benzo(e)pyrene	118	120	70-130	2	30				
Benzo(g,h,i)perylene	54	37	33-141	18	30				
Benzo(k)fluoranthene	101	110	54-142	8	30				
Butylbenzylphthalate	0*	0*	49-151	0	30				
Di-n-butylphthalate	0*	0*	52-147	0	30				
Chrysene	92	94	29-148	1	30				
Dibenz(a,h)anthracene	79	72	20-137	9	30				
Diethylphthalate	0*	0*	43-145	0	30				
Dimethylphthalate	0*	0*	58-129	0	30				
Bis(2-Ethylhexyl)phthalate	0*	0*	39-167	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409284
Reported: 08/16/13 at 03:22 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Fluoranthene	87	103	40-148	13	30				
Fluorene	89	94	51-137	5	30				
Indeno(1,2,3-cd)pyrene	66	49	17-136	16	30				
1-Methylnaphthalene	102	102	50-131	0	30				
2-Methylnaphthalene	105	103	35-152	2	30				
Naphthalene	99	100	31-148	0	30				
N-Nitrosodimethylamine	87	76	48-113	13	30				
Di-n-octylphthalate	0*	0*	52-162	0	30				
Phenanthrene	85	93	29-142	7	30				
Pyrene	93	92	26-143	1	30				
Batch number: 13224A16A	Sample number(s): 7150956,7150958-7150959 UNSPK: P156754								
11a TPH by EPA 8015B GRO	64	77	39-118	30	30				
Batch number: 132200026A	Sample number(s): 7150955-7150959 UNSPK: P149851								
PCB-1016	94	94	16-146	0	50				
PCB-1260	81	86	40-134	6	50				
Batch number: 132220004A	Sample number(s): 7150955-7150959 UNSPK: P152828								
EFH (C12-C14)	113	0*	49-123	200*	20				
EFH (C15-C20)	178*	246*	49-123	32*	20				
EFH (C21-C30)	478*	436*	49-123	5	20				
EFH (C30-C40)	267 (2)	703 (2)	49-123	38*	20				
EFH (C8-C11)	104	0*	49-123	200*	20				
Batch number: 132180637001	Sample number(s): 7150955-7150959 UNSPK: 7150955 BKG: 7150955								
Aluminum	-295 (2)	488 (2)	75-125	6	20	23,900	24,000	0	20
Antimony	37*	31*	75-125	13	20	3.92 U	3.96 U	0 (1)	20
Arsenic	98	96	75-125	1	20	4.75	4.74	0 (1)	20
Barium	102	99	75-125	0	20	102	102	1	20
Beryllium	105	103	75-125	1	20	0.784 J	0.798 J	2 (1)	20
Boron	99	96	75-125	1	20	11.5	10.8	7 (1)	20
Cadmium	99	95	75-125	1	20	0.306 J	0.316 J	3 (1)	20
Calcium	1807 (2)	-1119 (2)	75-125	79*	20	13,200	10,400	24*	20
Chromium	64*	79	75-125	7	20	32.5	29.7	9	20
Cobalt	95	94	75-125	2	20	7.55	7.08	6	20
Copper	100	97	75-125	0	20	14.6	13.8	6	20
Iron	-4442 (2)	-2894 (2)	75-125	6	20	26,300	27,500	5	20
Lead	92	88	75-125	0	20	7.81	8.57	9 (1)	20
Lithium	103	101	75-125	0	20	25.0	24.7	1	20
Magnesium	-218 (2)	-91 (2)	75-125	4	20	5,870	5,860	0	20
Manganese	-4 (2)	48 (2)	75-125	7	20	366	386	5	20
Molybdenum	99	94	75-125	2	20	0.312 J	0.182 J	52* (1)	20
Nickel	93	92	75-125	1	20	17.8	16.2	9	20
Phosphorus	142*	98	75-125	10	20	278	295	6	20
Potassium	115	99	75-125	3	20	3,680	3,590	2	20
Sodium	108	101	75-125	3	20	83.1 J	90.8 J	9 (1)	20
Tin	91	88	75-125	0	20	2.67 J	2.80 J	5 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409284
Reported: 08/16/13 at 03:22 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Titanium	348 (2)	268 (2)	75-125	5	20	1,040	1,120	7	20
Vanadium	100	102	75-125	2	20	55.1	55.6	1	20
Zinc	92	87	75-125	1	20	65.0	80.6	22*	20
Zirconium	104	101	75-125	0	20	6.04	7.46	21* (1)	20
Batch number: 132180637001A	Sample number(s): 7150955-7150959 UNSPK: 7150955 BKG: 7150955								
Silver	108	114	75-125	9	20	0.0453 J	0.0546 J	19 (1)	20
Strontium	99 (2)	122 (2)	75-125	4	20	40.8	36.4	11	20
Thallium	98	100	75-125	3	20	0.323	0.347	7 (1)	20
Batch number: 132180637001B	Sample number(s): 7150955-7150959 UNSPK: 7150955 BKG: 7150955								
Selenium	97	104	75-125	9	20	0.132 J	0.133 J	1 (1)	20
Batch number: 132180638001	Sample number(s): 7150955-7150959 UNSPK: 7150955 BKG: 7150955								
3a Mercury 7471A	120	119	65-135	2	20	0.0167 U	0.0164 U	0 (1)	20
Batch number: 13218039402A	Sample number(s): 7150955-7150959 BKG: 7150955								
15a pH by 9045D						8.17	8.20	0	3
Batch number: 13221162401B	Sample number(s): 7150955-7150959 BKG: 7150955								
14a Moisture Content by 160.3						11.8	12.5	5	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13220SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7150955	79	82	93
7150956	106	96	106
7150957	71	106	78
7150958	68	92	72
Blank	91	97	110
LCS	96	103	105
MS	82	85	102
MSD	106	84	79
Limits:	54-129	59-125	61-125

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13220SLX026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10

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Quality Control Summary

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Reported: 08/16/13 at 03:22 PM

Surrogate Quality Control

7150959	94	102	104
Blank	94	102	111
LCS	92	104	108
MS	82	90	95
MSD	89	88	97
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13218A20A

	Trifluorotoluene-F
7150954	86
Blank	85
LCS	118
LCSD	123
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13224A16A

	Trifluorotoluene-F
7150956	72
7150958	64
7150959	72
Blank	78
LCS	83
MS	67
MSD	76
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132200026A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7150955	104	88
7150956	105	98
7150957	107	91
7150958	104	79
7150959	107	100
Blank	109	104
LCS	104	103
LCSD	115	118
MS	100	79
MSD	99	84
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132220004A

	Chlorobenzene	Orthoterphenyl
7150955	91	92
7150956	99	104

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409284
Reported: 08/16/13 at 03:22 PM

Surrogate Quality Control

7150957	98	105
7150958	95	108
7150959	98	102
Blank	99	105
LCS	100	108
MS	103	108
MSD	100	106
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13224001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7150955	73	70	51	51	54	65
7150956	60	78	64	72	69	69
7150957	61	75	62	70	65	60
7150958	77	98	69	69	73	82
Blank	51	64	55	65	62	58
OPR	43	59	52	59	55	49
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7150955	53	65	61	68	59	58
7150956	87	68	64	79	71	79
7150957	80	63	59	77	70	75
7150958	74	83	73	100	77	81
Blank	86	51	48	67	68	74
OPR	78	51	48	64	61	66
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7150955	63	65	72	67	67
7150956	79	83	83	57	85
7150957	73	73	77	59	76
7150958	82	86	80	81	93
Blank	71	75	74	48	69
OPR	65	69	68	41	64
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

SSFL Phase 3 Chain of Custody

13013 1409284 7150954-59

CDM Smith

DateShipped: 8/5/2013
CarrierName: FedEx
AirbillNo: 796396374240

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130805-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	1,4 Dioxane 8260 SIM	VOCs 8260	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-080513	8/5/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-568-SA8-SB-0.0-0.5	8/5/13 08:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-568-SA8-SB-0.0-0.5	8/5/13 08:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-568-SA8-SB-4.0-5.0	8/5/13 08:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-568-SA8-SB-4.0-5.0	8/5/13 08:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-568-SA8-SB-4.0-5.0	8/5/13 08:30	SO	None	2 - Encore	10 day																			X												
SL-569-SA8-SB-0.0-0.5	8/5/13 09:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-569-SA8-SB-0.0-0.5	8/5/13 09:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-569-SA8-SB-4.0-5.0	8/5/13 10:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-569-SA8-SB-4.0-5.0	8/5/13 10:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-569-SA8-SB-4.0-5.0	8/5/13 10:40	SO	None	2 - Encore	10 day																			X												
SL-569-SA8-SB-7.0-8.0	8/5/13 13:35	SO	None	2 - SS-Sleeve	10 day	X	X					X			X											X										
SL-569-SA8-SB-7.0-8.0	8/5/13 13:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-569-SA8-SB-7.0-8.0	8/5/13 13:35	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: Steven Mercer

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Mercer	08/05/2013	1600									
									Brandy Barclay	8/6/13	915

COC Rev 2

COC: 20130805-01, Page 1 of 1

1 of 1

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1409284

Client/Project: CDM

Date of Receipt: 8.6.13

Time of Receipt: 915

Source Code: SO-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	1.2	TB	WI	X	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Barclay 2299 **Date/Time:** 8.6.13 936

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH085

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 21, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/07/2013
Group Number: 1409714
SDG: PH085
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-080613 Water	7152824
SL-564-SA8-SB-0.0-0.5 Soil	7152825
SL-582-SA8-SB-0.0-0.5 Soil	7152826
SL-582-SA8-SB-2.5-3.5 Soil	7152827
SL-583-SA8-SB-0.0-0.5 Soil	7152828
SL-583-SA8-SB-0.0-0.5MS Soil	7152829
SL-583-SA8-SB-0.0-0.5MSD Soil	7152830
SL-583-SA8-SB-0.0-0.5DUP Soil	7152831
SL-883-SA8-SB-0.0-0.5 Soil	7152832
SL-584-SA8-SB-0.0-0.5 Soil	7152833

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB-080613 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7152824
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 08:00

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB806 SDG#: PH085-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	20	U	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-080613 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7152824
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 08:00

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB806 SDG#: PH085-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y132202AA	08/08/2013 13:21	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y132202AA	08/08/2013 13:21	Angela D Sneeringer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13224A20A	08/12/2013 12:01	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-080613 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7152824
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 08:00

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB806 SDG#: PH085-01TB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01146	GC VOA Water Prep	SW-846 5030B	1	13224A20A	08/12/2013 12:01	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152825
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 10:00 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL564 SDG#: PH085-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	0.75	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.8		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	2.4		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.2	J	19	6.3	1
12969	Fluoranthene	206-44-0	2.2		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	2.4		1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	2.2		1.7	0.69	1
12969	Pyrene	129-00-0	1.9		1.7	0.69	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	23	J	37	12	1
10401	Dalapon	75-99-0	93	U	93	54	1
10401	2,4-DB	94-82-6	32	U	32	32	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8		1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.3	J	1.8	0.35	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152825
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 10:00 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL564 SDG#: PH085-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	p,p-DDT	50-29-3	1.1	J	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	11		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	29		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,000		40.5	7.30	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.749	1
06935	Arsenic	7440-38-2	3.02	J	4.05	0.709	1
06946	Barium	7440-39-3	108		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.728	J	1.01	0.0678	1
07914	Boron	7440-42-8	14.5		10.1	0.850	1
06949	Cadmium	7440-43-9	0.198	J	1.01	0.0769	1
01650	Calcium	7440-70-2	4,550		20.2	3.38	1
06951	Chromium	7440-47-3	23.6		3.04	0.162	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152825
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 10:00 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL564 SDG#: PH085-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	7.12		1.01	0.100	1
06953	Copper	7440-50-8	17.2		2.02	0.294	1
01654	Iron	7439-89-6	25,400		40.5	3.66	1
06955	Lead	7439-92-1	16.2		3.04	0.506	1
01656	Lithium	7439-93-2	21.8		4.0	0.34	1
01657	Magnesium	7439-95-4	5,110		10.1	1.69	1
06958	Manganese	7439-96-5	356		1.01	0.0840	1
06960	Molybdenum	7439-98-7	0.405	J	2.02	0.172	1
06961	Nickel	7440-02-0	13.7		2.02	0.132	1
10145	Phosphorus	7723-14-0	398		10.1	2.93	1
01662	Potassium	7440-09-7	4,100		101	8.44	1
01667	Sodium	7440-23-5	62.8	J	101	16.9	1
06969	Tin	7440-31-5	2.90	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,080		1.01	0.172	1
06971	Vanadium	7440-62-2	47.2		1.01	0.132	1
06972	Zinc	7440-66-6	62.3		4.05	0.202	1
10146	Zirconium	7440-67-7	3.02	J	5.06	0.850	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.183	J	0.405	0.101	2
06142	Silver	7440-22-4	0.0500	J	0.202	0.0263	2
06144	Strontium	7440-24-6	29.0		0.405	0.0688	2
06145	Thallium	7440-28-0	0.328		0.202	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0238		0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.63		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152825
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 10:00 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL564 SDG#: PH085-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0834	JQ	1.01	0.0688	1
11031	12378-PeCDD	40321-76-4	0.155	JB	5.06	0.0819	1
11031	123478-HxCDD	39227-28-6	0.157	J	5.06	0.0533	1
11031	123678-HxCDD	57653-85-7	0.426	JB	5.06	0.0567	1
11031	123789-HxCDD	19408-74-3	0.437	J	5.06	0.0569	1
11031	1234678-HpCDD	35822-46-9	5.42	B	5.06	0.106	1
11031	OCDD	3268-87-9	50.6	B	10.1	0.0805	1
11031	2378-TCDF	51207-31-9	0.241	J	1.01	0.103	1
11031	12378-PeCDF	57117-41-6	0.456	J	5.06	0.0508	1
11031	23478-PeCDF	57117-31-4	0.147	JB	5.06	0.0464	1
11031	123478-HxCDF	70648-26-9	0.211	JQ	5.06	0.0386	1
11031	123678-HxCDF	57117-44-9	0.196	J	5.06	0.0382	1
11031	123789-HxCDF	72918-21-9	0.295	JQ	5.06	0.0515	1
11031	234678-HxCDF	60851-34-5	0.222	J	5.06	0.0357	1
11031	1234678-HpCDF	67562-39-4	1.38	JB	5.06	0.0606	1
11031	1234789-HpCDF	55673-89-7	0.146	JBQ	5.06	0.0972	1
11031	OCDF	39001-02-0	3.91	JB	10.1	0.105	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.465				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152825
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 10:00 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL564 SDG#: PH085-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152825
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 10:00 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL564 SDG#: PH085-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 09:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 13:10	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 17:24	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/14/2013 20:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	2	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/12/2013 23:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 15:42	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-564-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152825
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 10:00 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL564 SDG#: PH085-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:12	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 13:00	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 13:00	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 13:00	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 13:00	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:08	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13219039401A	08/07/2013 18:30	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152826
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 07:45 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL582 SDG#: PH085-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	0.85	J	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	0.93	J	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	2.2		1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	0.73	J	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	9.7	J	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	3.1		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	48		19	6.4	1
12969	Fluoranthene	206-44-0	2.4		1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.3	J	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	2.8		1.8	0.71	1
12969	Naphthalene	91-20-3	2.2		1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	2.3		1.8	0.71	1
12969	Pyrene	129-00-0	2.2		1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	61		35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	9.5	J	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	11	U	11	4.2	2
12952	EFH (C15-C20)	n.a.	5.8	J	11	4.2	2
12952	EFH (C21-C30)	n.a.	50		11	4.2	2
12952	EFH (C30-C40)	n.a.	110		21	8.5	2
12952	EFH (C8-C11)	n.a.	11	U	11	4.2	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152826
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 07:45 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL582 SDG#: PH085-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,400		42.1	7.59	1
06944	Antimony	7440-36-0	2.05	J	4.21	0.779	1
06935	Arsenic	7440-38-2	2.89	J	4.21	0.737	1
06946	Barium	7440-39-3	111		1.05	0.0348	1
06947	Beryllium	7440-41-7	0.680	J	1.05	0.0706	1
07914	Boron	7440-42-8	13.9		10.5	0.885	1
06949	Cadmium	7440-43-9	0.594	J	1.05	0.0801	1
01650	Calcium	7440-70-2	4,520		21.1	3.52	1
06951	Chromium	7440-47-3	23.6		3.16	0.169	1
06952	Cobalt	7440-48-4	6.96		1.05	0.104	1
06953	Copper	7440-50-8	20.4		2.11	0.305	1
01654	Iron	7439-89-6	22,400		42.1	3.81	1
06955	Lead	7439-92-1	18.0		3.16	0.527	1
01656	Lithium	7439-93-2	19.7		4.2	0.36	1
01657	Magnesium	7439-95-4	5,670		10.5	1.76	1
06958	Manganese	7439-96-5	355		1.05	0.0874	1
06960	Molybdenum	7439-98-7	0.459	J	2.11	0.179	1
06961	Nickel	7440-02-0	14.2		2.11	0.137	1
10145	Phosphorus	7723-14-0	311		10.5	3.04	1
01662	Potassium	7440-09-7	3,860		105	8.78	1
01667	Sodium	7440-23-5	65.6	J	105	17.6	1
06969	Tin	7440-31-5	2.78	J	10.5	0.232	1
06970	Titanium	7440-32-6	1,030		1.05	0.179	1
06971	Vanadium	7440-62-2	43.9		1.05	0.137	1
06972	Zinc	7440-66-6	179		4.21	0.211	1
10146	Zirconium	7440-67-7	2.32	J	5.27	0.885	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.219	J	0.421	0.105	2
06142	Silver	7440-22-4	0.0849	J	0.211	0.0274	2
06144	Strontium	7440-24-6	29.8		0.421	0.0716	2
06145	Thallium	7440-28-0	0.399		0.211	0.0316	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0296		0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	5.46		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	6.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152826
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 07:45 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL582 SDG#: PH085-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.135	JQ	1.04	0.0453	1
11031	12378-PeCDD	40321-76-4	0.362	JB	5.19	0.0663	1
11031	123478-HxCDD	39227-28-6	0.206	JQ	5.19	0.0671	1
11031	123678-HxCDD	57653-85-7	0.978	JB	5.19	0.0737	1
11031	123789-HxCDD	19408-74-3	0.918	J	5.19	0.0703	1
11031	1234678-HpCDD	35822-46-9	12.2	B	5.19	0.0948	1
11031	OCDD	3268-87-9	105	B	10.4	0.0593	1
11031	2378-TCDF	51207-31-9	0.444	JQ	1.04	0.170	1
11031	12378-PeCDF	57117-41-6	2.74	J	5.19	0.0786	1
11031	23478-PeCDF	57117-31-4	0.534	JB	5.19	0.0820	1
11031	123478-HxCDF	70648-26-9	0.327	J	5.19	0.0566	1
11031	123678-HxCDF	57117-44-9	0.441	J	5.19	0.0524	1
11031	123789-HxCDF	72918-21-9	0.896	J	5.19	0.0686	1
11031	234678-HxCDF	60851-34-5	0.284	J	5.19	0.0546	1
11031	1234678-HpCDF	67562-39-4	1.98	JB	5.19	0.0441	1
11031	1234789-HpCDF	55673-89-7	0.207	JB	5.19	0.0673	1
11031	OCDF	39001-02-0	3.45	JB	10.4	0.0511	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.16				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152826
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 07:45 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL582 SDG#: PH085-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152826
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 07:45 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL582 SDG#: PH085-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 10:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/14/2013 21:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/13/2013 03:16	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 16:39	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:15	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 13:03	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 13:03	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 13:03	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 13:03	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152826
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 07:45 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL582 SDG#: PH085-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:10	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13219039401A	08/07/2013 18:30	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152827
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 08:50 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

582-2 SDG#: PH085-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	23	U	23	8	1.07
10237	Acrolein	107-02-8	110	U	110	23	1.07
10237	Acrylonitrile	107-13-1	23	U	23	5	1.07
10237	t-Amyl methyl ether	994-05-8	6	U	6	1	1.07
10237	Benzene	71-43-2	6	U	6	0.6	1.07
10237	Bromobenzene	108-86-1	6	U	6	1	1.07
10237	Bromochloromethane	74-97-5	6	U	6	1	1.07
10237	Bromodichloromethane	75-27-4	6	U	6	1	1.07
10237	Bromoform	75-25-2	6	U	6	1	1.07
10237	Bromomethane	74-83-9	6	U	6	2	1.07
10237	2-Butanone	78-93-3	11	U	11	5	1.07
10237	t-Butyl alcohol	75-65-0	57	U	57	23	1.07
10237	n-Butylbenzene	104-51-8	6	U	6	1	1.07
10237	sec-Butylbenzene	135-98-8	6	U	6	1	1.07
10237	tert-Butylbenzene	98-06-6	6	U	6	1	1.07
10237	Carbon Disulfide	75-15-0	6	U	6	1	1.07
10237	Carbon Tetrachloride	56-23-5	6	U	6	1	1.07
10237	Chlorobenzene	108-90-7	6	U	6	1	1.07
10237	Chloroethane	75-00-3	6	U	6	2	1.07
10237	2-Chloroethyl Vinyl Ether	110-75-8	11	U	11	2	1.07
10237	Chloroform	67-66-3	6	U	6	1	1.07
10237	1-Chlorohexane	544-10-5	6	U	6	1	1.07
10237	Chloromethane	74-87-3	6	U	6	2	1.07
10237	2-Chlorotoluene	95-49-8	6	U	6	1	1.07
10237	4-Chlorotoluene	106-43-4	6	U	6	1	1.07
10237	Chlorotrifluoroethene	79-38-9	6	U	6	2	1.07
10237	1,2-Dibromo-3-chloropropane	96-12-8	6	U	6	2	1.07
10237	Dibromochloromethane	124-48-1	6	U	6	1	1.07
10237	1,2-Dibromoethane	106-93-4	6	U	6	1	1.07
10237	Dibromomethane	74-95-3	6	U	6	1	1.07
10237	1,2-Dichlorobenzene	95-50-1	6	U	6	1	1.07
10237	1,3-Dichlorobenzene	541-73-1	6	U	6	1	1.07
10237	1,4-Dichlorobenzene	106-46-7	6	U	6	1	1.07
10237	Dichlorodifluoromethane	75-71-8	6	U	6	2	1.07
10237	1,1-Dichloroethane	75-34-3	6	U	6	1	1.07
10237	1,2-Dichloroethane	107-06-2	6	U	6	1	1.07
10237	1,1-Dichloroethene	75-35-4	6	U	6	1	1.07
10237	cis-1,2-Dichloroethene	156-59-2	6	U	6	1	1.07
10237	trans-1,2-Dichloroethene	156-60-5	6	U	6	1	1.07
10237	1,2-Dichloropropane	78-87-5	6	U	6	1	1.07
10237	1,3-Dichloropropane	142-28-9	6	U	6	1	1.07
10237	2,2-Dichloropropane	594-20-7	6	U	6	1	1.07
10237	1,1-Dichloropropene	563-58-6	6	U	6	1	1.07
10237	cis-1,3-Dichloropropene	10061-01-5	6	U	6	1	1.07
10237	trans-1,3-Dichloropropene	10061-02-6	6	U	6	1	1.07
10237	Ethyl t-butyl ether	637-92-3	6	U	6	1	1.07
10237	Ethylbenzene	100-41-4	6	U	6	1	1.07
10237	Freon 113	76-13-1	6	U	6	2	1.07
10237	Freon 133a	75-88-7	6	U	6	2	1.07
10237	Hexachlorobutadiene	87-68-3	6	U	6	2	1.07
10237	2-Hexanone	591-78-6	11	U	11	3	1.07

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152827
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 08:50 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

582-2 SDG#: PH085-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	di-Isopropyl ether	108-20-3	6	U	6	1	1.07
10237	Isopropylbenzene	98-82-8	6	U	6	1	1.07
10237	p-Isopropyltoluene	99-87-6	6	U	6	1	1.07
10237	Methyl Iodide	74-88-4	6	U	6	3	1.07
10237	Methyl Tertiary Butyl Ether	1634-04-4	6	U	6	0.6	1.07
10237	4-Methyl-2-pentanone	108-10-1	11	U	11	3	1.07
10237	Methylene Chloride	75-09-2	6	U	6	2	1.07
10237	n-Propylbenzene	103-65-1	6	U	6	1	1.07
10237	Styrene	100-42-5	6	U	6	1	1.07
10237	1,1,1,2-Tetrachloroethane	630-20-6	6	U	6	1	1.07
10237	1,1,2,2-Tetrachloroethane	79-34-5	6	U	6	1	1.07
10237	Tetrachloroethene	127-18-4	6	U	6	1	1.07
10237	Toluene	108-88-3	6	U	6	1	1.07
10237	1,2,3-Trichlorobenzene	87-61-6	6	U	6	1	1.07
10237	1,2,4-Trichlorobenzene	120-82-1	6	U	6	1	1.07
10237	1,1,1-Trichloroethane	71-55-6	6	U	6	1	1.07
10237	1,1,2-Trichloroethane	79-00-5	6	U	6	1	1.07
10237	Trichloroethene	79-01-6	6	U	6	1	1.07
10237	Trichlorofluoromethane	75-69-4	6	U	6	2	1.07
10237	1,2,3-Trichloropropane	96-18-4	6	U	6	1	1.07
10237	1,2,4-Trimethylbenzene	95-63-6	6	U	6	1	1.07
10237	1,3,5-Trimethylbenzene	108-67-8	6	U	6	1	1.07
10237	Vinyl Acetate	108-05-4	11	U	11	2	1.07
10237	Vinyl Chloride	75-01-4	6	U	6	1	1.07
10237	m+p-Xylene	179601-23-1	6	U	6	1	1.07
10237	o-Xylene	95-47-6	6	U	6	1	1.07

The response for 1,1,1-trichloroethane in the initial calibration does not meet the method acceptance limits for the linearity of the calibration curve. The following corrective action was taken: The average response factor for 1,1,1-trichloroethane was used due to poor curve fit.

GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152827
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 08:50 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

582-2 SDG#: PH085-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.71
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	2.5	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,900		42.1	7.59	1
06944	Antimony	7440-36-0	4.21	U	4.21	0.779	1
06935	Arsenic	7440-38-2	2.37	J	4.21	0.737	1
06946	Barium	7440-39-3	118		1.05	0.0347	1
06947	Beryllium	7440-41-7	0.784	J	1.05	0.0705	1
07914	Boron	7440-42-8	12.7		10.5	0.884	1
06949	Cadmium	7440-43-9	0.253	J	1.05	0.0800	1
01650	Calcium	7440-70-2	2,190		21.0	3.51	1
06951	Chromium	7440-47-3	23.9		3.16	0.168	1
06952	Cobalt	7440-48-4	6.78		1.05	0.104	1
06953	Copper	7440-50-8	17.3		2.10	0.305	1
01654	Iron	7439-89-6	23,900		42.1	3.81	1
06955	Lead	7439-92-1	8.15		3.16	0.526	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152827
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 08:50 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

582-2 SDG#: PH085-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	20.1	4.2	0.36	1
01657	Magnesium	7439-95-4	4,620	10.5	1.76	1
06958	Manganese	7439-96-5	235	1.05	0.0873	1
06960	Molybdenum	7439-98-7	0.446 J	2.10	0.179	1
06961	Nickel	7440-02-0	14.1	2.10	0.137	1
10145	Phosphorus	7723-14-0	346	10.5	3.04	1
01662	Potassium	7440-09-7	3,770	105	8.78	1
01667	Sodium	7440-23-5	69.8 J	105	17.6	1
06969	Tin	7440-31-5	2.69 J	10.5	0.231	1
06970	Titanium	7440-32-6	1,090	1.05	0.179	1
06971	Vanadium	7440-62-2	44.5	1.05	0.137	1
06972	Zinc	7440-66-6	59.7	4.21	0.210	1
10146	Zirconium	7440-67-7	1.86 J	5.26	0.884	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.275 J	0.421	0.105	2
06142	Silver	7440-22-4	0.0375 J	0.210	0.0274	2
06144	Strontium	7440-24-6	38.2	0.421	0.0715	2
06145	Thallium	7440-28-0	0.443	0.210	0.0316	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0170 U	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	5.45	0.0100	0.0100	1
	The pH was measured in water at 22 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.9	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152827
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 08:50 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

582-2 SDG#: PH085-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0455	1
11031	12378-PeCDD	40321-76-4	0.0679	JBQ	5.12	0.0583	1
11031	123478-HxCDD	39227-28-6	5.12	U	5.12	0.0482	1
11031	123678-HxCDD	57653-85-7	0.444	JBQ	5.12	0.0550	1
11031	123789-HxCDD	19408-74-3	0.650	J	5.12	0.0528	1
11031	1234678-HpCDD	35822-46-9	0.453	JB	5.12	0.0363	1
11031	OCDD	3268-87-9	3.23	JB	10.2	0.0294	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0461	1
11031	12378-PeCDF	57117-41-6	0.173	J	5.12	0.0286	1
11031	23478-PeCDF	57117-31-4	5.12	U	5.12	0.0255	1
11031	123478-HxCDF	70648-26-9	5.12	U	5.12	0.0186	1
11031	123678-HxCDF	57117-44-9	5.12	U	5.12	0.0181	1
11031	123789-HxCDF	72918-21-9	0.940	JQ	5.12	0.0223	1
11031	234678-HxCDF	60851-34-5	0.0207	JQ	5.12	0.0181	1
11031	1234678-HpCDF	67562-39-4	0.0800	JB	5.12	0.0188	1
11031	1234789-HpCDF	55673-89-7	5.12	U	5.12	0.0293	1
11031	OCDF	39001-02-0	0.156	JBQ	10.2	0.0348	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0765				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	54	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	63	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152827
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 08:50 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

582-2 SDG#: PH085-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152827
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 08:50 by SM

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

582-2 SDG#: PH085-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B132252AA	08/13/2013 22:32	Andrea E Lando	1.07
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201321931985	08/07/2013 15:15	Larry E Bevins	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201321931985	08/07/2013 15:15	Larry E Bevins	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201321931985	08/07/2013 15:13	Larry E Bevins	n.a.
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 05:45	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/12/2013 21:25	Laura M Krieger	26.71
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321931985	08/07/2013 15:12	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321931985	08/07/2013 15:12	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/14/2013 21:31	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/12/2013 23:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/14/2013 17:36	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-582-SA8-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152827
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 08:50 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

582-2 SDG#: PH085-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:27	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 13:10	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 13:10	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 13:10	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 13:10	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:12	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13219039401A	08/07/2013 18:30	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152828
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	340	U	340	170	1
10726	Benzidine	92-87-5	1,700	U	1,700	710	1
10726	Benzo(a)anthracene	56-55-3	7	J	17	3	1
10726	Benzo(b)fluoranthene	205-99-2	8	J	17	3	1
10726	Benzo(k)fluoranthene	207-08-9	8	J	17	3	1
10726	Benzoic acid	65-85-0	510	U	510	170	1
10726	Benzyl alcohol	100-51-6	340	U	340	170	1
10726	1,1'-Biphenyl	92-52-4	34	U	34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	34	U	34	17	1
10726	2-butoxy-Ethanol	111-76-2	170	U	170	170	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Carbazole	86-74-8	34	U	34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	34	U	34	17	1
10726	4-Chloroaniline	106-47-8	34	U	34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	34	U	34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	34	U	34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	34	U	34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	34	U	34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	17	1
10726	Chrysene	218-01-9	7	J	17	3	1
10726	Dibenzofuran	132-64-9	34	U	34	17	1
10726	1,2-Dichlorobenzene	95-50-1	34	U	34	17	1
10726	1,3-Dichlorobenzene	541-73-1	34	U	34	17	1
10726	1,4-Dichlorobenzene	106-46-7	34	U	34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	340	U	340	100	1
10726	2,4-Dichlorophenol	120-83-2	34	U	34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	2,4-Dimethylphenol	105-67-9	34	U	34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	510	U	510	170	1
10726	2,4-Dinitrophenol	51-28-5	670	U	670	300	1
10726	1,2-Diphenylhydrazine	122-66-7	34	U	34	17	1
10726	Fluoranthene	206-44-0	4	J	17	3	1
10726	Hexachlorobenzene	118-74-1	17	U	17	3	1
10726	Hexachlorobutadiene	87-68-3	34	U	34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	510	U	510	170	1
10726	Hexachloroethane	67-72-1	170	U	170	34	1
10726	Isophorone	78-59-1	34	U	34	17	1
10726	2-Methylphenol	95-48-7	34	U	34	17	1
10726	4-Methylphenol	106-44-5	34	U	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152828
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	34	U	34	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	68	1
10726	4-Nitroaniline	100-01-6	170	U	170	68	1
10726	Nitrobenzene	98-95-3	34	U	34	17	1
10726	2-Nitrophenol	88-75-5	34	U	34	17	1
10726	4-Nitrophenol	100-02-7	510	U	510	170	1
10726	N-Nitroso-di-n-propylamine	621-64-7	34	U	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	34	U	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	170	U	170	34	1
10726	Phenanthrene	85-01-8	5	J	17	3	1
10726	Phenol	108-95-2	34	U	34	17	1
10726	2-phenoxy-Ethanol	122-99-6	170	U	170	170	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyrene	129-00-0	8	J	17	3	1
10726	Pyridine	110-86-1	170	U	170	68	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	170	U	170	34	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	34	U	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	34	U	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	34	U	34	17	1
	The recovery for the sample internal standard(s) is outside the QC acceptance limits. The recovery for the internal standard(s) is also outside the QC acceptance limits in the associated matrix spike(s), indicating a matrix effect.						
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)pyrene	50-32-8	1.1	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.71	J	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	18	6.1	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.0	J	1.7	0.68	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152828
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Naphthalene	91-20-3	1.2	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	23	J	37	12	1
10401	Dalapon	75-99-0	91	U	91	45	1
10401	2,4-DB	94-82-6	30	U	30	30	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	24	U	24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.1	1
10401	MCPA	94-74-6	2,500	U	2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	2,500	U	2,500	760	1
10401	2,4,5-T	93-76-5	1.7	J	1.7	0.83	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.76	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.76	1
10590	p,p-DDT	50-29-3	3.3	U	3.3	3.3	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	1.2	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.42	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152828
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	20		17	4.5	1
10592	PCB-1260	11096-82-5	9.2	J	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	13		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	34		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,000		40.0	7.21	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.740	1
06935	Arsenic	7440-38-2	1.72	J	4.00	0.700	1
06946	Barium	7440-39-3	92.1		0.999	0.0330	1
06947	Beryllium	7440-41-7	0.621	J	0.999	0.0670	1
07914	Boron	7440-42-8	12.2		9.99	0.839	1
06949	Cadmium	7440-43-9	0.584	J	0.999	0.0760	1
01650	Calcium	7440-70-2	3,380		20.0	3.34	1
06951	Chromium	7440-47-3	20.0		3.00	0.160	1
06952	Cobalt	7440-48-4	5.46		0.999	0.0989	1
06953	Copper	7440-50-8	14.8		2.00	0.290	1
01654	Iron	7439-89-6	20,400		40.0	3.62	1
06955	Lead	7439-92-1	15.4		3.00	0.500	1
01656	Lithium	7439-93-2	19.6		4.0	0.34	1
01657	Magnesium	7439-95-4	4,040		9.99	1.67	1
06958	Manganese	7439-96-5	288		0.999	0.0829	1
06960	Molybdenum	7439-98-7	0.853	J	2.00	0.170	1
06961	Nickel	7440-02-0	11.8		2.00	0.130	1
10145	Phosphorus	7723-14-0	416		9.99	2.89	1
01662	Potassium	7440-09-7	3,290		99.9	8.33	1
01667	Sodium	7440-23-5	64.5	J	99.9	16.7	1
06969	Tin	7440-31-5	2.75	J	9.99	0.220	1
06970	Titanium	7440-32-6	980		0.999	0.170	1
06971	Vanadium	7440-62-2	37.0		0.999	0.130	1
06972	Zinc	7440-66-6	106		4.00	0.200	1
10146	Zirconium	7440-67-7	2.53	J	5.00	0.839	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.144	J	0.400	0.0999	2
06142	Silver	7440-22-4	0.0432	J	0.200	0.0260	2
06144	Strontium	7440-24-6	23.4		0.400	0.0680	2
06145	Thallium	7440-28-0	0.262		0.200	0.0300	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152828
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0225	0.0160	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	6.52	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	1.9	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152828
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.990	U	0.990	0.0325	1
11031	12378-PeCDD	40321-76-4	0.151	JB	4.95	0.0482	1
11031	123478-HxCDD	39227-28-6	0.266	JQ	4.95	0.0615	1
11031	123678-HxCDD	57653-85-7	0.870	JB	4.95	0.0673	1
11031	123789-HxCDD	19408-74-3	0.861	J	4.95	0.0667	1
11031	1234678-HpCDD	35822-46-9	12.8	B	4.95	0.0621	1
11031	OCDD	3268-87-9	122	B	9.90	0.0284	1
11031	2378-TCDF	51207-31-9	0.581	J	0.990	0.0903	1
11031	12378-PeCDF	57117-41-6	2.10	J	4.95	0.0504	1
11031	23478-PeCDF	57117-31-4	0.252	JB	4.95	0.0484	1
11031	123478-HxCDF	70648-26-9	0.347	J	4.95	0.0378	1
11031	123678-HxCDF	57117-44-9	0.403	J	4.95	0.0379	1
11031	123789-HxCDF	72918-21-9	0.396	J	4.95	0.0440	1
11031	234678-HxCDF	60851-34-5	0.237	J	4.95	0.0391	1
11031	1234678-HpCDF	67562-39-4	1.65	JB	4.95	0.0256	1
11031	1234789-HpCDF	55673-89-7	0.189	JB	4.95	0.0448	1
11031	OCDF	39001-02-0	3.08	JB	9.90	0.0263	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.843				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	62	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152828
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152828
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13225SLB026	08/19/2013 13:11	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 10:42	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13225SLB026	08/14/2013 08:30	Anna E Stager	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 13:36	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 17:39	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/14/2013 21:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	2	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/13/2013 00:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/16/2013 12:11	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152828
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 11:48	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 12:46	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 12:46	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 12:46	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 12:46	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:14	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13219039401A	08/07/2013 18:30	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152829
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	1,600		17	3	1
10726	Acenaphthylene	208-96-8	1,700		17	3	1
10726	Aniline	62-53-3	790		340	170	1
10726	Anthracene	120-12-7	1,600		17	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	710	1
10726	Benzo(a)anthracene	56-55-3	1,300		17	3	1
10726	Benzo(a)pyrene	50-32-8	1,400		17	3	1
10726	Benzo(b)fluoranthene	205-99-2	1,800		17	3	1
10726	Benzo(g,h,i)perylene	191-24-2	1,500		17	3	1
10726	Benzo(k)fluoranthene	207-08-9	1,700		17	3	1
10726	Benzoic acid	65-85-0	1,500		510	170	1
10726	Benzyl alcohol	100-51-6	1,500		340	170	1
10726	1,1'-Biphenyl	92-52-4	1,500		34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	1,700		34	17	1
10726	Butylbenzylphthalate	85-68-7	1,600		170	68	1
10726	Di-n-butylphthalate	84-74-2	1,500		170	68	1
10726	Carbazole	86-74-8	1,500		34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	1,500		34	17	1
10726	4-Chloroaniline	106-47-8	740		34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,500		34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,500		34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,500		34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	1,400		34	7	1
10726	2-Chlorophenol	95-57-8	1,600		34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,500		34	17	1
10726	Chrysene	218-01-9	1,300		17	3	1
10726	Dibenz(a,h)anthracene	53-70-3	1,700		17	3	1
10726	Dibenzofuran	132-64-9	1,600		34	17	1
10726	1,2-Dichlorobenzene	95-50-1	1,600		34	17	1
10726	1,3-Dichlorobenzene	541-73-1	1,500		34	17	1
10726	1,4-Dichlorobenzene	106-46-7	1,500		34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	960		340	100	1
10726	2,4-Dichlorophenol	120-83-2	1,700		34	17	1
10726	2,6-Dichlorophenol	87-65-0	1,600		34	17	1
10726	Diethylphthalate	84-66-2	1,600		170	68	1
10726	2,4-Dimethylphenol	105-67-9	1,500		34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	Dimethylphthalate	131-11-3	1,600		170	68	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,300		510	170	1
10726	2,4-Dinitrophenol	51-28-5	2,000		670	310	1
10726	1,2-Diphenylhydrazine	122-66-7	1,700		34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,500		170	68	1
10726	Fluoranthene	206-44-0	1,300		17	3	1
10726	Fluorene	86-73-7	1,600		17	3	1
10726	Hexachlorobenzene	118-74-1	1,600		17	3	1
10726	Hexachlorobutadiene	87-68-3	1,700		34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	3,500		510	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152829
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg	ug/kg	ug/kg	
10726	Hexachloroethane	67-72-1	1,600	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,700	17	3	1
10726	Isophorone	78-59-1	1,600	34	17	1
10726	1-Methylnaphthalene	90-12-0	1,600	17	3	1
10726	2-Methylnaphthalene	91-57-6	1,500	17	3	1
10726	2-Methylphenol	95-48-7	1,600	34	17	1
10726	4-Methylphenol	106-44-5	1,600	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10726	Naphthalene	91-20-3	1,600	17	3	1
10726	NDPA as diphenylamine	n.a.	1,600	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	2-Nitroaniline	88-74-4	1,500	34	17	1
10726	3-Nitroaniline	99-09-2	1,400	170	68	1
10726	4-Nitroaniline	100-01-6	1,200	170	68	1
10726	Nitrobenzene	98-95-3	1,600	34	17	1
10726	2-Nitrophenol	88-75-5	1,600	34	17	1
10726	4-Nitrophenol	100-02-7	1,500	510	170	1
10726	N-Nitrosodimethylamine	62-75-9	1,400	170	68	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,500	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	1,600	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	Di-n-octylphthalate	117-84-0	2,000	170	68	1
10726	Pentachlorophenol	87-86-5	1,400	170	34	1
10726	Phenanthrene	85-01-8	1,500	17	3	1
10726	Phenol	108-95-2	1,600	34	17	1
10726	Pyrene	129-00-0	1,600	17	3	1
10726	Pyridine	110-86-1	640	170	68	1
10726	1,2,4-Trichlorobenzene	120-82-1	1,600	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	1,600	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	1,600	34	17	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	32	1.7	0.67	1
12969	Acenaphthylene	208-96-8	34	1.7	0.34	1
12969	Anthracene	120-12-7	34	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	33	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	31	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	44	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	31	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	15	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	34	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	50	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	42	18	6.1	1
12969	Chrysene	218-01-9	35	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	19	1.7	0.67	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152829
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	36		18	6.1	1
12969	Dimethylphthalate	131-11-3	34		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	56		18	6.1	1
12969	Fluoranthene	206-44-0	36		1.7	0.67	1
12969	Fluorene	86-73-7	33		1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	18		1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	35		1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	35		1.7	0.67	1
12969	Naphthalene	91-20-3	34		1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	32		1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	62		18	6.1	1
12969	Phenanthrene	85-01-8	34		1.7	0.67	1
12969	Pyrene	129-00-0	38		1.7	0.67	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	90		36	12	1
10401	Dalapon	75-99-0	61	J	91	44	1
10401	2,4-DB	94-82-6	100		17	6.2	1
10401	Dicamba	1918-00-9	8.2	J	12	4.0	1
10401	Dinoseb	88-85-7	37		24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	110		17	9.1	1
10401	MCPA	94-74-6	7,900		2,500	760	1
10401	MCPP (Mecoprop)	93-65-2	6,900		2,500	750	1
10401	2,4,5-T	93-76-5	9.4		1.7	0.82	1
10401	2,4,5-TP	93-72-1	9.4		1.7	0.75	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	3.7		0.84	0.17	1
10590	Alpha BHC	319-84-6	3.5		0.84	0.17	1
10590	Beta BHC	319-85-7	3.7		1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	3.9		0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	8.4		1.7	0.34	1
10590	p,p-DDE	72-55-9	9.3		1.7	0.34	1
10590	p,p-DDT	50-29-3	14		1.7	0.36	1
10590	Delta BHC	319-86-8	3.9		0.84	0.46	1
10590	Dieldrin	60-57-1	8.3		1.7	0.34	1
10590	Endosulfan I	959-98-8	3.8		0.84	0.22	1
10590	Endosulfan II	33213-65-9	9.3		1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	8.0		1.7	0.34	1
10590	Endrin	72-20-8	8.3		1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	7.5		1.7	0.34	1
10590	Endrin Ketone	53494-70-5	7.4		1.8	0.61	1
10590	Heptachlor	76-44-8	4.2		0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	4.7		0.84	0.17	1
10590	Methoxychlor	72-43-5	41		6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152829
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	150		17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	45		17	4.5	1
10592	PCB-1260	11096-82-5	160		17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	4.5	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	34		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	48		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,500		40.4	7.28	1
06944	Antimony	7440-36-0	17.0		4.04	0.747	1
06935	Arsenic	7440-38-2	18.0		4.04	0.706	1
06946	Barium	7440-39-3	301		1.01	0.0333	1
06947	Beryllium	7440-41-7	5.95		1.01	0.0676	1
07914	Boron	7440-42-8	204		10.1	0.848	1
06949	Cadmium	7440-43-9	5.51		1.01	0.0767	1
01650	Calcium	7440-70-2	4,230		20.2	3.37	1
06951	Chromium	7440-47-3	44.4		3.03	0.161	1
06952	Cobalt	7440-48-4	54.9		1.01	0.0999	1
06953	Copper	7440-50-8	43.8		2.02	0.293	1
01654	Iron	7439-89-6	22,400		40.4	3.65	1
06955	Lead	7439-92-1	31.5		3.03	0.505	1
01656	Lithium	7439-93-2	124		4.0	0.34	1
01657	Magnesium	7439-95-4	4,770		10.1	1.69	1
06958	Manganese	7439-96-5	351		1.01	0.0838	1
06960	Molybdenum	7439-98-7	197		2.02	0.172	1
06961	Nickel	7440-02-0	62.9		2.02	0.131	1
10145	Phosphorus	7723-14-0	527		10.1	2.92	1
01662	Potassium	7440-09-7	4,870		101	8.42	1
01667	Sodium	7440-23-5	1,110		101	16.9	1
06969	Tin	7440-31-5	365		10.1	0.222	1
06970	Titanium	7440-32-6	1,370		1.01	0.172	1
06971	Vanadium	7440-62-2	97.7		1.01	0.131	1
06972	Zinc	7440-66-6	158		4.04	0.202	1
10146	Zirconium	7440-67-7	99.0		5.05	0.848	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152829
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.40	0.404	0.101	2
06142	Silver	7440-22-4	12.1	0.202	0.0262	2
06144	Strontium	7440-24-6	35.1	0.404	0.0686	2
06145	Thallium	7440-28-0	0.754	0.202	0.0303	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.215	0.0161	0.0096	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.9	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152829
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.6		1.01	0.0995	1
11031	12378-PeCDD	40321-76-4	106	B	5.07	0.182	1
11031	123478-HxCDD	39227-28-6	96.1		5.07	0.124	1
11031	123678-HxCDD	57653-85-7	97.8	B	5.07	0.136	1
11031	123789-HxCDD	19408-74-3	94.5		5.07	0.134	1
11031	1234678-HpCDD	35822-46-9	105	B	5.07	0.133	1
11031	OCDD	3268-87-9	305	B	10.1	0.0775	1
11031	2378-TCDF	51207-31-9	20.2		1.01	0.147	1
11031	12378-PeCDF	57117-41-6	95.8		5.07	0.0913	1
11031	23478-PeCDF	57117-31-4	95.7	B	5.07	0.101	1
11031	123478-HxCDF	70648-26-9	93.2		5.07	0.117	1
11031	123678-HxCDF	57117-44-9	93.5		5.07	0.112	1
11031	123789-HxCDF	72918-21-9	89.5		5.07	0.155	1
11031	234678-HxCDF	60851-34-5	91.2		5.07	0.121	1
11031	1234678-HpCDF	67562-39-4	89.9	B	5.07	0.0709	1
11031	1234789-HpCDF	55673-89-7	88.4	B	5.07	0.125	1
11031	OCDF	39001-02-0	181	B	10.1	0.0799	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152829
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13225SLB026	08/19/2013 11:58	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 11:16	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13225SLB026	08/14/2013 08:30	Anna E Stager	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 14:03	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 18:09	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/14/2013 22:08	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	2	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/13/2013 00:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/15/2013 18:05	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152829
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:00	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 12:53	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 12:53	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 12:53	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 12:53	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:18	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152830
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	1,500		17	3	1
10726	Acenaphthylene	208-96-8	1,700		17	3	1
10726	Aniline	62-53-3	610		340	170	1
10726	Anthracene	120-12-7	1,500		17	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	710	1
10726	Benzo(a)anthracene	56-55-3	1,300		17	3	1
10726	Benzo(a)pyrene	50-32-8	1,400		17	3	1
10726	Benzo(b)fluoranthene	205-99-2	1,700		17	3	1
10726	Benzo(g,h,i)perylene	191-24-2	1,400		17	3	1
10726	Benzo(k)fluoranthene	207-08-9	1,700		17	3	1
10726	Benzoic acid	65-85-0	1,300		500	170	1
10726	Benzyl alcohol	100-51-6	1,500		340	170	1
10726	1,1'-Biphenyl	92-52-4	1,400		34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	1,700		34	17	1
10726	Butylbenzylphthalate	85-68-7	1,500		170	67	1
10726	Di-n-butylphthalate	84-74-2	1,400		170	67	1
10726	Carbazole	86-74-8	1,400		34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	1,500		34	17	1
10726	4-Chloroaniline	106-47-8	620		34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,400		34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,500		34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,500		34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	1,300		33	7	1
10726	2-Chlorophenol	95-57-8	1,600		34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,500		34	17	1
10726	Chrysene	218-01-9	1,200		17	3	1
10726	Dibenz(a,h)anthracene	53-70-3	1,600		17	3	1
10726	Dibenzofuran	132-64-9	1,500		34	17	1
10726	1,2-Dichlorobenzene	95-50-1	1,500		34	17	1
10726	1,3-Dichlorobenzene	541-73-1	1,500		34	17	1
10726	1,4-Dichlorobenzene	106-46-7	1,500		34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	810		340	100	1
10726	2,4-Dichlorophenol	120-83-2	1,600		34	17	1
10726	2,6-Dichlorophenol	87-65-0	1,600		34	17	1
10726	Diethylphthalate	84-66-2	1,500		170	67	1
10726	2,4-Dimethylphenol	105-67-9	1,400		34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	Dimethylphthalate	131-11-3	1,500		170	67	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,300		500	170	1
10726	2,4-Dinitrophenol	51-28-5	1,700		670	300	1
10726	1,2-Diphenylhydrazine	122-66-7	1,700		34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,500		170	67	1
10726	Fluoranthene	206-44-0	1,300		17	3	1
10726	Fluorene	86-73-7	1,500		17	3	1
10726	Hexachlorobenzene	118-74-1	1,600		17	3	1
10726	Hexachlorobutadiene	87-68-3	1,600		34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	3,200		500	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152830
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		ug/kg	ug/kg	ug/kg	
10726	Hexachloroethane	67-72-1	1,500	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,500	17	3	1
10726	Isophorone	78-59-1	1,500	34	17	1
10726	1-Methylnaphthalene	90-12-0	1,500	17	3	1
10726	2-Methylnaphthalene	91-57-6	1,400	17	3	1
10726	2-Methylphenol	95-48-7	1,500	34	17	1
10726	4-Methylphenol	106-44-5	1,400	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10726	Naphthalene	91-20-3	1,500	17	3	1
10726	NDPA as diphenylamine	n.a.	1,600	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	2-Nitroaniline	88-74-4	1,500	34	17	1
10726	3-Nitroaniline	99-09-2	1,300	170	67	1
10726	4-Nitroaniline	100-01-6	1,200	170	67	1
10726	Nitrobenzene	98-95-3	1,500	34	17	1
10726	2-Nitrophenol	88-75-5	1,500	34	17	1
10726	4-Nitrophenol	100-02-7	1,400	500	170	1
10726	N-Nitrosodimethylamine	62-75-9	1,200	170	67	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,500	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	1,600	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	Di-n-octylphthalate	117-84-0	1,900	170	67	1
10726	Pentachlorophenol	87-86-5	1,400	170	34	1
10726	Phenanthrene	85-01-8	1,500	17	3	1
10726	Phenol	108-95-2	1,500	34	17	1
10726	Pyrene	129-00-0	1,600	17	3	1
10726	Pyridine	110-86-1	520	170	67	1
10726	1,2,4-Trichlorobenzene	120-82-1	1,600	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	1,600	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	1,600	34	17	1
	The recovery for the sample internal standard(s) is outside the QC acceptance limits. The recovery for the internal standard(s) is also outside the QC acceptance limits in the associated background sample, indicating a matrix effect.					
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	33	1.7	0.68	1
12969	Acenaphthylene	208-96-8	35	1.7	0.34	1
12969	Anthracene	120-12-7	35	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	34	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	32	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	45	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	32	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	15	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	34	1.7	0.68	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152830
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Butylbenzylphthalate	85-68-7	49		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	44		18	6.1	1
12969	Chrysene	218-01-9	37		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	19		1.7	0.68	1
12969	Diethylphthalate	84-66-2	37		18	6.1	1
12969	Dimethylphthalate	131-11-3	35		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	55		18	6.1	1
12969	Fluoranthene	206-44-0	38		1.7	0.68	1
12969	Fluorene	86-73-7	34		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	18		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	36		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	37		1.7	0.68	1
12969	Naphthalene	91-20-3	35		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	32		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	62		18	6.1	1
12969	Phenanthrene	85-01-8	35		1.7	0.68	1
12969	Pyrene	129-00-0	39		1.7	0.68	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	90		36	12	1
10401	Dalapon	75-99-0	91	U	91	44	1
10401	2,4-DB	94-82-6	98		17	6.2	1
10401	Dicamba	1918-00-9	7.7	J	12	4.0	1
10401	Dinoseb	88-85-7	36		24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	110		17	9.1	1
10401	MCPA	94-74-6	7,500		2,500	760	1
10401	MCPP (Mecoprop)	93-65-2	6,900		2,500	750	1
10401	2,4,5-T	93-76-5	9.0		1.7	0.82	1
10401	2,4,5-TP	93-72-1	8.9		1.7	0.75	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	3.3		0.84	0.17	1
10590	Alpha BHC	319-84-6	3.3		0.84	0.17	1
10590	Beta BHC	319-85-7	3.5		1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	3.3		0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	7.7		1.7	0.34	1
10590	p,p-DDE	72-55-9	8.2		1.7	0.34	1
10590	p,p-DDT	50-29-3	11		1.7	0.36	1
10590	Delta BHC	319-86-8	4.0		0.84	0.46	1
10590	Dieldrin	60-57-1	7.6		1.7	0.34	1
10590	Endosulfan I	959-98-8	3.4		0.84	0.22	1
10590	Endosulfan II	33213-65-9	8.0		1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	7.3		1.7	0.34	1
10590	Endrin	72-20-8	7.5		1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	6.7		1.7	0.34	1
10590	Endrin Ketone	53494-70-5	6.9		1.8	0.61	1
10590	Heptachlor	76-44-8	3.4		0.84	0.17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152830
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Heptachlor Epoxide	1024-57-3	3.9		0.84	0.17	1
10590	Methoxychlor	72-43-5	38		6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	150		17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	69		17	4.5	1
10592	PCB-1260	11096-82-5	160		17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	6.3		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	32		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	70		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,500		40.8	7.35	1
06944	Antimony	7440-36-0	19.4		4.08	0.754	1
06935	Arsenic	7440-38-2	17.9		4.08	0.714	1
06946	Barium	7440-39-3	300		1.02	0.0336	1
06947	Beryllium	7440-41-7	5.95		1.02	0.0683	1
07914	Boron	7440-42-8	204		10.2	0.856	1
06949	Cadmium	7440-43-9	5.95		1.02	0.0775	1
01650	Calcium	7440-70-2	4,080		20.4	3.40	1
06951	Chromium	7440-47-3	44.2		3.06	0.163	1
06952	Cobalt	7440-48-4	55.5		1.02	0.101	1
06953	Copper	7440-50-8	44.8		2.04	0.296	1
01654	Iron	7439-89-6	22,300		40.8	3.69	1
06955	Lead	7439-92-1	35.8		3.06	0.510	1
01656	Lithium	7439-93-2	124		4.1	0.35	1
01657	Magnesium	7439-95-4	4,640		10.2	1.70	1
06958	Manganese	7439-96-5	355		1.02	0.0846	1
06960	Molybdenum	7439-98-7	201		2.04	0.173	1
06961	Nickel	7440-02-0	63.5		2.04	0.133	1
10145	Phosphorus	7723-14-0	568		10.2	2.95	1
01662	Potassium	7440-09-7	4,800		102	8.50	1
01667	Sodium	7440-23-5	1,110		102	17.0	1
06969	Tin	7440-31-5	369		10.2	0.224	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152830
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06970	Titanium	7440-32-6	1,360	1.02	0.173	1
06971	Vanadium	7440-62-2	97.9	1.02	0.133	1
06972	Zinc	7440-66-6	206	4.08	0.204	1
10146	Zirconium	7440-67-7	99.2	5.10	0.856	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.91	0.408	0.102	2
06142	Silver	7440-22-4	15.6	0.204	0.0265	2
06144	Strontium	7440-24-6	48.4	0.408	0.0693	2
06145	Thallium	7440-28-0	1.01	0.204	0.0306	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.229	0.0168	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.9	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152830
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.4		1.00	0.116	1
11031	12378-PeCDD	40321-76-4	105	B	5.01	0.133	1
11031	123478-HxCDD	39227-28-6	94.5		5.01	0.119	1
11031	123678-HxCDD	57653-85-7	95.4	B	5.01	0.134	1
11031	123789-HxCDD	19408-74-3	94.8		5.01	0.134	1
11031	1234678-HpCDD	35822-46-9	113	B	5.01	0.129	1
11031	OCDD	3268-87-9	410	B	10.0	0.0579	1
11031	2378-TCDF	51207-31-9	20.1		1.00	0.188	1
11031	12378-PeCDF	57117-41-6	98.0		5.01	0.119	1
11031	23478-PeCDF	57117-31-4	94.9	B	5.01	0.127	1
11031	123478-HxCDF	70648-26-9	89.0		5.01	0.114	1
11031	123678-HxCDF	57117-44-9	89.3		5.01	0.109	1
11031	123789-HxCDF	72918-21-9	87.9		5.01	0.122	1
11031	234678-HxCDF	60851-34-5	88.7		5.01	0.107	1
11031	1234678-HpCDF	67562-39-4	90.6	B	5.01	0.0803	1
11031	1234789-HpCDF	55673-89-7	87.5	B	5.01	0.127	1
11031	OCDF	39001-02-0	177	B	10.0	0.0785	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	63	26 - 123
13C12-234678-HxCDF	62	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152830
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13225SLB026	08/19/2013 12:23	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 11:49	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13225SLB026	08/14/2013 08:30	Anna E Stager	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 14:30	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 18:25	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/14/2013 22:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	2	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/13/2013 00:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13224001	08/15/2013 19:02	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13224001	08/12/2013 11:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152830
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:04	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 12:56	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 12:56	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 12:56	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 12:56	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:21	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152831
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,800		40.8	7.35	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.754	1
06935	Arsenic	7440-38-2	2.40	J	4.08	0.714	1
06946	Barium	7440-39-3	91.3		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.626	J	1.02	0.0683	1
07914	Boron	7440-42-8	11.9		10.2	0.856	1
06949	Cadmium	7440-43-9	0.507	J	1.02	0.0775	1
01650	Calcium	7440-70-2	3,360		20.4	3.40	1
06951	Chromium	7440-47-3	20.2		3.06	0.163	1
06952	Cobalt	7440-48-4	5.46		1.02	0.101	1
06953	Copper	7440-50-8	14.9		2.04	0.296	1
01654	Iron	7439-89-6	20,400		40.8	3.69	1
06955	Lead	7439-92-1	15.1		3.06	0.510	1
01656	Lithium	7439-93-2	20.1		4.1	0.35	1
01657	Magnesium	7439-95-4	4,100		10.2	1.70	1
06958	Manganese	7439-96-5	272		1.02	0.0846	1
06960	Molybdenum	7439-98-7	0.478	J	2.04	0.173	1
06961	Nickel	7440-02-0	11.8		2.04	0.133	1
10145	Phosphorus	7723-14-0	409		10.2	2.95	1
01662	Potassium	7440-09-7	3,350		102	8.50	1
01667	Sodium	7440-23-5	60.0	J	102	17.0	1
06969	Tin	7440-31-5	2.94	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,040		1.02	0.173	1
06971	Vanadium	7440-62-2	37.6		1.02	0.133	1
06972	Zinc	7440-66-6	98.0		4.08	0.204	1
10146	Zirconium	7440-67-7	3.30	J	5.10	0.856	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.163	J	0.408	0.102	2
06142	Silver	7440-22-4	0.0489	J	0.204	0.0265	2
06144	Strontium	7440-24-6	30.2		0.408	0.0693	2
06145	Thallium	7440-28-0	0.357		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0221		0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.52		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.9		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-583-SA8-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152831
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:20 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL583 SDG#: PH085-05DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 11:56	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 12:51	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 12:51	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 12:51	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 12:51	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:16	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13219039401A	08/07/2013 18:30	Clayton C Litchmore	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-883-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152832
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:25 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL883 SDG#: PH085-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Aniline	62-53-3	340	U	340	170	1
10726	Anthracene	120-12-7	3	J	17	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	710	1
10726	Benzo(a)anthracene	56-55-3	5	J	17	3	1
10726	Benzo(a)pyrene	50-32-8	8	J	17	3	1
10726	Benzo(b)fluoranthene	205-99-2	9	J	17	3	1
10726	Benzo(g,h,i)perylene	191-24-2	6	J	17	3	1
10726	Benzo(k)fluoranthene	207-08-9	4	J	17	3	1
10726	Benzoic acid	65-85-0	510	U	510	170	1
10726	Benzyl alcohol	100-51-6	340	U	340	170	1
10726	1,1'-Biphenyl	92-52-4	34	U	34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	34	U	34	17	1
10726	2-butoxy-Ethanol	111-76-2	170	U	170	170	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Carbazole	86-74-8	34	U	34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	34	U	34	17	1
10726	4-Chloroaniline	106-47-8	34	U	34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	34	U	34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	34	U	34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	34	U	34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	34	U	34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	17	1
10726	Dibenzofuran	132-64-9	34	U	34	17	1
10726	1,2-Dichlorobenzene	95-50-1	34	U	34	17	1
10726	1,3-Dichlorobenzene	541-73-1	34	U	34	17	1
10726	1,4-Dichlorobenzene	106-46-7	34	U	34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	340	U	340	100	1
10726	2,4-Dichlorophenol	120-83-2	34	U	34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	2,4-Dimethylphenol	105-67-9	34	U	34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	510	U	510	170	1
10726	2,4-Dinitrophenol	51-28-5	670	U	670	310	1
10726	1,2-Diphenylhydrazine	122-66-7	34	U	34	17	1
10726	Fluoranthene	206-44-0	8	J	17	3	1
10726	Hexachlorobenzene	118-74-1	17	U	17	3	1
10726	Hexachlorobutadiene	87-68-3	34	U	34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	510	U	510	170	1
10726	Hexachloroethane	67-72-1	170	U	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	5	J	17	3	1
10726	Isophorone	78-59-1	34	U	34	17	1
10726	2-Methylphenol	95-48-7	34	U	34	17	1
10726	4-Methylphenol	106-44-5	34	U	34	17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-883-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152832
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:25 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL883 SDG#: PH085-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	NDPA as diphenylamine	n.a.	170	U	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	34	U	34	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	68	1
10726	4-Nitroaniline	100-01-6	170	U	170	68	1
10726	Nitrobenzene	98-95-3	34	U	34	17	1
10726	2-Nitrophenol	88-75-5	34	U	34	17	1
10726	4-Nitrophenol	100-02-7	510	U	510	170	1
10726	N-Nitroso-di-n-propylamine	621-64-7	34	U	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	34	U	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Pentachlorophenol	87-86-5	170	U	170	34	1
10726	Phenanthrene	85-01-8	6	J	17	3	1
10726	Phenol	108-95-2	34	U	34	17	1
10726	2-phenoxy-Ethanol	122-99-6	170	U	170	170	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyrene	129-00-0	10	J	17	3	1
10726	Pyridine	110-86-1	170	U	170	68	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	170	U	170	34	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	34	U	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	34	U	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	34	U	34	17	1
	The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken: The sample was re-analyzed and internal standard areas are again outside of the QC acceptance limits, indicating a matrix effect. The reported data is from the initial analysis of the sample.						
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Benzo(e)pyrene	192-97-2	4.5	J	17	3.4	1
12969	Butylbenzylphthalate	85-68-7	27		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	11		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	0.69	J	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	29		18	6.1	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-883-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152832
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:25 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL883 SDG#: PH085-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	1-Methylnaphthalene	90-12-0	0.79	J	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	2.2		1.7	0.68	1
12969	Naphthalene	91-20-3	2.3		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	23	J	37	12	1
10401	Dalapon	75-99-0	92	U	92	84	1
10401	2,4-DB	94-82-6	35	U	35	35	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	24	U	24	9.2	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.2	1
10401	MCPA	94-74-6	2,600	U	2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	770	1
10401	2,4,5-T	93-76-5	2.3		1.7	0.84	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.77	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.87	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.36	1
10590	Delta BHC	319-86-8	0.85	U	0.85	0.46	1
10590	Dieldrin	60-57-1	1.8	U	1.8	1.8	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.38	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.50	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.52	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.85	U	0.85	0.21	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	22	J	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-883-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152832
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:25 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL883 SDG#: PH085-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	96		17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	2.4	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	24		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	66		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,800		40.9	7.38	1
06944	Antimony	7440-36-0	8.98		4.09	0.757	1
06935	Arsenic	7440-38-2	2.32	J	4.09	0.716	1
06946	Barium	7440-39-3	93.7		1.02	0.0338	1
06947	Beryllium	7440-41-7	0.614	J	1.02	0.0686	1
07914	Boron	7440-42-8	12.9		10.2	0.860	1
06949	Cadmium	7440-43-9	1.39		1.02	0.0778	1
01650	Calcium	7440-70-2	3,400		20.5	3.42	1
06951	Chromium	7440-47-3	22.6		3.07	0.164	1
06952	Cobalt	7440-48-4	5.76		1.02	0.101	1
06953	Copper	7440-50-8	17.2		2.05	0.297	1
01654	Iron	7439-89-6	21,000		40.9	3.71	1
06955	Lead	7439-92-1	27.3		3.07	0.512	1
01656	Lithium	7439-93-2	20.4		4.1	0.35	1
01657	Magnesium	7439-95-4	4,130		10.2	1.71	1
06958	Manganese	7439-96-5	296		1.02	0.0850	1
06960	Molybdenum	7439-98-7	0.380	J	2.05	0.174	1
06961	Nickel	7440-02-0	12.8		2.05	0.133	1
10145	Phosphorus	7723-14-0	443		10.2	2.96	1
01662	Potassium	7440-09-7	3,440		102	8.54	1
01667	Sodium	7440-23-5	66.7	J	102	17.1	1
06969	Tin	7440-31-5	4.14	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,050		1.02	0.174	1
06971	Vanadium	7440-62-2	39.0		1.02	0.133	1
06972	Zinc	7440-66-6	219		4.09	0.205	1
10146	Zirconium	7440-67-7	1.94	J	5.12	0.860	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.215	J	0.409	0.102	2
06142	Silver	7440-22-4	0.101	J	0.205	0.0266	2
06144	Strontium	7440-24-6	34.7		0.409	0.0696	2
06145	Thallium	7440-28-0	0.381		0.205	0.0307	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-883-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152832
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:25 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL883 SDG#: PH085-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0359	0.0164	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	6.71	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.3	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-883-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152832
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:25 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL883 SDG#: PH085-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0550	J	0.997	0.0532	1
11031	12378-PeCDD	40321-76-4	0.548	JB	4.98	0.135	1
11031	123478-HxCDD	39227-28-6	0.778	J	4.98	0.115	1
11031	123678-HxCDD	57653-85-7	2.27	JB	4.98	0.120	1
11031	123789-HxCDD	19408-74-3	1.93	J	4.98	0.121	1
11031	1234678-HpCDD	35822-46-9	45.6	B	4.98	0.118	1
11031	OCDD	3268-87-9	414	B	9.97	0.0605	1
11650	2378-TCDF-Conf	51207-31-9	2.32	C	0.997	0.152	1
11031	12378-PeCDF	57117-41-6	5.96	B	4.98	0.122	1
11031	23478-PeCDF	57117-31-4	1.66	J	4.98	0.105	1
11031	123478-HxCDF	70648-26-9	1.37	JB	4.98	0.0745	1
11031	123678-HxCDF	57117-44-9	1.11	JB	4.98	0.0798	1
11031	123789-HxCDF	72918-21-9	0.642	JB	4.98	0.0854	1
11031	234678-HxCDF	60851-34-5	0.767	JB	4.98	0.0750	1
11031	1234678-HpCDF	67562-39-4	5.73	B	4.98	0.0586	1
11031	1234789-HpCDF	55673-89-7	0.551	JQ	4.98	0.0793	1
11031	OCDF	39001-02-0	11.5	B	9.97	0.0592	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	3.04				1

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-883-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152832
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:25 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL883 SDG#: PH085-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13225SLB026	08/19/2013 12:47	Linda M Hartenstine	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/16/2013 13:55	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13225SLB026	08/14/2013 08:30	Anna E Stager	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 15:51	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 18:40	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/14/2013 22:45	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	2	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/13/2013 02:14	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 09:04	Joseph D Anderson	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	13227001	08/19/2013 14:00	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-883-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152832
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 12:25 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL883 SDG#: PH085-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:30	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 13:12	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 13:12	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 13:12	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 13:12	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:29	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13219039401A	08/07/2013 18:30	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-584-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152833
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 14:15 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL584 SDG#: PH085-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.0	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.1	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.1	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.78	J	1.7	0.67	1
12969	Pyrene	129-00-0	0.93	J	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	9.2		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	27		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-584-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152833
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 14:15 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL584 SDG#: PH085-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,000		40.1	7.23	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.742	1
06935	Arsenic	7440-38-2	2.82	J	4.01	0.702	1
06946	Barium	7440-39-3	111		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.674	J	1.00	0.0672	1
07914	Boron	7440-42-8	12.6		10.0	0.843	1
06949	Cadmium	7440-43-9	0.164	J	1.00	0.0762	1
01650	Calcium	7440-70-2	2,260		20.1	3.35	1
06951	Chromium	7440-47-3	18.1		3.01	0.161	1
06952	Cobalt	7440-48-4	5.11		1.00	0.0993	1
06953	Copper	7440-50-8	13.0		2.01	0.291	1
01654	Iron	7439-89-6	20,800		40.1	3.63	1
06955	Lead	7439-92-1	8.83		3.01	0.502	1
01656	Lithium	7439-93-2	23.1		4.0	0.34	1
01657	Magnesium	7439-95-4	3,890		10.0	1.68	1
06958	Manganese	7439-96-5	300		1.00	0.0833	1
06960	Molybdenum	7439-98-7	0.634	J	2.01	0.171	1
06961	Nickel	7440-02-0	10.9		2.01	0.130	1
10145	Phosphorus	7723-14-0	359		10.0	2.90	1
01662	Potassium	7440-09-7	3,560		100	8.37	1
01667	Sodium	7440-23-5	64.0	J	100	16.8	1
06969	Tin	7440-31-5	2.66	J	10.0	0.221	1
06970	Titanium	7440-32-6	1,070		1.00	0.171	1
06971	Vanadium	7440-62-2	35.1		1.00	0.130	1
06972	Zinc	7440-66-6	117		4.01	0.201	1
10146	Zirconium	7440-67-7	0.847	J	5.02	0.843	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.241	J	0.401	0.100	2
06142	Silver	7440-22-4	0.0339	J	0.201	0.0261	2
06144	Strontium	7440-24-6	31.0		0.401	0.0682	2
06145	Thallium	7440-28-0	0.338		0.201	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183		0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.10		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-584-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152833
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 14:15 by SM

Submitted: 08/07/2013 09:15
Reported: 08/21/2013 14:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL584 SDG#: PH085-07*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.972 U	0.972	0.0546	1
11031	12378-PeCDD	40321-76-4	0.0953 JBQ	4.86	0.0532	1
11031	123478-HxCDD	39227-28-6	0.0701 J	4.86	0.0379	1
11031	123678-HxCDD	57653-85-7	0.489 JBQ	4.86	0.0409	1
11031	123789-HxCDD	19408-74-3	0.584 J	4.86	0.0399	1
11031	1234678-HpCDD	35822-46-9	1.60 JB	4.86	0.0559	1
11031	OCDD	3268-87-9	14.4 B	9.72	0.0310	1
11031	2378-TCDF	51207-31-9	0.972 U	0.972	0.0519	1
11031	12378-PeCDF	57117-41-6	0.143 JB	4.86	0.0280	1
11031	23478-PeCDF	57117-31-4	0.0809 JQ	4.86	0.0273	1
11031	123478-HxCDF	70648-26-9	0.0585 JBQ	4.86	0.0214	1
11031	123678-HxCDF	57117-44-9	0.0440 JBQ	4.86	0.0211	1
11031	123789-HxCDF	72918-21-9	0.352 JB	4.86	0.0262	1
11031	234678-HxCDF	60851-34-5	0.0696 JBQ	4.86	0.0201	1
11031	1234678-HpCDF	67562-39-4	0.326 JB	4.86	0.0201	1
11031	1234789-HpCDF	55673-89-7	0.0350 J	4.86	0.0280	1
11031	OCDF	39001-02-0	0.646 JBQ	9.72	0.0424	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.129			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	65	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-584-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152833
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

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3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL584 SDG#: PH085-07*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-584-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152833
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/06/2013 14:15 by SM

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL584 SDG#: PH085-07*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 06:18	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/14/2013 23:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132220004A	08/12/2013 23:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132220004A	08/11/2013 11:45	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 10:00	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:34	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 13:14	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 13:14	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 13:14	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 13:14	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-584-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7152833
LL Group # 1409714
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL584 SDG#: PH085-07*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:31	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13219039401A	08/07/2013 18:30	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402A	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B132252AA	Sample number(s): 7152827								
Acetone	20 U	20.	7	ug/kg	113	106	18-197	7	30
Acrolein	100 U	100.	20	ug/kg	100	89	50-137	11	30
Acrylonitrile	20 U	20.	4	ug/kg	90	86	60-133	5	30
t-Amyl methyl ether	5 U	5.	1	ug/kg	110	102	63-130	7	30
Benzene	5 U	5.	0.5	ug/kg	109	98	80-120	11	30
Bromobenzene	5 U	5.	1	ug/kg	112	101	79-120	10	30
Bromochloromethane	5 U	5.	1	ug/kg	106	97	82-133	9	30
Bromodichloromethane	5 U	5.	1	ug/kg	108	100	75-114	8	30
Bromoform	5 U	5.	1	ug/kg	105	98	70-120	7	30
Bromomethane	5 U	5.	2	ug/kg	95	85	32-162	11	30
2-Butanone	10 U	10.	4	ug/kg	104	101	38-146	3	30
t-Butyl alcohol	50 U	50.	20	ug/kg	112	109	60-149	3	30
n-Butylbenzene	5 U	5.	1	ug/kg	104	95	72-120	9	30
sec-Butylbenzene	5 U	5.	1	ug/kg	111	100	75-120	11	30
tert-Butylbenzene	5 U	5.	1	ug/kg	107	94	75-120	13	30
Carbon Disulfide	5 U	5.	1	ug/kg	107	95	59-129	12	30
Carbon Tetrachloride	5 U	5.	1	ug/kg	116	103	69-122	12	30
Chlorobenzene	5 U	5.	1	ug/kg	109	98	80-120	10	30
Chloroethane	5 U	5.	2	ug/kg	89	79	37-154	12	30
2-Chloroethyl Vinyl Ether	10 U	10.	2	ug/kg	99	94	44-137	6	30
Chloroform	5 U	5.	1	ug/kg	113	102	80-120	10	30
1-Chlorohexane	5 U	5.	1	ug/kg	119	106	70-130	11	30
Chloromethane	5 U	5.	2	ug/kg	92	80	56-120	14	30
2-Chlorotoluene	5 U	5.	1	ug/kg	113	98	78-120	15	30
4-Chlorotoluene	5 U	5.	1	ug/kg	109	96	79-120	13	30
Chlorotrifluoroethene	5 U	5.	2	ug/kg	97	87	22-131	10	30
1,2-Dibromo-3-chloropropane	5 U	5.	2	ug/kg	103	103	55-128	0	30
Dibromochloromethane	5 U	5.	1	ug/kg	110	103	77-120	7	30
1,2-Dibromoethane	5 U	5.	1	ug/kg	113	104	80-120	9	30
Dibromomethane	5 U	5.	1	ug/kg	107	99	80-120	8	30
1,2-Dichlorobenzene	5 U	5.	1	ug/kg	107	98	80-120	9	30
1,3-Dichlorobenzene	5 U	5.	1	ug/kg	107	97	80-120	10	30
1,4-Dichlorobenzene	5 U	5.	1	ug/kg	109	97	80-120	12	30
Dichlorodifluoromethane	5 U	5.	2	ug/kg	95	86	32-120	10	30
1,1-Dichloroethane	5 U	5.	1	ug/kg	111	99	80-120	11	30
1,2-Dichloroethane	5 U	5.	1	ug/kg	116	106	72-126	9	30
1,1-Dichloroethene	5 U	5.	1	ug/kg	114	101	73-129	12	30
cis-1,2-Dichloroethene	5 U	5.	1	ug/kg	109	98	80-120	10	30
trans-1,2-Dichloroethene	5 U	5.	1	ug/kg	113	100	79-120	12	30
1,2-Dichloropropane	5 U	5.	1	ug/kg	113	102	77-120	11	30
1,3-Dichloropropane	5 U	5.	1	ug/kg	111	101	80-120	9	30
2,2-Dichloropropane	5 U	5.	1	ug/kg	106	93	72-123	12	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloropropene	5	U	5.	1	ug/kg	115	101	77-120	13	30
cis-1,3-Dichloropropene	5	U	5.	1	ug/kg	107	98	74-120	9	30
trans-1,3-Dichloropropene	5	U	5.	1	ug/kg	112	103	77-120	8	30
Ethyl t-butyl ether	5	U	5.	1	ug/kg	109	100	64-124	9	30
Ethylbenzene	5	U	5.	1	ug/kg	109	97	80-120	12	30
Freon 113	5	U	5.	2	ug/kg	109	100	64-137	9	30
Freon 133a	5	U	5.	2	ug/kg	100	91	78-120	9	30
Hexachlorobutadiene	5	U	5.	2	ug/kg	90	87	46-130	4	30
2-Hexanone	10	U	10.	3	ug/kg	105	102	40-129	2	30
di-Isopropyl ether	5	U	5.	1	ug/kg	114	103	68-128	10	30
Isopropylbenzene	5	U	5.	1	ug/kg	108	98	76-120	10	30
p-Isopropyltoluene	5	U	5.	1	ug/kg	105	95	75-120	10	30
Methyl Iodide	5	U	5.	3	ug/kg	116	103	72-130	12	30
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/kg	112	104	74-121	7	30
4-Methyl-2-pentanone	10	U	10.	3	ug/kg	107	102	52-125	4	30
Methylene Chloride	5	U	5.	2	ug/kg	114	102	76-124	10	30
n-Propylbenzene	5	U	5.	1	ug/kg	115	100	77-120	14	30
Styrene	5	U	5.	1	ug/kg	105	99	76-120	7	30
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/kg	112	100	80-120	12	30
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/kg	116	107	71-123	8	30
Tetrachloroethene	5	U	5.	1	ug/kg	111	100	78-126	10	30
Toluene	5	U	5.	1	ug/kg	111	98	80-120	13	30
1,2,3-Trichlorobenzene	5	U	5.	1	ug/kg	90	91	64-120	2	30
1,2,4-Trichlorobenzene	5	U	5.	1	ug/kg	92	91	68-113	1	30
1,1,1-Trichloroethane	5	U	5.	1	ug/kg	100	89	71-125	12	30
1,1,2-Trichloroethane	5	U	5.	1	ug/kg	112	102	80-120	9	30
Trichloroethene	5	U	5.	1	ug/kg	112	99	80-120	12	30
Trichlorofluoromethane	5	U	5.	2	ug/kg	102	91	58-133	12	30
1,2,3-Trichloropropane	5	U	5.	1	ug/kg	121	112	71-123	9	30
1,2,4-Trimethylbenzene	5	U	5.	1	ug/kg	110	101	79-120	9	30
1,3,5-Trimethylbenzene	5	U	5.	1	ug/kg	113	100	78-120	12	30
Vinyl Acetate	10	U	10.	2	ug/kg	61	56	29-111	10	30
Vinyl Chloride	5	U	5.	1	ug/kg	98	86	53-120	12	30
m+p-Xylene	5	U	5.	1	ug/kg	106	96	80-120	10	30
o-Xylene	5	U	5.	1	ug/kg	106	97	80-120	9	30
Batch number: Y132202AA	Sample number(s): 7152824									
Acetone	20	U	20.	6	ug/l	115	108	35-181	6	30
Acrolein	100 U		100.	40	ug/l	88	89	46-146	1	30
Acrylonitrile	20	U	20.	4	ug/l	89	87	61-130	2	30
t-Amyl methyl ether	5	U	5.	0.8	ug/l	106	104	66-120	1	30
Benzene	5	U	5.	0.5	ug/l	102	102	77-121	0	30
Bromobenzene	5	U	5.	1	ug/l	103	102	80-120	1	30
Bromochloromethane	5	U	5.	1	ug/l	116	113	80-121	3	30
Bromodichloromethane	5	U	5.	1	ug/l	110	109	73-120	1	30
Bromoform	5	U	5.	1	ug/l	110	109	61-120	1	30
Bromomethane	5	U	5.	1	ug/l	91	90	51-120	1	30
2-Butanone	10	U	10.	3	ug/l	98	93	57-141	5	30
t-Butyl alcohol	50	U	50.	10	ug/l	108	110	75-120	1	30
n-Butylbenzene	5	U	5.	1	ug/l	106	105	73-130	1	30
sec-Butylbenzene	5	U	5.	1	ug/l	109	109	74-124	0	30
tert-Butylbenzene	5	U	5.	1	ug/l	103	104	80-120	1	30
Carbon Disulfide	5	U	5.	1	ug/l	96	96	68-121	1	30
Carbon Tetrachloride	5	U	5.	1	ug/l	121	117	65-137	3	30
Chlorobenzene	5	U	5.	0.8	ug/l	109	109	80-120	0	30

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chloroethane	5	U	5.	1	ug/l	82	77	60-120	6	30
2-Chloroethyl Vinyl Ether	10	U	10.	2	ug/l	103	100	52-127	2	30
Chloroform	5	U	5.	0.8	ug/l	113	112	77-122	1	30
1-Chlorohexane	5	U	5.	1	ug/l	106	106	70-130	0	30
Chloromethane	5	U	5.	1	ug/l	88	88	54-123	1	30
2-Chlorotoluene	5	U	5.	1	ug/l	103	104	80-120	1	30
4-Chlorotoluene	5	U	5.	1	ug/l	103	103	80-120	0	30
Chlorotrifluoroethene	5	U	5.	2	ug/l	53	54	47-120	2	30
1,2-Dibromo-3-chloropropane	5	U	5.	2	ug/l	108	108	56-120	0	30
Dibromochloromethane	5	U	5.	1	ug/l	106	103	72-120	2	30
1,2-Dibromoethane	5	U	5.	1	ug/l	111	109	76-120	2	30
Dibromomethane	5	U	5.	1	ug/l	108	107	80-120	1	30
1,2-Dichlorobenzene	5	U	5.	1	ug/l	110	110	80-120	0	30
1,3-Dichlorobenzene	5	U	5.	1	ug/l	107	107	80-120	0	30
1,4-Dichlorobenzene	5	U	5.	1	ug/l	108	107	80-120	0	30
Dichlorodifluoromethane	5	U	5.	2	ug/l	104	102	35-122	2	30
1,1-Dichloroethane	5	U	5.	1	ug/l	101	101	79-120	0	30
1,2-Dichloroethane	5	U	5.	1	ug/l	116	114	64-130	2	30
1,1-Dichloroethene	5	U	5.	0.8	ug/l	110	108	76-124	2	30
cis-1,2-Dichloroethene	5	U	5.	0.8	ug/l	107	107	80-120	0	30
trans-1,2-Dichloroethene	5	U	5.	0.8	ug/l	109	109	80-120	1	30
1,2-Dichloropropane	5	U	5.	1	ug/l	100	100	80-120	0	30
1,3-Dichloropropane	5	U	5.	1	ug/l	100	99	80-120	1	30
2,2-Dichloropropane	5	U	5.	1	ug/l	113	113	67-124	0	30
1,1-Dichloropropene	5	U	5.	1	ug/l	109	109	80-120	1	30
cis-1,3-Dichloropropene	5	U	5.	1	ug/l	110	110	78-120	0	30
trans-1,3-Dichloropropene	5	U	5.	1	ug/l	100	99	66-124	1	30
Ethyl t-butyl ether	5	U	5.	0.8	ug/l	101	100	66-120	1	30
Ethylbenzene	5	U	5.	0.8	ug/l	104	104	79-120	0	30
Freon 113	5	U	5.	2	ug/l	113	111	69-128	2	30
Freon 133a	5	U	5.	2	ug/l	86	88	64-120	2	30
Hexachlorobutadiene	5	U	5.	2	ug/l	112	115	58-120	3	30
2-Hexanone	10	U	10.	3	ug/l	91	88	59-125	3	30
di-Isopropyl ether	5	U	5.	0.8	ug/l	92	92	65-120	0	30
Isopropylbenzene	5	U	5.	1	ug/l	109	108	77-120	0	30
p-Isopropyltoluene	5	U	5.	1	ug/l	107	107	77-121	0	30
Methyl Iodide	5	U	5.	1	ug/l	111	110	71-122	1	30
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/l	109	107	68-121	2	30
4-Methyl-2-pentanone	10	U	10.	3	ug/l	92	90	65-122	2	30
Methylene Chloride	5	U	5.	2	ug/l	108	107	84-118	0	30
n-Propylbenzene	5	U	5.	1	ug/l	107	107	77-130	0	30
Styrene	5	U	5.	1	ug/l	106	105	77-120	2	30
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/l	111	110	79-120	1	30
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/l	103	103	70-129	0	30
Tetrachloroethene	5	U	5.	0.8	ug/l	109	108	79-120	1	30
Toluene	5	U	5.	0.7	ug/l	105	105	79-120	0	30
1,2,3-Trichlorobenzene	5	U	5.	1	ug/l	113	117	67-120	3	30
1,2,4-Trichlorobenzene	5	U	5.	1	ug/l	112	115	65-120	3	30
1,1,1-Trichloroethane	5	U	5.	0.8	ug/l	110	107	66-126	2	30
1,1,2-Trichloroethane	5	U	5.	0.8	ug/l	110	107	80-120	2	30
Trichloroethene	5	U	5.	1	ug/l	113	111	80-120	2	30
Trichlorofluoromethane	5	U	5.	2	ug/l	111	108	65-130	3	30
1,2,3-Trichloropropane	5	U	5.	1	ug/l	107	105	76-120	2	30
1,2,4-Trimethylbenzene	5	U	5.	1	ug/l	110	109	69-122	0	30
1,3,5-Trimethylbenzene	5	U	5.	1	ug/l	108	108	68-124	0	30
Vinyl Acetate	10	U	10.	2	ug/l	75	75	57-147	0	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Vinyl Chloride	5	U	5.	1	ug/l	92	90	63-120	3	30
m+p-Xylene	5	U	5.	0.8	ug/l	106	105	77-120	1	30
o-Xylene	5	U	5.	0.8	ug/l	104	104	77-120	0	30
Batch number: 13225SLA026	Sample number(s): 7152825-7152830,7152832-7152833									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	105		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	116		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	107		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	111		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	115		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	101		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	111		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	108		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	105		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	104		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	105		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	109		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	107		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	108		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	88		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	110		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	100		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		79-112		
Batch number: 13225SLB026	Sample number(s): 7152828-7152830,7152832									
Acenaphthene	17	U	17.	3	ug/kg	100		83-111		
Acenaphthylene	17	U	17.	3	ug/kg	109		83-127		
Aniline	330 U		330.	170	ug/kg	85		43-110		
Anthracene	17	U	17.	3	ug/kg	102		82-118		
Benzidine	1,700 U		1,700.	700	ug/kg	37		25-74		
Benzo(a)anthracene	17	U	17.	3	ug/kg	93		81-117		
Benzo(a)pyrene	17	U	17.	3	ug/kg	105		84-122		
Benzo(b)fluoranthene	17	U	17.	3	ug/kg	108		76-124		
Benzo(g,h,i)perylene	17	U	17.	3	ug/kg	105		77-122		
Benzo(k)fluoranthene	17	U	17.	3	ug/kg	104		80-125		
Benzoic acid	500 U		500.	170	ug/kg	72		41-122		
Benzyl alcohol	330 U		330.	170	ug/kg	99		78-115		
1,1'-Biphenyl	33	U	33.	17	ug/kg	92		76-117		
4-Bromophenyl-phenylether	33	U	33.	17	ug/kg	103		84-120		
2-butoxy-Ethanol	170 U		170.	170	ug/kg					
Butylbenzylphthalate	170 U		170.	67	ug/kg	103		80-118		
Di-n-butylphthalate	170		170.	67	ug/kg	102		84-120		

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Quality Control Summary

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Reported: 08/21/13 at 02:07 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Carbazole	33 U	U	33.	17	ug/kg	97		84-119		
4-Chloro-3-methylphenol	33 U	U	33.	17	ug/kg	105		80-124		
4-Chloroaniline	33 U	U	33.	17	ug/kg	53		10-100		
bis(2-Chloroethoxy)methane	33 U	U	33.	17	ug/kg	98		71-121		
bis(2-Chloroethyl)ether	33 U	U	33.	17	ug/kg	98		77-115		
bis(2-Chloroisopropyl)ether	33 U	U	33.	17	ug/kg	95		68-118		
2-Chloronaphthalene	33 U	U	33.	7	ug/kg	86		56-144		
2-Chlorophenol	33 U	U	33.	17	ug/kg	109		80-122		
4-Chlorophenyl-phenylether	33 U	U	33.	17	ug/kg	101		83-115		
Chrysene	17 U	U	17.	3	ug/kg	94		77-116		
Dibenz(a,h)anthracene	17 U	U	17.	3	ug/kg	102		81-123		
Dibenzofuran	33 U	U	33.	17	ug/kg	102		85-115		
1,2-Dichlorobenzene	33 U	U	33.	17	ug/kg	99		79-112		
1,3-Dichlorobenzene	33 U	U	33.	17	ug/kg	95		79-113		
1,4-Dichlorobenzene	33 U	U	33.	17	ug/kg	98		79-112		
3,3'-Dichlorobenzidine	330 U		330.	100	ug/kg	88		10-119		
2,4-Dichlorophenol	33 U	U	33.	17	ug/kg	112		81-123		
2,6-Dichlorophenol	33 U	U	33.	17	ug/kg	111		77-113		
Diethylphthalate	170 U		170.	67	ug/kg	102		82-113		
2,4-Dimethylphenol	33 U	U	33.	17	ug/kg	110		83-120		
3,5-Dimethylphenol	170 U		170.	33	ug/kg	106	106	70-130	0	30
Dimethylphthalate	170 U		170.	67	ug/kg	102		82-113		
4,6-Dinitro-2-methylphenol	500 U		500.	170	ug/kg	98		56-132		
2,4-Dinitrophenol	660 U		660.	300	ug/kg	79		24-136		
1,2-Diphenylhydrazine	33 U	U	33.	17	ug/kg	107		77-111		
bis(2-Ethylhexyl)phthalate	170 U		170.	67	ug/kg	102		75-124		
Fluoranthene	17 U	U	17.	3	ug/kg	92		79-123		
Fluorene	17 U	U	17.	3	ug/kg	102		86-118		
Hexachlorobenzene	17 U	U	17.	3	ug/kg	102		80-121		
Hexachlorobutadiene	33 U	U	33.	17	ug/kg	102		76-115		
Hexachlorocyclopentadiene	500 U		500.	170	ug/kg	120		70-138		
Hexachloroethane	170 U		170.	33	ug/kg	98		76-109		
Indeno(1,2,3-cd)pyrene	17 U	U	17.	3	ug/kg	104		77-122		
Isophorone	33 U	U	33.	17	ug/kg	102		77-119		
1-Methylnaphthalene	17 U	U	17.	3	ug/kg	101		77-115		
2-Methylnaphthalene	17 U	U	17.	3	ug/kg	96		80-114		
2-Methylphenol	33 U	U	33.	17	ug/kg	107		82-125		
4-Methylphenol	33 U	U	33.	17	ug/kg	103		73-124		
Naphthalene	17 U	U	17.	3	ug/kg	99		83-112		
NDPA as diphenylamine	170 U		170.	33	ug/kg	104		70-130		
2-Nitroaniline	33 U	U	33.	17	ug/kg	99		84-126		
3-Nitroaniline	170 U		170.	67	ug/kg	94		69-122		
4-Nitroaniline	170 U		170.	67	ug/kg	89		51-107		

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Quality Control Summary

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Reported: 08/21/13 at 02:07 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Nitrobenzene	33 U		33.	17	ug/kg	102		73-118		
2-Nitrophenol	33 U		33.	17	ug/kg	103		83-125		
4-Nitrophenol	500 U		500.	170	ug/kg	81		55-133		
N-Nitroso-di-n-propylamine	33 U		33.	17	ug/kg	100		70-113		
N-Nitrosodimethylamine	170 U		170.	67	ug/kg	96		67-116		
N-Nitrosodiphenylamine	33 U		33.	17	ug/kg	105		83-118		
Di-n-octylphthalate	170 U		170.	67	ug/kg	114		75-136		
Pentachlorophenol	170 U		170.	33	ug/kg	86		56-132		
Phenanthrene	17 U		17.	3	ug/kg	100		85-116		
Phenol	33 U		33.	17	ug/kg	106		76-124		
2-phenoxy-Ethanol	170 U		170.	170	ug/kg					
Pyrene	17 U		17.	3	ug/kg	103		81-114		
Pyridine	170 U		170.	67	ug/kg	86		45-113		
1,2,3,4-Tetrahydronaphthalene	170 U		170.	33	ug/kg					
1,2,4-Trichlorobenzene	33 U		33.	17	ug/kg	102		84-119		
2,4,5-Trichlorophenol	33 U		33.	17	ug/kg	101		86-123		
2,4,6-Trichlorophenol	33 U		33.	17	ug/kg	101		81-123		
Batch number: 13224A16A	Sample number(s): 7152827									
11a TPH by EPA 8015B GRO	1.0 U		1.0	0.2	mg/kg	95		67-119		
Batch number: 13224A20A	Sample number(s): 7152824									
TPH-GRO S.CA water C5-C12	50 U		50.	20	ug/l	102	102	75-135	0	30
Batch number: 132250009A	Sample number(s): 7152825,7152828-7152830,7152832									
2,4-D	36 U		36.	12	ug/kg	103		59-122		
Dalapon	90 U		90.	44	ug/kg	45		25-100		
2,4-DB	17 U		17.	6.2	ug/kg	108		54-131		
Dicamba	12 U		12.	4.0	ug/kg	83		60-123		
Dinoseb	24 U		24.	9.0	ug/kg	12		10-36		
2,4-DP (Dichlorprop)	17 U		17.	9.0	ug/kg	132		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	85		60-127		
MCPP (Mecoprop)	2,500 U		2,500.	750	ug/kg	93		54-134		
2,4,5-T	1.7 U		1.7	0.82	ug/kg	105		58-135		
2,4,5-TP	1.7 U		1.7	0.75	ug/kg	111		63-130		
Batch number: 132250001A	Sample number(s): 7152825-7152830,7152832-7152833									
Aroclor 5432	33 U		33.	10	ug/kg					
Aroclor 5442	33 U		33.	10	ug/kg	76	73	36-106	4	30
Aroclor 5460	33 U		33.	10	ug/kg					
PCB-1016	17 U		17.	3.3	ug/kg	97		80-120		
PCB-1221	17 U		17.	5.1	ug/kg					
PCB-1232	17 U		17.	4.1	ug/kg					
PCB-1242	17 U		17.	4.1	ug/kg					
PCB-1248	17 U		17.	3.3	ug/kg					
PCB-1254	17 U		17.	4.4	ug/kg					
PCB-1260	17 U		17.	3.9	ug/kg	102		72-120		

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PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132250011A	Sample number(s): 7152825,7152828-7152830,7152832									
Aldrin	0.83	U	0.83	0.17	ug/kg	107		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	110		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	116		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	111		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	119		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	121		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	118		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	117		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	115		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	109		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	118		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	126		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	108		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	112		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	121		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	107		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	114		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	117		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132220004A	Sample number(s): 7152825-7152830,7152832-7152833									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	101		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	107		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	110		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	70		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	88		49-107		
Batch number: 132200637001	Sample number(s): 7152825-7152833									
Aluminum	40.0	U	40.0	7.21	mg/kg	103		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	100		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	93		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	100		80-120		
Calcium	3.70	J	20.0	3.34	mg/kg	104		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	107		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	103		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	0.85	J	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	104		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	103		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100		100.	16.7	mg/kg	101		80-120		

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	U									
Tin	1.92	J	10.0	0.220	mg/kg	99		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	0.422	J	4.00	0.200	mg/kg	101		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	103		80-120		
Batch number: 132200637001A	Sample number(s): 7152825-7152833									
Silver	0.200	U	0.200	0.0260	mg/kg	110		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	103		80-120		
Batch number: 132200637001B	Sample number(s): 7152825-7152833									
Selenium	0.400	U	0.400	0.100	mg/kg	106		80-120		
Batch number: 132200638001	Sample number(s): 7152825-7152833									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	114		85-120		
Batch number: 13219039401A	Sample number(s): 7152825-7152828,7152831-7152833									
15a pH by 9045D						99		95-105		
Batch number: 13221162402A	Sample number(s): 7152825-7152833									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13224001	Sample number(s): 7152825-7152830									
2378-TCDD	1.00	U	1.00	0.0847	ng/kg	112		67-158		
12378-PeCDD	0.0780	J	5.00	0.0697	ng/kg	107		70-142		
123478-HxCDD	5.00	U	5.00	0.0276	ng/kg	103		70-164		
123678-HxCDD	0.0377	J	5.00	0.0296	ng/kg	99		76-134		
123789-HxCDD	5.00	U	5.00	0.0314	ng/kg	98		64-162		
1234678-HpCDD	0.0637	J	5.00	0.0424	ng/kg	96		70-140		
OCDD	0.252	J	10.0	0.0359	ng/kg	98		78-144		
2378-TCDF	1.00	U	1.00	0.0768	ng/kg	105		75-158		
12378-PeCDF	5.00	U	5.00	0.0383	ng/kg	98		80-134		
23478-PeCDF	0.0474	J	5.00	0.0383	ng/kg	101		68-160		
123478-HxCDF	5.00	U	5.00	0.0235	ng/kg	97		72-134		
123678-HxCDF	5.00	U	5.00	0.0222	ng/kg	100		84-130		
123789-HxCDF	5.00	U	5.00	0.0320	ng/kg	95		78-130		
234678-HxCDF	5.00	U	5.00	0.0215	ng/kg	97		70-156		
1234678-HpCDF	0.0267	J	5.00	0.0139	ng/kg	96		82-122		
1234789-HpCDF	0.0434	J	5.00	0.0326	ng/kg	94		78-138		
OCDF	0.202	J	10.0	0.0706	ng/kg	94		63-170		
Batch number: 13227001	Sample number(s): 7152832-7152833									
2378-TCDD	1.00	U	1.00	0.0760	ng/kg	99		67-158		
12378-PeCDD	0.0796	J	5.00	0.0681	ng/kg	103		70-142		
123478-HxCDD	5.00	U	5.00	0.0263	ng/kg	99		70-164		
123678-HxCDD	0.0344	J	5.00	0.0291	ng/kg	92		76-134		
123789-HxCDD	5.00	U	5.00	0.0306	ng/kg	94		64-162		
1234678-HpCDD	0.0682	J	5.00	0.0395	ng/kg	91		70-140		

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
OCDD	0.286	J	10.0	0.0305	ng/kg	91		78-144		
2378-TCDF	1.00	U	1.00	0.0678	ng/kg	98		75-158		
2378-TCDF-Conf	1.00	U	1.00	0.0418	ng/kg	98		75-158		
12378-PeCDF	0.0421	J	5.00	0.0314	ng/kg	95		80-134		
23478-PeCDF	0.0576	J	5.00	0.0324	ng/kg	93		68-160		
123478-HxCDF	0.0398	J	5.00	0.0242	ng/kg	94		72-134		
123678-HxCDF	0.0310	J	5.00	0.0233	ng/kg	93		84-130		
123789-HxCDF	0.0558	J	5.00	0.0306	ng/kg	93		78-130		
234678-HxCDF	0.0316	J	5.00	0.0229	ng/kg	93		70-156		
1234678-HpCDF	0.0368	J	5.00	0.0134	ng/kg	93		82-122		
1234789-HpCDF	5.00	U	5.00	0.0225	ng/kg	91		78-138		
OCDF	0.112	J	10.0	0.0583	ng/kg	90		63-170		
Batch number: 13224001	Sample number(s): 7152825-7152830									
TEQ WHO 2005 - EDLx0.0	U				ng/kg					
Batch number: 13227001	Sample number(s): 7152832-7152833									
TEQ WHO 2005 - EDLx0.0	0.0110				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13225SLA026	Sample number(s): 7152825-7152830,7152832-7152833 UNSPK: 7152828								
Acenaphthene	96	97	48-127	2	30				
Acenaphthylene	101	103	49-121	2	30				
Anthracene	100	102	52-126	3	30				
Benzo(a)anthracene	96	98	44-143	3	30				
Benzo(a)pyrene	90	92	44-140	2	30				
Benzo(b)fluoranthene	124	124	26-142	2	30				
Benzo(e)pyrene	94	96	70-130	3	30				
Benzo(g,h,i)perylene	43	42	33-141	1	30				
Benzo(k)fluoranthene	97	98	54-142	3	30				
Butylbenzylphthalate	149	145	49-151	2	30				
Di-n-butylphthalate	125	130	52-147	4	30				
Chrysene	93	95	29-148	3	30				
Dibenz(a,h)anthracene	56	55	20-137	1	30				
Diethylphthalate	107	109	43-145	3	30				
Dimethylphthalate	102	104	58-129	2	30				
Bis(2-Ethylhexyl)phthalate	133	129	39-167	2	30				
Fluoranthene	99	103	40-148	4	30				
Fluorene	98	100	51-137	3	30				
Indeno(1,2,3-cd)pyrene	54	53	17-136	0	30				
1-Methylnaphthalene	103	107	50-131	5	30				
2-Methylnaphthalene	102	105	35-152	4	30				
Naphthalene	96	99	31-148	3	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
N-Nitrosodimethylamine	94	95	48-113	2	30				
Di-n-octylphthalate	184*	183*	52-162	0	30				
Phenanthrene	94	97	29-142	4	30				
Pyrene	106	109	26-143	3	30				
Batch number: 13225SLB026	Sample number(s): 7152828-7152830,7152832 UNSPK: 7152828								
Acenaphthene	93	92	61-128	2	30				
Acenaphthylene	100	100	67-130	1	30				
Aniline	46	36	10-131	25	30				
Anthracene	92	90	41-142	3	30				
Benzidine	0*	0*	35-141	0	30				
Benzo(a)anthracene	78	75	32-150	6	30				
Benzo(a)pyrene	83	83	36-151	1	30				
Benzo(b)fluoranthene	108	103	29-150	6	30				
Benzo(g,h,i)perylene	86	82	41-147	6	30				
Benzo(k)fluoranthene	101	99	44-145	3	30				
Benzoic acid	45	38	23-170	17	30				
Benzyl alcohol	90	88	32-145	3	30				
1,1'-Biphenyl	87	85	64-120	3	30				
4-Bromophenyl-phenylether	98	99	66-122	0	30				
Butylbenzylphthalate	93	92	67-126	2	30				
Di-n-butylphthalate	88	86	70-124	3	30				
Carbazole	85	85	63-126	2	30				
4-Chloro-3-methylphenol	91	89	61-131	4	30				
4-Chloroaniline	44	37	11-114	18	30				
bis(2-Chloroethoxy)methane	88	86	58-122	4	30				
bis(2-Chloroethyl)ether	89	89	66-122	1	30				
bis(2-Chloroisopropyl)ether	90	89	50-115	2	30				
2-Chloronaphthalene	80	76	50-140	6	30				
2-Chlorophenol	96	95	71-130	2	30				
4-Chlorophenyl-phenylether	90	90	65-117	1	30				
Chrysene	77	74	28-146	6	30				
Dibenz(a,h)anthracene	100	95	54-142	6	30				
Dibenzofuran	91	90	65-124	2	30				
1,2-Dichlorobenzene	94	90	72-114	5	30				
1,3-Dichlorobenzene	88	87	67-118	1	30				
1,4-Dichlorobenzene	90	89	68-119	3	30				
3,3'-Dichlorobenzidine	57	48	10-143	18	30				
2,4-Dichlorophenol	101	97	54-135	5	30				
2,6-Dichlorophenol	96	93	56-133	4	30				
Diethylphthalate	93	91	66-120	3	30				
2,4-Dimethylphenol	89	84	62-132	7	30				
Dimethylphthalate	93	92	69-119	2	30				
4,6-Dinitro-2-methylphenol	79	75	10-148	7	30				
2,4-Dinitrophenol	58	50	20-143	16	30				
1,2-Diphenylhydrazine	101	103	51-145	1	30				
bis(2-Ethylhexyl)phthalate	87	87	60-134	1	30				
Fluoranthene	78	75	30-151	5	30				
Fluorene	92	90	55-128	3	30				
Hexachlorobenzene	94	93	46-132	3	30				
Hexachlorobutadiene	98	97	65-125	2	30				
Hexachlorocyclopentadiene	104	95	10-153	10	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Hexachloroethane	94	91	24-138	5	30				
Indeno(1,2,3-cd)pyrene	99	91	44-147	9	30				
Isophorone	91	89	68-119	4	30				
1-Methylnaphthalene	92	90	82-115	3	30				
2-Methylnaphthalene	86	85	39-140	2	30				
2-Methylphenol	97	92	62-133	7	30				
4-Methylphenol	92	84	59-132	10	30				
Naphthalene	91	92	44-142	0	30				
NDPA as diphenylamine	96	96	70-130	1	30				
2-Nitroaniline	90	91	64-131	0	30				
3-Nitroaniline	82	77	31-145	8	30				
4-Nitroaniline	74	70	30-131	5	30				
Nitrobenzene	94	91	63-125	4	30				
2-Nitrophenol	94	89	45-146	6	30				
4-Nitrophenol	87	85	25-142	4	30				
N-Nitroso-di-n-propylamine	90	89	58-126	3	30				
N-Nitrosodimethylamine	80	73	52-117	10	30				
N-Nitrosodiphenylamine	96	96	59-135	1	30				
Di-n-octylphthalate	117	115	48-155	2	30				
Pentachlorophenol	83	86	23-145	3	30				
Phenanthrene	89	89	34-147	0	30				
Phenol	92	87	61-130	7	30				
Pyrene	93	92	29-148	2	30				
Pyridine	38	31	16-108	21	30				
1,2,4-Trichlorobenzene	93	95	66-116	1	30				
2,4,5-Trichlorophenol	95	94	64-131	3	30				
2,4,6-Trichlorophenol	96	94	60-136	3	30				
Batch number: 13224A16A	Sample number(s): 7152827 UNSPK: P156754								
11a TPH by EPA 8015B GRO	64	77	39-118	30	30				
Batch number: 132250009A	Sample number(s): 7152825,7152828-7152830,7152832 UNSPK: 7152828								
2,4-D	79	79	42-143	0	35				
Dalapon	29	0*	19-109	200*	50				
2,4-DB	121	116	10-179	4	50				
Dicamba	98	92	45-147	6	50				
Dinoseb	26	26	10-52	1	35				
2,4-DP (Dichlorprop)	133	130	32-171	2	50				
MCPA	94	89	23-169	5	50				
MCPP (Mecoprop)	82	82	24-164	1	50				
2,4,5-T	91	87	12-172	4	35				
2,4,5-TP	112	106	10-142	6	35				
Batch number: 132250001A	Sample number(s): 7152825-7152830,7152832-7152833 UNSPK: 7152828								
PCB-1016	89	87	16-146	3	50				
PCB-1260	91	89	40-134	2	50				
Batch number: 132250011A	Sample number(s): 7152825,7152828-7152830,7152832 UNSPK: 7152828								
Aldrin	109	97	16-126	11	50				
Alpha BHC	102	95	14-140	7	50				
Beta BHC	107	100	10-173	6	50				
Gamma BHC - Lindane	112	96	30-137	15	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
p,p-DDD	114	105	43-149	8	50				
p,p-DDE	136	119	18-161	13	50				
p,p-DDT	188	147	12-193	25	50				
Delta BHC	112	115	13-153	2	50				
Dieldrin	116	105	19-154	10	50				
Endosulfan I	106	96	16-137	10	50				
Endosulfan II	135	117	10-156	14	50				
Endosulfan Sulfate	117	107	10-181	9	50				
Endrin	112	101	30-152	11	50				
Endrin Aldehyde	106	95	10-152	11	35				
Endrin Ketone	107	100	10-160	7	50				
Heptachlor	118	97	16-152	20	50				
Heptachlor Epoxide	138	113	17-167	20	50				
Methoxychlor	111	104	34-168	7	50				
Batch number: 132220004A	Sample number(s): 7152825-7152830,7152832-7152833 UNSPK: 7152828								
EFH (C12-C14)	113	0*	49-123	200*	20				
EFH (C15-C20)	178*	246*	49-123	32*	20				
EFH (C21-C30)	478*	436*	49-123	5	20				
EFH (C30-C40)	267 (2)	703 (2)	49-123	38*	20				
EFH (C8-C11)	104	0*	49-123	200*	20				
Batch number: 132200637001	Sample number(s): 7152825-7152833 UNSPK: 7152828 BKG: 7152828								
Aluminum	3208 (2)	2690 (2)	75-125	4	20	17,700	18,400	4	20
Antimony	34*	38*	75-125	14	20	3.92 U	4.00 U	0 (1)	20
Arsenic	107	106	75-125	1	20	1.69 J	2.35 J	33* (1)	20
Barium	104	102	75-125	0	20	90.4	89.5	1	20
Beryllium	106	105	75-125	0	20	0.609 J	0.614 J	1 (1)	20
Boron	95	94	75-125	0	20	11.9	11.7	2 (1)	20
Cadmium	98	105	75-125	8	20	0.573 J	0.497 J	14 (1)	20
Calcium	210 (2)	171 (2)	75-125	4	20	3,310	3,300	0	20
Chromium	121	118	75-125	1	20	19.6	19.8	1	20
Cobalt	98	98	75-125	1	20	5.35	5.36	0	20
Copper	115	117	75-125	2	20	14.6	14.6	1	20
Iron	1992 (2)	1863 (2)	75-125	1	20	20,000	20,000	0	20
Lead	107	133*	75-125	13	20	15.1	14.8	2 (1)	20
Lithium	103	102	75-125	0	20	19.3	19.7	2 (1)	20
Magnesium	361 (2)	296 (2)	75-125	3	20	3,960	4,020	1	20
Manganese	125 (2)	133 (2)	75-125	1	20	282	267	5	20
Molybdenum	97	98	75-125	2	20	0.837 J	0.469 J	56* (1)	20
Nickel	101	101	75-125	1	20	11.6	11.6	0	20
Phosphorus	110 (2)	149 (2)	75-125	7	20	408	401	2	20
Potassium	157*	149*	75-125	2	20	3,220	3,290	2	20
Sodium	104	103	75-125	0	20	63.3 J	58.9 J	7 (1)	20
Tin	90	90	75-125	1	20	2.70 J	2.88 J	7 (1)	20
Titanium	391 (2)	369 (2)	75-125	1	20	961	1,020	6	20
Vanadium	120	119	75-125	0	20	36.3	36.9	1	20
Zinc	105	198*	75-125	26*	20	104	96.1	7	20
Zirconium	96	95	75-125	0	20	2.48 J	3.24 J	27* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132200637001A	Sample number(s): 7152825-7152833 UNSPK: 7152828 BKG: 7152828								
Silver	120	152*	75-125	25*	20	0.0424 J	0.0480 J	13 (1)	20
Strontium	145*	307*	75-125	32*	20	22.9	29.6	25*	20
Thallium	122	182*	75-125	29*	20	0.257	0.350	31* (1)	20
Batch number: 132200637001B	Sample number(s): 7152825-7152833 UNSPK: 7152828 BKG: 7152828								
Selenium	112	136*	75-125	19	20	0.141 J	0.160 J	13 (1)	20
Batch number: 132200638001	Sample number(s): 7152825-7152833 UNSPK: 7152828 BKG: 7152828								
3a Mercury 7471A	119	123	65-135	6	20	0.0221	0.0217	2 (1)	20
Batch number: 13219039401A	Sample number(s): 7152825-7152828,7152831-7152833 BKG: 7152828								
15a pH by 9045D						6.52	6.52	0	3
Batch number: 13221162402A	Sample number(s): 7152825-7152833 BKG: 7152828								
14a Moisture Content by 160.3						1.9	1.7	8	20
14a Moisture Content by 160.3						1.9	1.7	8	20
14a Moisture Content by 160.3						1.9	1.7	8	20
Batch number: 13224001	Sample number(s): 7152825-7152830 UNSPK: 7152828								
2378-TCDD	102	102	40-135	1	20				
12378-PeCDD	105	105	40-135	1	20				
123478-HxCDD	95	94	40-135	2	20				
123678-HxCDD	96	94	40-135	2	20				
123789-HxCDD	92	94	40-135	0	20				
1234678-HpCDD	91	101	40-135	8	20				
OCDD	90	143*	40-135	29*	20				
2378-TCDF	97	97	40-135	1	20				
12378-PeCDF	93	96	40-135	2	20				
23478-PeCDF	94	95	40-135	1	20				
123478-HxCDF	92	89	40-135	5	20				
123678-HxCDF	92	89	40-135	5	20				
123789-HxCDF	88	87	40-135	2	20				
234678-HxCDF	90	88	40-135	3	20				
1234678-HpCDF	87	89	40-135	1	20				
1234789-HpCDF	87	87	40-135	1	20				
OCDF	88	87	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 12a Volatile Organics EPA8260B
Batch number: B132252AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7152827	102	106	101	98
Blank	100	102	101	99

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Surrogate Quality Control

LCS	100	104	102	99
LCSD	100	99	101	100
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 12b Volatile Organics EPA8260B
Batch number: Y132202AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7152824	106	103	99	95
Blank	106	102	98	94
LCS	105	105	100	103
LCSD	104	105	100	103
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13225SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7152825	82	78	97
7152826	87	91	100
7152827	87	91	104
7152828	77	75	90
7152829	88	88	101
7152830	87	89	105
7152832	93	91	111
7152833	85	88	100
Blank	74	81	88
LCS	90	98	105
MS	88	88	101
MSD	87	89	105
Limits:	54-129	59-125	61-125

Analysis Name: 8a SVOCs by EPA 8270D
Batch number: 13225SLB026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7152828	89	93	88	90	101	104
7152829	93	96	88	89	96	102
7152830	87	91	81	87	95	98
7152832	74	78	72	77	87	87
Blank	99	107	115	99	109	116
LCS	101	105	97	95	99	110
LCSD	89	97	104			
MS	93	96	88	89	96	102
MSD	87	91	81	87	95	98
Limits:	25-120	25-130	35-130	40-130	45-130	45-130

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13224A16A

	Trifluorotoluene-F

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Surrogate Quality Control

7152827	72
Blank	78
LCS	83
MS	67
MSD	76
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13224A20A

	Trifluorotoluene-F
7152824	86
Blank	86
LCS	122
LCSD	116
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132250001A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7152825	109	102
7152826	109	99
7152827	111	108
7152828	105	102
7152829	101	96
7152830	95	92
7152832	95	86
7152833	104	99
Blank	109	109
LCS	105	106
LCSD	113	115
MS	101	96
MSD	95	92
Limits:	45-120	45-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132250009A

	2,4-Dichlorophenylacetic acid
7152825	62
7152828	59
7152829	66
7152830	64
7152832	60
Blank	61
LCS	71
MS	66
MSD	64
Limits:	50-150

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Surrogate Quality Control

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132250011A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7152825	103	124*
7152828	97	111
7152829	103	114
7152830	95	107
7152832	93	102
Blank	109	130*
LCS	110	133*
MS	103	114
MSD	95	107
Limits:	50-130	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132220004A

	Chlorobenzene	Orthoterphenyl
7152825	95	103
7152826	92	100
7152827	99	105
7152828	94	103
7152829	103	108
7152830	100	106
7152832	95	103
7152833	95	101
Blank	99	105
LCS	100	108
MS	103	108
MSD	100	106
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13224001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7152825	60	78	60	67	65	62
7152826	62	72	60	66	63	65
7152827	54	73	58	63	61	61
7152828	60	75	61	67	62	67
7152829	62	74	62	70	64	58
7152830	62	76	59	63	62	67
Blank	51	64	55	65	62	58
MS	62	74	62	70	64	58
MSD	62	76	59	63	62	67
OPR	43	59	52	59	55	49
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7152825	82	69	66	85	74	78
7152826	75	63	60	75	70	71

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

Surrogate Quality Control

7152827	78	67	59	76	67	72
7152828	83	61	57	78	72	76
7152829	81	58	56	77	75	77
7152830	77	64	59	81	73	77
Blank	86	51	48	67	68	74
MS	81	58	56	77	75	77
MSD	77	64	59	81	73	77
OPR	78	51	48	64	61	66
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7152825	78	88	87	60	79	
7152826	73	76	78	61	80	
7152827	71	78	78	53	72	
7152828	72	77	77	61	80	
7152829	77	79	80	62	80	
7152830	74	80	79	65	84	
Blank	71	75	74	48	69	
MS	77	79	80	62	80	
MSD	74	80	79	65	84	
OPR	65	69	68	41	64	
Limits:	28-130	23-140	17-157	24-169	24-185	

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13227001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7152832	76	76	60	63	60	69
7152833	63	79	60	65	64	66
Blank	66	76	61	69	68	69
OPR	60	76	54	57	59	66
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7152832	61	59	55	70	65	67
7152833	80	70	61	78	69	71
Blank	81	64	60	81	73	81
OPR	68	59	54	77	66	69
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	13C12-2378-TCDF-Conf
7152832	67	64	70		71	75
7152833	72	78	79	66	82	
Blank	78	83	79	63	82	66
OPR	69	73	68	56	73	56
Limits:	28-130	23-140	17-157	24-169	24-185	24-169

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409714
Reported: 08/21/13 at 02:07 PM

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Cp#1409714 Sample#7152824-33

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/6/2013
CarrierName: FedEx
AirbillNo: 796405811865

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130806-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-080613	8/6/13 08:00	WQ	HCl	6 - 40 mL Vial	10 day																	X		X												
SL-564-SA8-SB-0.0-0.5	8/6/13 10:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X					X		X				X										
SL-564-SA8-SB-0.0-0.5	8/6/13 10:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-582-SA8-SB-0.0-0.5	8/6/13 07:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-582-SA8-SB-0.0-0.5	8/6/13 07:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-582-SA8-SB-2.5-3.5	8/6/13 08:50	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X											X										
SL-582-SA8-SB-2.5-3.5	8/6/13 08:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-582-SA8-SB-2.5-3.5	8/6/13 08:50	SO	None	5 - Encore	10 day																		X		X											
SL-583-SA8-SB-0.0-0.5MS	8/6/13 12:20	SO	None	6 - SS-Sleeve	10 day	X	X			X	X	X		X	X					X		X				X										TIC for Tetralin only. MS/MSD
SL-583-SA8-SB-0.0-0.5MS	8/6/13 12:20	SO	None	1 - 16 oz glass	10 day													X																		MS/MSD
SL-883-SA8-SB-0.0-0.5	8/6/13 12:25	SO	None	2 - SS-Sleeve	10 day	X	X			X	X	X		X	X					X		X				X										TIC for Tetralin only
SL-883-SA8-SB-0.0-0.5	8/6/13 12:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-584-SA8-SB-0.0-0.5	8/6/13 14:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-584-SA8-SB-0.0-0.5	8/6/13 14:15	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: Steven Mercer

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Scott Mysel	8/06/2013	1600							Brandy Barclay	8.7.13	915

COC Rev 2

COC: 20130806-01, Page 1 of 1

1 of 1

eurofins | Lancaster Laboratories

C#1409714

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 8.7.13

Time of Receipt: 915

Source Code: 50.1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	1.1	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Barclay 2299 **Date/Time:** 8.7.13 933

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH086

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 21, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/08/2013
Group Number: 1409993
SDG: PH086
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB-080713 Water	7154020
TB-080713 Water	7154021
SL-575-SA8-SB-0.0-0.5 Soil	7154022
SL-575-SA8-SB-4.0-5.0 Soil	7154023
SL-575-SA8-SB-9.0-10.0 Soil	7154024
SL-566-SA8-SB-0.0-0.5 Soil	7154025
SL-566-SA8-SB-4.0-5.0 Soil	7154026

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: EB-080713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7154020
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 15:00 by PH

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB807 SDG#: PH086-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	8	J	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-080713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7154020
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 15:00 by PH

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB807 SDG#: PH086-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**		**ug/l**	**ug/l**	
10461	Aniline	62-53-3	1	U	1	0.5	1
10461	Benzidine	92-87-5	62	U	62	21	1
10461	Benzoic acid	65-85-0	16	U	16	6	1
10461	Benzyl alcohol	100-51-6	16	U	16	5	1
10461	1,1'-Biphenyl	92-52-4	1	U	1	0.5	1
10461	4-Bromophenyl-phenylether	101-55-3	1	U	1	0.5	1
10461	2-butoxy-Ethanol	111-76-2	5	U	5	5	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10461	Carbazole	86-74-8	1	U	1	0.5	1
10461	4-Chloro-3-methylphenol	59-50-7	1	U	1	0.5	1
10461	4-Chloroaniline	106-47-8	1	U	1	0.5	1
10461	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	0.5	1
10461	bis(2-Chloroethyl)ether	111-44-4	1	U	1	0.5	1
10461	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10461	2-Chloronaphthalene	91-58-7	1	U	1	0.4	1
10461	2-Chlorophenol	95-57-8	1	U	1	0.5	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-080713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7154020
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 15:00 by PH

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB807 SDG#: PH086-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/l		ug/l	ug/l	
10461	4-Chlorophenyl-phenylether	7005-72-3	1	U	1	0.5	1
10461	Dibenzofuran	132-64-9	1	U	1	0.5	1
10461	1,2-Dichlorobenzene	95-50-1	1	U	1	0.5	1
10461	1,3-Dichlorobenzene	541-73-1	1	U	1	0.5	1
10461	1,4-Dichlorobenzene	106-46-7	1	U	1	0.5	1
10461	3,3'-Dichlorobenzidine	91-94-1	5	U	5	2	1
10461	2,4-Dichlorophenol	120-83-2	1	U	1	0.5	1
10461	2,6-Dichlorophenol	87-65-0	1	U	1	0.5	1
10461	2,4-Dimethylphenol	105-67-9	1	U	1	0.5	1
10461	3,5-Dimethylphenol	108-68-9	10	U	10	3	1
10461	4,6-Dinitro-2-methylphenol	534-52-1	16	U	16	5	1
10461	2,4-Dinitrophenol	51-28-5	31	U	31	10	1
10461	1,2-Diphenylhydrazine	122-66-7	1	U	1	0.5	1
10461	Hexachlorobenzene	118-74-1	0.5	U	0.5	0.1	1
10461	Hexachlorobutadiene	87-68-3	1	U	1	0.5	1
10461	Hexachlorocyclopentadiene	77-47-4	16	U	16	5	1
10461	Hexachloroethane	67-72-1	5	U	5	1	1
10461	Isophorone	78-59-1	1	U	1	0.5	1
10461	2-Methylphenol	95-48-7	1	U	1	0.5	1
10461	4-Methylphenol	106-44-5	1	U	1	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10461	NDPA as diphenylamine	n.a.	5	U	5	2	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10461	2-Nitroaniline	88-74-4	1	U	1	0.5	1
10461	3-Nitroaniline	99-09-2	1	U	1	0.5	1
10461	4-Nitroaniline	100-01-6	1	U	1	0.5	1
10461	Nitrobenzene	98-95-3	1	U	1	0.5	1
10461	2-Nitrophenol	88-75-5	1	U	1	0.5	1
10461	4-Nitrophenol	100-02-7	31	U	31	10	1
10461	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	0.5	1
10461	N-Nitrosodiphenylamine	86-30-6	1	U	1	0.5	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10461	Pentachlorophenol	87-86-5	5	U	5	1	1
10461	Phenol	108-95-2	1	U	1	0.5	1
10461	2-phenoxy-Ethanol	122-99-6	5	U	5	5	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10461	Pyridine	110-86-1	5	U	5	2	1
10461	1,2,3,4-Tetrahydronaphthalene	119-64-2	5	U	5	5	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10461	1,2,4-Trichlorobenzene	120-82-1	1	U	1	0.5	1
10461	2,4,5-Trichlorophenol	95-95-4	1	U	1	0.5	1
10461	2,4,6-Trichlorophenol	88-06-2	1	U	1	0.5	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-080713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7154020
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 15:00 by PH

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB807 SDG#: PH086-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.052	U	0.052	0.010	1
12971	Acenaphthylene	208-96-8	0.052	U	0.052	0.010	1
12971	Anthracene	120-12-7	0.052	U	0.052	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.052	U	0.052	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.052	U	0.052	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.052	U	0.052	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.052	U	0.052	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.052	U	0.052	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.052	U	0.052	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.052	1
12971	Di-n-butylphthalate	84-74-2	0.18	J	1.0	0.052	1
12971	Chrysene	218-01-9	0.052	U	0.052	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.052	U	0.052	0.010	1
12971	Diethylphthalate	84-66-2	0.44	J	1.0	0.052	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.052	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	1.0	U	1.0	0.052	1
12971	Fluoranthene	206-44-0	0.052	U	0.052	0.010	1
12971	Fluorene	86-73-7	0.052	U	0.052	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.052	U	0.052	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.052	U	0.052	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.012	J	0.052	0.010	1
12971	Naphthalene	91-20-3	0.035	J	0.052	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.052	U	0.052	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.052	1
12971	Phenanthrene	85-01-8	0.052	U	0.052	0.031	1
12971	Pyrene	129-00-0	0.052	U	0.052	0.010	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.49	U	0.49	0.16	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.98	U	0.98	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.078	1
10407	Dinoseb	88-85-7	0.49	U	0.49	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.49	U	0.49	0.16	1
10407	MCPA	94-74-6	200	U	200	49	1
10407	MCPP	93-65-2	200	U	200	49	1
10407	2,4,5-T	93-76-5	0.049	U	0.049	0.015	1
10407	2,4,5-TP	93-72-1	0.049	U	0.049	0.0098	1
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0085	U	0.0085	0.0017	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-080713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7154020
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 15:00 by PH

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB807 SDG#: PH086-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Alpha BHC	319-84-6	0.0085	U	0.0085	0.0026	1
10589	Beta BHC	319-85-7	0.0085	U	0.0085	0.0029	1
10589	Gamma BHC - Lindane	58-89-9	0.0085	U	0.0085	0.0017	1
10589	Chlordane	57-74-9	0.43	U	0.43	0.14	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0043	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0043	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0044	1
10589	Delta BHC	319-86-8	0.0085	U	0.0085	0.0029	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0045	1
10589	Endosulfan I	959-98-8	0.0085	U	0.0085	0.0037	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0049	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0069	1
10589	Endrin Aldehyde	7421-93-4	0.085	U	0.085	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0043	1
10589	Heptachlor	76-44-8	0.0085	U	0.0085	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0085	U	0.0085	0.0020	1
10589	Methoxychlor	72-43-5	0.085	U	0.085	0.026	1
10589	Mirex	2385-85-5	0.21	U	0.21	0.072	1
10589	Toxaphene	8001-35-2	2.6	U	2.6	0.85	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.43	U	0.43	0.085	1
10591	Aroclor 5442	12642-23-8	0.43	U	0.43	0.085	1
10591	Aroclor 5460	11126-42-4	0.43	U	0.43	0.094	1
10591	PCB-1016	12674-11-2	0.43	U	0.43	0.085	1
10591	PCB-1221	11104-28-2	0.43	U	0.43	0.085	1
10591	PCB-1232	11141-16-5	0.43	U	0.43	0.17	1
10591	PCB-1242	53469-21-9	0.43	U	0.43	0.085	1
10591	PCB-1248	12672-29-6	0.43	U	0.43	0.085	1
10591	PCB-1254	11097-69-1	0.43	U	0.43	0.085	1
10591	PCB-1260	11096-82-5	0.43	U	0.43	0.13	1
10591	PCB-1262	37324-23-5	0.43	U	0.43	0.17	1
10591	PCB-1268	11100-14-4	0.43	U	0.43	0.14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C15-C20)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C21-C30)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C30 - C40)	n.a.	0.50	U	0.50	0.10	1
10365	EFH (C8-C11)	n.a.	0.10	U	0.10	0.050	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.143	J	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-080713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7154020
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 15:00 by PH

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB807 SDG#: PH086-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0098 J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0029 J	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.5	0.010	0.010	1

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Sample Description: EB-080713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7154020
LL Group # 1409993
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Collected: 08/07/2013 15:00 by PH

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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

EB807 SDG#: PH086-01EB

CAT No.	Analysis Name		CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans		**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD		1746-01-6	1.93	U	1.93	0.537	1
10915	12378-PeCDD		40321-76-4	9.67	U	9.67	0.686	1
10915	123478-HxCDD		39227-28-6	9.67	U	9.67	0.243	1
10915	123678-HxCDD		57653-85-7	0.476	JBQ	9.67	0.269	1
10915	123789-HxCDD		19408-74-3	9.67	U	9.67	0.276	1
10915	1234678-HpCDD		35822-46-9	0.687	JB	9.67	0.329	1
10915	OCDD		3268-87-9	1.65	JBQ	19.3	0.332	1
10915	2378-TCDF		51207-31-9	1.93	U	1.93	0.377	1
10915	12378-PeCDF		57117-41-6	0.451	JBQ	9.67	0.239	1
10915	23478-PeCDF		57117-31-4	0.403	JBQ	9.67	0.229	1
10915	123478-HxCDF		70648-26-9	0.396	JBQ	9.67	0.153	1
10915	123678-HxCDF		57117-44-9	0.426	JB	9.67	0.167	1
10915	123789-HxCDF		72918-21-9	9.67	U	9.67	0.162	1
10915	234678-HxCDF		60851-34-5	9.67	U	9.67	0.142	1
10915	1234678-HpCDF		67562-39-4	0.427	JBQ	9.67	0.111	1
10915	1234789-HpCDF		55673-89-7	0.258	JBQ	9.67	0.144	1
10915	OCDF		39001-02-0	1.13	JBQ	19.3	0.293	1
Toxic Equivalents		**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0		n.a.	0.0495				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	92	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB-080713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7154020
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 15:00 by PH

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB807 SDG#: PH086-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB-080713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7154020
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 15:00 by PH

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB807 SDG#: PH086-01EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y132281AA	08/16/2013 12:17	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y132281AA	08/16/2013 12:17	Angela D Sneeringer	1
10461	8b SVOCs by EPA 8270D	SW-846 8270D	1	13225WAI026	08/21/2013 02:51	Holly Berry	1
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225WAH026	08/20/2013 01:21	Brian K Graham	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13225WAH026	08/14/2013 09:45	Kerrie A Freeburn	1
11010	8270D BNA Extraction	SW-846 3510C	1	13225WAI026	08/14/2013 09:45	Kerrie A Freeburn	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13224A20A	08/12/2013 12:22	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13224A20A	08/12/2013 12:22	Catherine J Schwarz	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132220010A	08/16/2013 08:42	Melissa McDermott	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132260003A	08/16/2013 05:38	Lisa A Reinert	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	132260004A	08/15/2013 05:13	Monica M Souders	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	132260004A	08/14/2013 15:00	Seth A Farrier	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132260003A	08/14/2013 15:00	Seth A Farrier	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132220010A	08/12/2013 08:50	Katheryne V Sponheimer	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132250021A	08/15/2013 00:45	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132250021A	08/14/2013 12:00	William H Saadeh	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13228001	08/20/2013 13:29	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13228001	08/16/2013 08:15	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07044	Antimony	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07035	Arsenic	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07046	Barium	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07047	Beryllium	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
08014	Boron	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07049	Cadmium	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
01750	Calcium	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07051	Chromium	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07052	Cobalt	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07053	Copper	SW-846 6010C	1	132250635001	08/20/2013 10:01	Eric L Eby	1
01754	Iron	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-080713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7154020
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 15:00 by PH

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB807 SDG#: PH086-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07055	Lead	SW-846 6010C	1	132250635001	08/20/2013 10:01	Eric L Eby	1
01756	Lithium	SW-846 6010C	1	132250635001	08/20/2013 10:01	Eric L Eby	1
01757	Magnesium	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07058	Manganese	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07060	Molybdenum	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07061	Nickel	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
10143	Phosphorus	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
01762	Potassium	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
01767	Sodium	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07069	Tin	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07070	Titanium	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07071	Vanadium	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
07072	Zinc	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
10144	Zirconium	SW-846 6010C	1	132250635001	08/19/2013 00:49	Eric L Eby	1
06041	Selenium	SW-846 6020A	1	132250639001B	08/16/2013 08:48	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	132250639001A	08/16/2013 08:48	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	132250639001A	08/16/2013 08:48	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	132250639001A	08/16/2013 08:48	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	132255713002	08/14/2013 14:30	Parker D Lindstrom	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132250635001	08/14/2013 09:50	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132250639001	08/14/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132255713002	08/13/2013 17:30	Nelli S Markaryan	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13220121522A	08/08/2013 20:45	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-080713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7154021
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 08:00

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB807 SDG#: PH086-02TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13224A20A	08/12/2013 12:44	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13224A20A	08/12/2013 12:44	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154022
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 07:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57500 SDG#: PH086-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.4	10
12969	Acenaphthylene	208-96-8	19	U	19	3.7	10
12969	Anthracene	120-12-7	21		19	3.7	10
12969	Benzo(a)anthracene	56-55-3	980		19	7.4	10
12969	Benzo(a)pyrene	50-32-8	810		19	7.4	10
12969	Benzo(b)fluoranthene	205-99-2	1,300		19	7.4	10
12969	Benzo(e)pyrene	192-97-2	500		190	37	10
12969	Benzo(g,h,i)perylene	191-24-2	130		19	7.4	10
12969	Benzo(k)fluoranthene	207-08-9	580		19	7.4	10
12969	Butylbenzylphthalate	85-68-7	200	U	200	67	10
12969	Di-n-butylphthalate	84-74-2	200	U	200	67	10
12969	Chrysene	218-01-9	1,200		19	3.7	10
12969	Dibenz(a,h)anthracene	53-70-3	67		19	7.4	10
12969	Diethylphthalate	84-66-2	200	U	200	67	10
12969	Dimethylphthalate	131-11-3	200	U	200	67	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	200	U	200	67	10
12969	Fluoranthene	206-44-0	350		19	7.4	10
12969	Fluorene	86-73-7	19	U	19	7.4	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	150		19	7.4	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.4	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.4	10
12969	Naphthalene	91-20-3	19	U	19	7.4	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.4	10
12969	Di-n-octylphthalate	117-84-0	200	U	200	67	10
12969	Phenanthrene	85-01-8	28		19	7.4	10
12969	Pyrene	129-00-0	550		19	7.4	10
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	99	U	99	48	1
10401	2,4-DB	94-82-6	19	U	19	6.8	1
10401	Dicamba	1918-00-9	13	U	13	4.4	1
10401	Dinoseb	88-85-7	26	U	26	9.9	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	9.9	1
10401	MCPA	94-74-6	2,800	U	2,800	840	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	830	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.90	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.83	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.92	U	0.92	0.19	1
10590	Alpha BHC	319-84-6	0.92	U	0.92	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.92	U	0.92	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154022
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 07:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57500 SDG#: PH086-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	0.92	U	0.92	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.92	U	0.92	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.92	U	0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.92	U	0.92	0.19	1
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	28	U	28	11	5
12952	EFH (C15-C20)	n.a.	28	U	28	11	5
12952	EFH (C21-C30)	n.a.	78		28	11	5
12952	EFH (C30-C40)	n.a.	250		56	22	5
12952	EFH (C8-C11)	n.a.	28	U	28	11	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,500		43.3	7.81	1
06944	Antimony	7440-36-0	4.33	U	4.33	0.802	1
06935	Arsenic	7440-38-2	2.89	J	4.33	0.758	1
06946	Barium	7440-39-3	130		1.08	0.0358	1
06947	Beryllium	7440-41-7	0.931	J	1.08	0.0726	1
07914	Boron	7440-42-8	16.6		10.8	0.910	1
06949	Cadmium	7440-43-9	0.337	J	1.08	0.0824	1
01650	Calcium	7440-70-2	6,930		21.7	3.62	1
06951	Chromium	7440-47-3	35.2		3.25	0.173	1
06952	Cobalt	7440-48-4	10.0		1.08	0.107	1
06953	Copper	7440-50-8	21.8		2.17	0.314	1
01654	Iron	7439-89-6	32,500		217	19.6	5
06955	Lead	7439-92-1	14.2		3.25	0.542	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154022
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 07:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57500 SDG#: PH086-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	24.8		4.3	0.37	1
01657	Magnesium	7439-95-4	6,350		10.8	1.81	1
06958	Manganese	7439-96-5	500		1.08	0.0899	1
06960	Molybdenum	7439-98-7	2.17	U	2.17	0.184	1
06961	Nickel	7440-02-0	21.1		2.17	0.141	1
10145	Phosphorus	7723-14-0	280		10.8	3.13	1
01662	Potassium	7440-09-7	4,290		108	9.04	1
01667	Sodium	7440-23-5	75.5	J	108	18.1	1
06969	Tin	7440-31-5	3.54	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,160		1.08	0.184	1
06971	Vanadium	7440-62-2	66.1		1.08	0.141	1
06972	Zinc	7440-66-6	88.4		4.33	0.217	1
10146	Zirconium	7440-67-7	3.13	J	5.42	0.910	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.262	J	0.433	0.108	2
06142	Silver	7440-22-4	0.0579	J	0.217	0.0282	2
06144	Strontium	7440-24-6	48.2		0.433	0.0737	2
06145	Thallium	7440-28-0	0.464		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0110	J	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.91		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154022
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 07:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57500 SDG#: PH086-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0555	1
11031	12378-PeCDD	40321-76-4	0.0992	JBQ	5.39	0.0689	1
11031	123478-HxCDD	39227-28-6	0.0707	JQ	5.39	0.0474	1
11031	123678-HxCDD	57653-85-7	0.420	JB	5.39	0.0489	1
11031	123789-HxCDD	19408-74-3	0.616	J	5.39	0.0501	1
11031	1234678-HpCDD	35822-46-9	3.71	JB	5.39	0.0520	1
11031	OCDD	3268-87-9	61.6	B	10.8	0.0333	1
11031	2378-TCDF	51207-31-9	1.08	U	1.08	0.0650	1
11031	12378-PeCDF	57117-41-6	0.239	JBQ	5.39	0.0350	1
11031	23478-PeCDF	57117-31-4	0.116	JQ	5.39	0.0287	1
11031	123478-HxCDF	70648-26-9	0.0771	JBQ	5.39	0.0294	1
11031	123678-HxCDF	57117-44-9	0.119	JB	5.39	0.0308	1
11031	123789-HxCDF	72918-21-9	0.503	JB	5.39	0.0311	1
11031	234678-HxCDF	60851-34-5	0.0589	JBQ	5.39	0.0271	1
11031	1234678-HpCDF	67562-39-4	0.711	JB	5.39	0.0310	1
11031	1234789-HpCDF	55673-89-7	0.0411	JQ	5.39	0.0333	1
11031	OCDF	39001-02-0	1.73	JB	10.8	0.0388	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.229				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	105	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	96	24 - 185
13C12-23478-PeCDF	104	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	87	26 - 138
13C12-OCDF	84	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154022
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 07:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57500 SDG#: PH086-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154022
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 07:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57500 SDG#: PH086-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 12:56	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 16:17	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 19:10	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/14/2013 23:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	2	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/16/2013 00:54	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 10:57	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 23:52	John W Yanzuk II	5
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154022
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 07:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57500 SDG#: PH086-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:38	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 13:17	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 13:17	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 13:17	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 13:17	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:33	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13220039402A	08/08/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402B	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154023
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 08:20 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57540 SDG#: PH086-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.6	10
12969	Acenaphthylene	208-96-8	19	U	19	3.8	10
12969	Anthracene	120-12-7	19	U	19	3.8	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.6	10
12969	Benzo(a)pyrene	50-32-8	19	U	19	7.6	10
12969	Benzo(b)fluoranthene	205-99-2	19	U	19	7.6	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	38	10
12969	Benzo(g,h,i)perylene	191-24-2	19	U	19	7.6	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.6	10
12969	Butylbenzylphthalate	85-68-7	210	U	210	69	10
12969	Di-n-butylphthalate	84-74-2	210	U	210	69	10
12969	Chrysene	218-01-9	5.6	J	19	3.8	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.6	10
12969	Diethylphthalate	84-66-2	210	U	210	69	10
12969	Dimethylphthalate	131-11-3	210	U	210	69	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	210	U	210	69	10
12969	Fluoranthene	206-44-0	19	U	19	7.6	10
12969	Fluorene	86-73-7	19	U	19	7.6	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.6	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.6	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.6	10
12969	Naphthalene	91-20-3	19	U	19	7.6	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.6	10
12969	Di-n-octylphthalate	117-84-0	210	U	210	69	10
12969	Phenanthrene	85-01-8	19	U	19	7.6	10
12969	Pyrene	129-00-0	19	U	19	7.6	10
	Reporting limits were raised due to interference from the sample matrix.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.69
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	41	U	41	14	1
10401	Dalapon	75-99-0	100	U	100	50	1
10401	2,4-DB	94-82-6	19	U	19	7.0	1
10401	Dicamba	1918-00-9	14	U	14	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	860	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	850	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.93	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.85	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.96	U	0.96	0.20	1
10590	Alpha BHC	319-84-6	0.96	U	0.96	0.20	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154023
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 08:20 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57540 SDG#: PH086-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Gamma BHC - Lindane	58-89-9	0.96	U	0.96	0.20	1
10590	Chlordane	57-74-9	20	U	20	4.6	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.38	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.38	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.40	1
10590	Delta BHC	319-86-8	0.96	U	0.96	0.52	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.38	1
10590	Endosulfan I	959-98-8	0.96	U	0.96	0.25	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.38	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.38	1
10590	Endrin	72-20-8	2.0	U	2.0	0.38	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.38	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.69	1
10590	Heptachlor	76-44-8	0.96	U	0.96	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.96	U	0.96	0.20	1
10590	Methoxychlor	72-43-5	7.7	U	7.7	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.40	1
10590	Toxaphene	8001-35-2	38	U	38	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	11	U	11	4.6	2
12952	EFH (C15-C20)	n.a.	11	U	11	4.6	2
12952	EFH (C21-C30)	n.a.	24		11	4.6	2
12952	EFH (C30-C40)	n.a.	86		23	9.2	2
12952	EFH (C8-C11)	n.a.	11	U	11	4.6	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,900		45.7	8.24	1
06944	Antimony	7440-36-0	6.48		4.57	0.846	1
06935	Arsenic	7440-38-2	4.38	J	4.57	0.800	1
06946	Barium	7440-39-3	87.3		1.14	0.0377	1
06947	Beryllium	7440-41-7	0.312	J	1.14	0.0766	1
07914	Boron	7440-42-8	13.5		11.4	0.960	1
06949	Cadmium	7440-43-9	0.136	J	1.14	0.0869	1
01650	Calcium	7440-70-2	182,000		114	19.1	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154023
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 08:20 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57540 SDG#: PH086-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06951	Chromium	7440-47-3	24.1		3.43	0.183	1
06952	Cobalt	7440-48-4	5.24		1.14	0.113	1
06953	Copper	7440-50-8	13.7		2.29	0.332	1
01654	Iron	7439-89-6	20,000		45.7	4.14	1
06955	Lead	7439-92-1	6.98		3.43	0.572	1
01656	Lithium	7439-93-2	20.6		4.6	0.39	1
01657	Magnesium	7439-95-4	4,500		11.4	1.91	1
06958	Manganese	7439-96-5	235		1.14	0.0949	1
06960	Molybdenum	7439-98-7	3.29		2.29	0.194	1
06961	Nickel	7440-02-0	11.8		2.29	0.149	1
10145	Phosphorus	7723-14-0	184		11.4	3.30	1
01662	Potassium	7440-09-7	2,120		114	9.54	1
01667	Sodium	7440-23-5	106	J	114	19.1	1
06969	Tin	7440-31-5	2.72	J	11.4	0.252	1
06970	Titanium	7440-32-6	802		1.14	0.194	1
06971	Vanadium	7440-62-2	43.6		1.14	0.149	1
06972	Zinc	7440-66-6	40.2		4.57	0.229	1
10146	Zirconium	7440-67-7	2.65	J	5.72	0.960	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.457	U	0.457	0.114	2
06142	Silver	7440-22-4	0.0864	J	0.229	0.0297	2
06144	Strontium	7440-24-6	78.8		1.14	0.194	5
06145	Thallium	7440-28-0	0.352		0.229	0.0343	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0163	J	0.0186	0.0112	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.00		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154023
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 08:20 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57540 SDG#: PH086-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.11 U	1.11	0.0528	1
11031	12378-PeCDD	40321-76-4	0.0646 JBQ	5.57	0.0499	1
11031	123478-HxCDD	39227-28-6	5.57 U	5.57	0.0299	1
11031	123678-HxCDD	57653-85-7	0.0423 JBQ	5.57	0.0344	1
11031	123789-HxCDD	19408-74-3	0.0711 JQ	5.57	0.0314	1
11031	1234678-HpCDD	35822-46-9	0.237 JB	5.57	0.0403	1
11031	OCDD	3268-87-9	1.59 JB	11.1	0.0580	1
11031	2378-TCDF	51207-31-9	1.11 U	1.11	0.0390	1
11031	12378-PeCDF	57117-41-6	0.0603 JBQ	5.57	0.0247	1
11031	23478-PeCDF	57117-31-4	5.57 U	5.57	0.0216	1
11031	123478-HxCDF	70648-26-9	5.57 U	5.57	0.0184	1
11031	123678-HxCDF	57117-44-9	0.0183 JBQ	5.57	0.0178	1
11031	123789-HxCDF	72918-21-9	0.0554 JBQ	5.57	0.0182	1
11031	234678-HxCDF	60851-34-5	5.57 U	5.57	0.0163	1
11031	1234678-HpCDF	67562-39-4	0.0844 JB	5.57	0.0170	1
11031	1234789-HpCDF	55673-89-7	0.0286 J	5.57	0.0196	1
11031	OCDF	39001-02-0	0.127 JB	11.1	0.0518	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00393			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	55	26 - 152
13C12-123678-HxCDF	56	26 - 123
13C12-234678-HxCDF	56	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	66	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154023
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 08:20 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57540 SDG#: PH086-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154023
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 08:20 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57540 SDG#: PH086-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 13:29	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/12/2013 22:03	Laura M Krieger	22.69
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322031992	08/08/2013 14:19	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322031992	08/08/2013 14:20	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 16:44	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132240016A	08/19/2013 22:29	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/14/2013 23:41	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132240016A	08/13/2013 16:25	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/16/2013 00:34	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 11:54	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 23:55	John W Yanzuk II	5
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154023
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 08:20 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57540 SDG#: PH086-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:42	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 13:19	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 13:19	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/19/2013 06:17	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 13:19	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:35	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13220039402A	08/08/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402B	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154024
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 09:15 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57590 SDG#: PH086-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	19	U	19	7.5	10
12969	Acenaphthylene	208-96-8	19	U	19	3.8	10
12969	Anthracene	120-12-7	19	U	19	3.8	10
12969	Benzo(a)anthracene	56-55-3	19	U	19	7.5	10
12969	Benzo(a)pyrene	50-32-8	19	U	19	7.5	10
12969	Benzo(b)fluoranthene	205-99-2	19	U	19	7.5	10
12969	Benzo(e)pyrene	192-97-2	190	U	190	38	10
12969	Benzo(g,h,i)perylene	191-24-2	19	U	19	7.5	10
12969	Benzo(k)fluoranthene	207-08-9	19	U	19	7.5	10
12969	Butylbenzylphthalate	85-68-7	200	U	200	68	10
12969	Di-n-butylphthalate	84-74-2	200	U	200	68	10
12969	Chrysene	218-01-9	19	U	19	3.8	10
12969	Dibenz(a,h)anthracene	53-70-3	19	U	19	7.5	10
12969	Diethylphthalate	84-66-2	200	U	200	68	10
12969	Dimethylphthalate	131-11-3	200	U	200	68	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	200	U	200	68	10
12969	Fluoranthene	206-44-0	19	U	19	7.5	10
12969	Fluorene	86-73-7	19	U	19	7.5	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	7.5	10
12969	1-Methylnaphthalene	90-12-0	19	U	19	7.5	10
12969	2-Methylnaphthalene	91-57-6	19	U	19	7.5	10
12969	Naphthalene	91-20-3	19	U	19	7.5	10
12969	N-Nitrosodimethylamine	62-75-9	19	U	19	7.5	10
12969	Di-n-octylphthalate	117-84-0	200	U	200	68	10
12969	Phenanthrene	85-01-8	19	U	19	7.5	10
12969	Pyrene	129-00-0	19	U	19	7.5	10
	Reporting limits were raised due to interference from the sample matrix.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.58
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	100	U	100	49	1
10401	2,4-DB	94-82-6	19	U	19	7.0	1
10401	Dicamba	1918-00-9	13	U	13	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	850	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	840	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.92	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.84	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.94	U	0.94	0.19	1
10590	Alpha BHC	319-84-6	0.22	J	0.94	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154024
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 09:15 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57590 SDG#: PH086-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Gamma BHC - Lindane	58-89-9	0.94	U	0.94	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.94	U	0.94	0.51	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.94	U	0.94	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.68	1
10590	Heptachlor	76-44-8	0.94	U	0.94	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.94	U	0.94	0.19	1
10590	Methoxychlor	72-43-5	7.6	U	7.6	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	9.0		5.6	2.3	1
12952	EFH (C30-C40)	n.a.	16		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,800		44.8	8.08	1
06944	Antimony	7440-36-0	4.48	U	4.48	0.829	1
06935	Arsenic	7440-38-2	2.29	J	4.48	0.784	1
06946	Barium	7440-39-3	82.9		1.12	0.0370	1
06947	Beryllium	7440-41-7	0.709	J	1.12	0.0750	1
07914	Boron	7440-42-8	12.1		11.2	0.941	1
06949	Cadmium	7440-43-9	0.115	J	1.12	0.0851	1
01650	Calcium	7440-70-2	8,860		22.4	3.74	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154024
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 09:15 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57590 SDG#: PH086-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06951	Chromium	7440-47-3	23.2		3.36	0.179	1
06952	Cobalt	7440-48-4	6.19		1.12	0.111	1
06953	Copper	7440-50-8	16.3		2.24	0.325	1
01654	Iron	7439-89-6	24,000		44.8	4.05	1
06955	Lead	7439-92-1	5.90		3.36	0.560	1
01656	Lithium	7439-93-2	21.2		4.5	0.38	1
01657	Magnesium	7439-95-4	4,970		11.2	1.87	1
06958	Manganese	7439-96-5	312		1.12	0.0930	1
06960	Molybdenum	7439-98-7	2.24	U	2.24	0.190	1
06961	Nickel	7440-02-0	13.2		2.24	0.146	1
10145	Phosphorus	7723-14-0	436		11.2	3.24	1
01662	Potassium	7440-09-7	2,720		112	9.34	1
01667	Sodium	7440-23-5	106	J	112	18.7	1
06969	Tin	7440-31-5	3.21	J	11.2	0.246	1
06970	Titanium	7440-32-6	1,280		1.12	0.190	1
06971	Vanadium	7440-62-2	47.4		1.12	0.146	1
06972	Zinc	7440-66-6	49.4		4.48	0.224	1
10146	Zirconium	7440-67-7	2.01	J	5.60	0.941	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.448	U	0.448	0.112	2
06142	Silver	7440-22-4	0.0470	J	0.224	0.0291	2
06144	Strontium	7440-24-6	43.4		0.448	0.0762	2
06145	Thallium	7440-28-0	0.369		0.224	0.0336	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0163	J	0.0181	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.16		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154024
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 09:15 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57590 SDG#: PH086-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 14:03	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/12/2013 22:41	Laura M Krieger	23.58
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322031992	08/08/2013 14:21	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322031992	08/08/2013 14:22	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 17:11	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 19:26	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/14/2013 23:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	2	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/16/2013 18:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:46	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 13:21	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 13:21	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 13:21	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-575-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154024
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 09:15 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

57590 SDG#: PH086-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 13:21	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:37	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13220039402A	08/08/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402B	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154025
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:00 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56600 SDG#: PH086-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.2	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.4	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.4	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.6	J	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	0.76	J	1.7	0.68	1
12969	Naphthalene	91-20-3	0.95	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.2	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.1	J	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	3.1	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	20		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	40		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154025
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:00 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56600 SDG#: PH086-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,400		40.3	7.27	1
06944	Antimony	7440-36-0	4.03	U	4.03	0.746	1
06935	Arsenic	7440-38-2	3.69	J	4.03	0.706	1
06946	Barium	7440-39-3	144		1.01	0.0333	1
06947	Beryllium	7440-41-7	1.02		1.01	0.0676	1
07914	Boron	7440-42-8	16.9		10.1	0.847	1
06949	Cadmium	7440-43-9	0.268	J	1.01	0.0766	1
01650	Calcium	7440-70-2	6,860		20.2	3.37	1
06951	Chromium	7440-47-3	37.3		3.02	0.161	1
06952	Cobalt	7440-48-4	9.89		1.01	0.0998	1
06953	Copper	7440-50-8	22.8		2.02	0.292	1
01654	Iron	7439-89-6	33,600		202	18.2	5
06955	Lead	7439-92-1	12.2		3.02	0.504	1
01656	Lithium	7439-93-2	25.7		4.0	0.34	1
01657	Magnesium	7439-95-4	6,680		10.1	1.68	1
06958	Manganese	7439-96-5	482		1.01	0.0837	1
06960	Molybdenum	7439-98-7	2.02	U	2.02	0.171	1
06961	Nickel	7440-02-0	20.7		2.02	0.131	1
10145	Phosphorus	7723-14-0	304		10.1	2.91	1
01662	Potassium	7440-09-7	5,190		101	8.41	1
01667	Sodium	7440-23-5	85.2	J	101	16.8	1
06969	Tin	7440-31-5	3.12	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,230		1.01	0.171	1
06971	Vanadium	7440-62-2	69.2		1.01	0.131	1
06972	Zinc	7440-66-6	72.3		4.03	0.202	1
10146	Zirconium	7440-67-7	4.39	J	5.04	0.847	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.326	J	0.403	0.101	2
06142	Silver	7440-22-4	0.0772	J	0.202	0.0262	2
06144	Strontium	7440-24-6	48.7		0.403	0.0686	2
06145	Thallium	7440-28-0	0.445		0.202	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0131	J	0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.34		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154025
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:00 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56600 SDG#: PH086-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0499	1
11031	12378-PeCDD	40321-76-4	5.00	U	5.00	0.0534	1
11031	123478-HxCDD	39227-28-6	0.0923	J	5.00	0.0458	1
11031	123678-HxCDD	57653-85-7	0.420	JB	5.00	0.0507	1
11031	123789-HxCDD	19408-74-3	0.556	JQ	5.00	0.0492	1
11031	1234678-HpCDD	35822-46-9	4.88	JB	5.00	0.0733	1
11031	OCDD	3268-87-9	45.9	B	10.0	0.0466	1
11031	2378-TCDF	51207-31-9	1.00	U	1.00	0.0494	1
11031	12378-PeCDF	57117-41-6	0.233	JB	5.00	0.0284	1
11031	23478-PeCDF	57117-31-4	0.0731	J	5.00	0.0257	1
11031	123478-HxCDF	70648-26-9	0.0551	JBQ	5.00	0.0228	1
11031	123678-HxCDF	57117-44-9	0.0898	JBQ	5.00	0.0225	1
11031	123789-HxCDF	72918-21-9	0.811	JB	5.00	0.0300	1
11031	234678-HxCDF	60851-34-5	0.0659	JB	5.00	0.0226	1
11031	1234678-HpCDF	67562-39-4	0.637	JB	5.00	0.0277	1
11031	1234789-HpCDF	55673-89-7	0.0906	JQ	5.00	0.0360	1
11031	OCDF	39001-02-0	1.53	JB	10.0	0.0498	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.237				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154025
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:00 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56600 SDG#: PH086-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154025
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:00 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56600 SDG#: PH086-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 06:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/15/2013 00:18	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/15/2013 22:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 12:51	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/16/2013 23:59	John W Yanzuk II	5
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:50	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 13:24	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 13:24	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 13:24	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 13:24	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154025
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:00 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56600 SDG#: PH086-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:39	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13220039402A	08/08/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402B	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154026
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56640 SDG#: PH086-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.49	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	0.74	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.4	U	1.4	0.3	32.55
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	2.2	J	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154026
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56640 SDG#: PH086-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	7.0		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	12		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,200		43.5	7.84	1
06944	Antimony	7440-36-0	4.35	U	4.35	0.805	1
06935	Arsenic	7440-38-2	4.11	J	4.35	0.762	1
06946	Barium	7440-39-3	135		1.09	0.0359	1
06947	Beryllium	7440-41-7	1.01	J	1.09	0.0729	1
07914	Boron	7440-42-8	16.3		10.9	0.914	1
06949	Cadmium	7440-43-9	0.104	J	1.09	0.0827	1
01650	Calcium	7440-70-2	11,100		21.8	3.63	1
06951	Chromium	7440-47-3	32.8		3.26	0.174	1
06952	Cobalt	7440-48-4	8.32		1.09	0.108	1
06953	Copper	7440-50-8	17.1		2.18	0.316	1
01654	Iron	7439-89-6	30,600		218	19.7	5
06955	Lead	7439-92-1	9.45		3.26	0.544	1
01656	Lithium	7439-93-2	30.2		4.4	0.37	1
01657	Magnesium	7439-95-4	6,090		10.9	1.82	1
06958	Manganese	7439-96-5	417		1.09	0.0903	1
06960	Molybdenum	7439-98-7	2.18	U	2.18	0.185	1
06961	Nickel	7440-02-0	19.3		2.18	0.141	1
10145	Phosphorus	7723-14-0	164		10.9	3.14	1
01662	Potassium	7440-09-7	3,070		109	9.07	1
01667	Sodium	7440-23-5	546		109	18.2	1
06969	Tin	7440-31-5	3.33	J	10.9	0.239	1
06970	Titanium	7440-32-6	1,260		1.09	0.185	1
06971	Vanadium	7440-62-2	60.5		1.09	0.141	1
06972	Zinc	7440-66-6	57.6		4.35	0.218	1
10146	Zirconium	7440-67-7	3.15	J	5.44	0.914	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.132	J	0.435	0.109	2
06142	Silver	7440-22-4	0.0838	J	0.218	0.0283	2
06144	Strontium	7440-24-6	51.5		0.435	0.0740	2
06145	Thallium	7440-28-0	0.374		0.218	0.0326	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0189		0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.8 C.	n.a.	8.31		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154026
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56640 SDG#: PH086-07*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154026
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56640 SDG#: PH086-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0521	1
11031	12378-PeCDD	40321-76-4	5.43	U	5.43	0.0618	1
11031	123478-HxCDD	39227-28-6	0.0633	JQ	5.43	0.0299	1
11031	123678-HxCDD	57653-85-7	0.117	JBQ	5.43	0.0337	1
11031	123789-HxCDD	19408-74-3	0.145	JQ	5.43	0.0345	1
11031	1234678-HpCDD	35822-46-9	0.915	JB	5.43	0.0575	1
11031	OCDD	3268-87-9	7.14	JB	10.9	0.0313	1
11031	2378-TCDF	51207-31-9	0.0575	JQ	1.09	0.0460	1
11031	12378-PeCDF	57117-41-6	0.104	JBQ	5.43	0.0299	1
11031	23478-PeCDF	57117-31-4	0.159	JQ	5.43	0.0249	1
11031	123478-HxCDF	70648-26-9	0.0505	JBQ	5.43	0.0208	1
11031	123678-HxCDF	57117-44-9	0.0444	JBQ	5.43	0.0186	1
11031	123789-HxCDF	72918-21-9	0.168	JB	5.43	0.0229	1
11031	234678-HxCDF	60851-34-5	0.0269	JBQ	5.43	0.0185	1
11031	1234678-HpCDF	67562-39-4	0.159	JB	5.43	0.0207	1
11031	1234789-HpCDF	55673-89-7	0.0504	JQ	5.43	0.0299	1
11031	OCDF	39001-02-0	0.319	JB	10.9	0.0455	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0297				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	92	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	92	24 - 185
13C12-23478-PeCDF	95	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154026
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56640 SDG#: PH086-07*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154026
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56640 SDG#: PH086-07*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 07:24	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/12/2013 23:19	Laura M Krieger	32.55
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322031992	08/08/2013 14:23	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322031992	08/08/2013 14:23	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/15/2013 00:36	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/15/2013 21:49	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 13:47	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132200637001	08/17/2013 00:03	John W Yanzuk II	5
06955	Lead	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132200637001	08/16/2013 12:53	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-566-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7154026
LL Group # 1409993
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/07/2013 12:40 by SM

Submitted: 08/08/2013 09:15
Reported: 08/21/2013 14:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56640 SDG#: PH086-07*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132200637001B	08/14/2013 13:26	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132200637001A	08/14/2013 13:26	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132200637001A	08/14/2013 13:26	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132200637001A	08/14/2013 13:26	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132200638001	08/15/2013 14:41	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132200637001	08/09/2013 09:35	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132200638001	08/09/2013 11:25	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13220039402A	08/08/2013 21:30	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13221162402B	08/09/2013 23:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: Y132281AA	Sample number(s): 7154020								
Acetone	20 U	20.	6	ug/l	134	118	35-181	13	30
Acrolein	100 U	100.	40	ug/l	96	97	46-146	1	30
Acrylonitrile	20 U	20.	4	ug/l	84	82	61-130	3	30
t-Amyl methyl ether	5 U	5.	0.8	ug/l	97	98	66-120	2	30
Benzene	5 U	5.	0.5	ug/l	102	102	77-121	0	30
Bromobenzene	5 U	5.	1	ug/l	102	103	80-120	1	30
Bromochloromethane	5 U	5.	1	ug/l	120	118	80-121	1	30
Bromodichloromethane	5 U	5.	1	ug/l	107	106	73-120	1	30
Bromoform	5 U	5.	1	ug/l	110	108	61-120	1	30
Bromomethane	5 U	5.	1	ug/l	89	89	51-120	0	30
2-Butanone	10 U	10.	3	ug/l	115	106	57-141	8	30
t-Butyl alcohol	50 U	50.	10	ug/l	112	109	75-120	2	30
n-Butylbenzene	5 U	5.	1	ug/l	99	102	73-130	3	30
sec-Butylbenzene	5 U	5.	1	ug/l	101	104	74-124	3	30
tert-Butylbenzene	5 U	5.	1	ug/l	97	99	80-120	2	30
Carbon Disulfide	5 U	5.	1	ug/l	74	76	68-121	3	30
Carbon Tetrachloride	5 U	5.	1	ug/l	115	114	65-137	1	30
Chlorobenzene	5 U	5.	0.8	ug/l	110	111	80-120	1	30
Chloroethane	5 U	5.	1	ug/l	80	81	60-120	2	30
2-Chloroethyl Vinyl Ether	10 U	10.	2	ug/l	98	104	52-127	6	30
Chloroform	5 U	5.	0.8	ug/l	112	111	77-122	1	30
1-Chlorohexane	5 U	5.	1	ug/l	103	106	70-130	3	30
Chloromethane	5 U	5.	1	ug/l	86	90	54-123	5	30
2-Chlorotoluene	5 U	5.	1	ug/l	101	103	80-120	2	30
4-Chlorotoluene	5 U	5.	1	ug/l	100	103	80-120	3	30
Chlorotrifluoroethene	5 U	5.	2	ug/l	76	77	47-120	2	30
1,2-Dibromo-3-chloropropane	5 U	5.	2	ug/l	100	99	56-120	2	30
Dibromochloromethane	5 U	5.	1	ug/l	105	105	72-120	0	30
1,2-Dibromoethane	5 U	5.	1	ug/l	110	109	76-120	0	30
Dibromomethane	5 U	5.	1	ug/l	108	107	80-120	0	30
1,2-Dichlorobenzene	5 U	5.	1	ug/l	110	111	80-120	0	30
1,3-Dichlorobenzene	5 U	5.	1	ug/l	106	107	80-120	1	30
1,4-Dichlorobenzene	5 U	5.	1	ug/l	108	109	80-120	1	30
Dichlorodifluoromethane	5 U	5.	2	ug/l	99	101	35-122	2	30
1,1-Dichloroethane	5 U	5.	1	ug/l	102	101	79-120	1	30
1,2-Dichloroethane	5 U	5.	1	ug/l	117	114	64-130	2	30
1,1-Dichloroethene	5 U	5.	0.8	ug/l	95	94	76-124	0	30
cis-1,2-Dichloroethene	5 U	5.	0.8	ug/l	106	104	80-120	2	30
trans-1,2-Dichloroethene	5 U	5.	0.8	ug/l	101	99	80-120	1	30
1,2-Dichloropropane	5 U	5.	1	ug/l	103	105	80-120	2	30
1,3-Dichloropropane	5 U	5.	1	ug/l	101	103	80-120	2	30
2,2-Dichloropropane	5 U	5.	1	ug/l	107	108	67-124	1	30

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloropropene	5	U	5.	1	ug/l	105	107	80-120	2	30
cis-1,3-Dichloropropene	5	U	5.	1	ug/l	104	106	78-120	2	30
trans-1,3-Dichloropropene	5	U	5.	1	ug/l	95	96	66-124	2	30
Ethyl t-butyl ether	5	U	5.	0.8	ug/l	94	96	66-120	2	30
Ethylbenzene	5	U	5.	0.8	ug/l	101	103	79-120	3	30
Freon 113	5	U	5.	2	ug/l	99	99	69-128	0	30
Freon 133a	5	U	5.	2	ug/l	93	97	64-120	4	30
Hexachlorobutadiene	5	U	5.	2	ug/l	105	109	58-120	4	30
2-Hexanone	10	U	10.	3	ug/l	98	96	59-125	2	30
di-Isopropyl ether	5	U	5.	0.8	ug/l	93	94	65-120	1	30
Isopropylbenzene	5	U	5.	1	ug/l	103	105	77-120	2	30
p-Isopropyltoluene	5	U	5.	1	ug/l	101	103	77-121	2	30
Methyl Iodide	5	U	5.	1	ug/l	104	103	71-122	2	30
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/l	97	96	68-121	1	30
4-Methyl-2-pentanone	10	U	10.	3	ug/l	97	95	65-122	2	30
Methylene Chloride	5	U	5.	2	ug/l	98	98	84-118	0	30
n-Propylbenzene	5	U	5.	1	ug/l	100	102	77-130	2	30
Styrene	5	U	5.	1	ug/l	104	105	77-120	1	30
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/l	111	112	79-120	1	30
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/l	99	100	70-129	1	30
Tetrachloroethene	5	U	5.	0.8	ug/l	110	113	79-120	2	30
Toluene	5	U	5.	0.7	ug/l	103	105	79-120	1	30
1,2,3-Trichlorobenzene	5	U	5.	1	ug/l	112	113	67-120	1	30
1,2,4-Trichlorobenzene	5	U	5.	1	ug/l	108	108	65-120	0	30
1,1,1-Trichloroethane	5	U	5.	0.8	ug/l	102	103	66-126	2	30
1,1,2-Trichloroethane	5	U	5.	0.8	ug/l	110	110	80-120	0	30
Trichloroethene	5	U	5.	1	ug/l	112	110	80-120	2	30
Trichlorofluoromethane	5	U	5.	2	ug/l	107	106	65-130	1	30
1,2,3-Trichloropropane	5	U	5.	1	ug/l	104	104	76-120	0	30
1,2,4-Trimethylbenzene	5	U	5.	1	ug/l	102	104	69-122	2	30
1,3,5-Trimethylbenzene	5	U	5.	1	ug/l	102	105	68-124	3	30
Vinyl Acetate	10	U	10.	2	ug/l	76	79	57-147	3	30
Vinyl Chloride	5	U	5.	1	ug/l	86	91	63-120	5	30
m+p-Xylene	5	U	5.	0.8	ug/l	105	107	77-120	2	30
o-Xylene	5	U	5.	0.8	ug/l	101	103	77-120	3	30
Batch number: 13225SLA026	Sample number(s): 7154022-7154026									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	105		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	116		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	107		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	111		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	115		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	101		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	111		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	108		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	105		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	104		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	105		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	109		77-124		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	107		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	108		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	88		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	110		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	100		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		79-112		
Batch number: 13225WAH026	Sample number(s): 7154020									
Acenaphthene	0.050	U	0.050	0.010	ug/l	104	100	77-118	4	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	119	114	80-123	4	30
Anthracene	0.050	U	0.050	0.010	ug/l	107	101	78-123	6	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	98	95	73-127	3	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	98	96	72-120	3	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	99	100	79-136	0	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	97	93	70-130	4	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	107	102	64-130	4	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	115	105	73-131	9	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	77	65	40-138	18	30
Di-n-butylphthalate	0.14	J	1.0	0.050	ug/l	112	97	64-141	14	30
Chrysene	0.050	U	0.050	0.010	ug/l	106	102	76-125	4	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	107	103	58-131	4	30
Diethylphthalate	0.077	J	1.0	0.050	ug/l	116	108	64-128	7	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	97	86	23-139	12	30
Bis(2-Ethylhexyl)phthalate	0.077	J	1.0	0.050	ug/l	93	81	70-143	13	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	108	85	79-124	23	30
Fluorene	0.050	U	0.050	0.010	ug/l	107	103	74-115	3	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	102	96	62-130	7	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	115	111	80-126	3	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	113	106	81-124	6	30
Naphthalene	0.050	U	0.050	0.030	ug/l	112	107	75-120	5	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	76	76	36-120	0	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	76	72	57-145	5	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	104	100	75-120	5	30
Pyrene	0.050	U	0.050	0.010	ug/l	110	102	71-130	7	30
Batch number: 13225WAI026	Sample number(s): 7154020									
Aniline	1	U	1.	0.5	ug/l	68	59	44-101	15	30
Benzidine	60	U	60.	20	ug/l	37	28	20-82	28	30
Benzoic acid	15	U	15.	6	ug/l	40	51	10-69	23	30
Benzyl alcohol	15	U	15.	5	ug/l	97	98	59-114	1	30
1,1'-Biphenyl	1	U	1.	0.5	ug/l	94	91	60-120	2	30
4-Bromophenyl-phenylether	1	U	1.	0.5	ug/l	96	94	75-115	2	30
2-butoxy-Ethanol	5	U	5.	5	ug/l					
Carbazole	1	U	1.	0.5	ug/l	101	95	70-128	7	30
4-Chloro-3-methylphenol	1	U	1.	0.5	ug/l	105	99	67-131	6	30
4-Chloroaniline	1	U	1.	0.5	ug/l	80	68	46-112	16	30
bis(2-Chloroethoxy)methane	1	U	1.	0.5	ug/l	101	98	65-125	3	30
bis(2-Chloroethyl)ether	1	U	1.	0.5	ug/l	99	98	73-112	2	30
bis(2-Chloroisopropyl)ether	1	U	1.	0.5	ug/l	94	93	67-115	2	30
2-Chloronaphthalene	1	U	1.	0.4	ug/l	94	95	60-138	1	30
2-Chlorophenol	1	U	1.	0.5	ug/l	101	97	76-111	4	30
4-Chlorophenyl-phenylether	1	U	1.	0.5	ug/l	96	92	77-114	4	30
Dibenzofuran	1	U	1.	0.5	ug/l	97	96	81-110	1	30
1,2-Dichlorobenzene	1	U	1.	0.5	ug/l	94	91	69-107	3	30
1,3-Dichlorobenzene	1	U	1.	0.5	ug/l	93	90	57-115	3	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,4-Dichlorobenzene	1	U	1.	0.5	ug/l	93	89	61-109	4	30
3,3'-Dichlorobenzidine	5	U	5.	2	ug/l	90	84	47-108	6	30
2,4-Dichlorophenol	1	U	1.	0.5	ug/l	105	96	84-114	9	30
2,6-Dichlorophenol	1	U	1.	0.5	ug/l	101	94	80-116	6	30
2,4-Dimethylphenol	1	U	1.	0.5	ug/l	100	96	66-125	4	30
3,5-Dimethylphenol	10	U	10.	3	ug/l	108	106	70-130	1	30
4,6-Dinitro-2-methylphenol	15	U	15.	5	ug/l	94	84	68-131	12	30
2,4-Dinitrophenol	30	U	30.	10	ug/l	88	85	43-137	3	30
1,2-Diphenylhydrazine	1	U	1.	0.5	ug/l	101	97	68-127	3	30
Hexachlorobenzene	0.5	U	0.5	0.1	ug/l	90	87	74-126	4	30
Hexachlorobutadiene	1	U	1.	0.5	ug/l	90	86	56-119	4	30
Hexachlorocyclopentadiene	15	U	15.	5	ug/l	53	55	21-126	4	30
Hexachloroethane	5	U	5.	1	ug/l	92	89	55-109	3	30
Isophorone	1	U	1.	0.5	ug/l	106	102	68-124	4	30
2-Methylphenol	1	U	1.	0.5	ug/l	96	94	61-118	3	30
4-Methylphenol	1	U	1.	0.5	ug/l	93	97	54-112	4	30
NDPA as diphenylamine	5	U	5.	2	ug/l	101	97	70-130	4	30
2-Nitroaniline	1	U	1.	0.5	ug/l	109	109	84-122	1	30
3-Nitroaniline	1	U	1.	0.5	ug/l	94	86	70-118	9	30
4-Nitroaniline	1	U	1.	0.5	ug/l	95	87	61-110	8	30
Nitrobenzene	1	U	1.	0.5	ug/l	103	99	67-123	4	30
2-Nitrophenol	1	U	1.	0.5	ug/l	106	94	84-118	12	30
4-Nitrophenol	30	U	30.	10	ug/l	86	81	16-91	5	30
N-Nitroso-di-n-propylamine	1	U	1.	0.5	ug/l	99	99	71-117	0	30
N-Nitrosodiphenylamine	1	U	1.	0.5	ug/l	101	97	80-115	4	30
Pentachlorophenol	5	U	5.	1	ug/l	92	83	50-129	10	30
Phenol	1	U	1.	0.5	ug/l	69	69	23-82	1	30
2-phenoxy-Ethanol	5	U	5.	5	ug/l					
Pyridine	5	U	5.	2	ug/l	79	77	22-96	3	30
1,2,3,4-Tetrahydronaphthalene	5	U	5.	5	ug/l					
1,2,4-Trichlorobenzene	1	U	1.	0.5	ug/l	96	93	71-112	4	30
2,4,5-Trichlorophenol	1	U	1.	0.5	ug/l	103	92	81-121	12	30
2,4,6-Trichlorophenol	1	U	1.	0.5	ug/l	102	96	84-119	6	30
Batch number: 13224A16A	Sample number(s): 7154023-7154024,7154026									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	95		67-119		
Batch number: 13224A20A	Sample number(s): 7154020-7154021									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	102	102	75-135	0	30
Batch number: 132220010A	Sample number(s): 7154020									
2,4-D	0.50	U	0.50	0.16	ug/l	106	110	68-155	4	30
Dalapon	1.3	U	1.3	0.25	ug/l	76	65	39-115	14	30
2,4-DB	1.0	U	1.0	0.30	ug/l	106	106	50-163	1	30
Dicamba	0.30	U	0.30	0.080	ug/l	91	93	55-163	2	30
Dinoseb	0.50	U	0.50	0.12	ug/l	127	112	16-163	13	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	140	141	89-162	1	30
MCPA	200 U		200.	50	ug/l	94	94	68-154	0	30
MCPP	200 U		200.	50	ug/l	91	91	46-173	1	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	105	105	55-169	0	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	115	121	58-155	5	30
Batch number: 132250009A	Sample number(s): 7154022-7154024									
2,4-D	36	U	36.	12	ug/kg	103		59-122		

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Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dalapon	90	U	90.	44	ug/kg	45		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	108		54-131		
Dicamba	12	U	12.	4.0	ug/kg	83		60-123		
Dinoseb	24	U	24.	9.0	ug/kg	12		10-36		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	132		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	85		60-127		
MCPP (Mecoprop)	2,500 U		2,500.	750	ug/kg	93		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	105		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	111		63-130		
Batch number: 132240016A	Sample number(s): 7154023									
Aldrin	0.83	U	0.83	0.17	ug/kg	96		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	104		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	107		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	103		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	106		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	107		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	101		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	108		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	106		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	101		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	107		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	112		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	95		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	100		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	112		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	98		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	104		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	105		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132250001A	Sample number(s): 7154022-7154026									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	76	73	36-106	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	97		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	102		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132250011A	Sample number(s): 7154022,7154024									
Aldrin	0.83	U	0.83	0.17	ug/kg	107		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	110		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	116		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	111		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	119		76-138		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
p,p-DDE	1.7	U	1.7	0.33	ug/kg	121		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	118		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	117		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	115		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	109		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	118		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	126		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	108		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	112		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	121		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	107		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	114		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	117		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132260003A	Sample number(s): 7154020									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	78	73	55-126	7	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	90	85	63-132	6	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	96	91	63-132	5	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	89	83	68-128	8	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	100	94	62-143	7	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	93	85	56-137	9	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	92	79	45-134	16	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	93	87	63-131	7	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	92	85	65-135	8	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	90	83	48-124	8	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	93	86	53-123	7	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	87	82	60-129	6	30
Endrin	0.016	U	0.016	0.0065	ug/l	85	78	43-139	8	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	91	82	55-123	11	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	94	88	51-138	7	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	80	75	57-126	5	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	91	84	65-128	8	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	95	86	46-134	11	30
Mirex	0.20	U	0.20	0.068	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132260004A	Sample number(s): 7154020									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	60	67	35-84	12	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	93	90	69-120	3	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	100	101	69-128	1	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132250021A	Sample number(s): 7154020									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	101	102	70-130	1	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	105	106	70-130	1	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	107	109	70-130	1	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	108	107	70-130	2	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	92	91	70-130	1	30
Batch number: 132260015A	Sample number(s): 7154022-7154026									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	101		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	103		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	105		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	73		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	92		49-107		
Batch number: 132200637001	Sample number(s): 7154022-7154026									
Aluminum	40.0	U	40.0	7.21	mg/kg	103		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	100		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	93		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	100		80-120		
Calcium	3.70	J	20.0	3.34	mg/kg	104		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	107		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	103		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	0.85	J	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	104		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	103		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.92	J	10.0	0.220	mg/kg	99		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	0.422	J	4.00	0.200	mg/kg	101		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	103		80-120		
Batch number: 132200637001A	Sample number(s): 7154022-7154026									
Silver	0.200	U	0.200	0.0260	mg/kg	110		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	103		80-120		
Batch number: 132200637001B	Sample number(s): 7154022-7154026									
Selenium	0.400	U	0.400	0.100	mg/kg	106		80-120		
Batch number: 132200638001	Sample number(s): 7154022-7154026									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	114		85-120		
Batch number: 132250635001	Sample number(s): 7154020									
Aluminum	0.400	U	0.400	0.0828	mg/l	105	104	80-120	1	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	119	120	80-120	1	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	97	98	80-120	2	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
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Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Barium	0.0100 U	0.0100	0.00033	mg/l	104	104	80-120	0	20
Beryllium	0.0100 U	0.0100	0.00067	mg/l	100	101	80-120	0	20
Boron	0.100 U	0.100	0.0084	mg/l	98	98	80-120	1	20
Cadmium	0.0100 U	0.0100	0.00076	mg/l	104	105	80-120	0	20
Calcium	0.400 U	0.400	0.0334	mg/l	105	106	80-120	2	20
Chromium	0.0300 U	0.0300	0.0016	mg/l	103	104	80-120	1	20
Cobalt	0.0100 U	0.0100	0.0013	mg/l	107	107	80-120	0	20
Copper	0.0200 U	0.0200	0.0027	mg/l	101	101	80-120	0	20
Iron	0.400 U	0.400	0.0430	mg/l	103	106	80-120	3	20
Lead	0.0300 U	0.0300	0.0047	mg/l	98	97	80-120	2	20
Lithium	0.0400 U	0.0400	0.0047	mg/l	102	101	80-120	1	20
Magnesium	0.200 U	0.200	0.0167	mg/l	104	105	80-120	0	20
Manganese	0.0100 U	0.0100	0.00083	mg/l	104	104	80-120	1	20
Molybdenum	0.0200 U	0.0200	0.0017	mg/l	110	111	80-120	1	20
Nickel	0.0200 U	0.0200	0.0015	mg/l	108	109	80-120	1	20
Phosphorus	0.200 U	0.200	0.0418	mg/l	108	107	80-120	0	20
Potassium	1.00 U	1.00	0.0980	mg/l	102	104	80-120	2	20
Sodium	2.00 U	2.00	0.167	mg/l	102	104	80-120	2	20
Tin	0.0400 U	0.0400	0.0029	mg/l	105	105	80-120	0	20
Titanium	0.0200 U	0.0200	0.0017	mg/l	106	107	80-120	1	20
Vanadium	0.0100 U	0.0100	0.0020	mg/l	105	105	80-120	0	20
Zinc	0.0400 U	0.0400	0.0020	mg/l	107	106	80-120	1	20
Zirconium	0.100 U	0.100	0.0084	mg/l	102	104	80-120	2	20
Batch number: 132250639001A	Sample number(s): 7154020								
Silver	0.0010 U	0.0010	0.00011	mg/l	94	95	90-115	1	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	93	97	80-120	4	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	103	101	80-120	2	20
Batch number: 132250639001B	Sample number(s): 7154020								
Selenium	0.0040 U	0.0040	0.00050	mg/l	102	105	80-120	2	20
Batch number: 132255713002	Sample number(s): 7154020								
3b Mercury 7470A	0.00020 U	0.00020	0.00006 0	mg/l	103	104	90-115	1	20
Batch number: 13220039402A	Sample number(s): 7154022-7154026								
15a pH by 9045D					100		95-105		
Batch number: 13220121522A	Sample number(s): 7154020								
28b pH (9040B and 9040C)					100		99-103		
Batch number: 13221162402B	Sample number(s): 7154022-7154026								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13227001	Sample number(s): 7154022-7154023,7154025-7154026								
2378-TCDD	1.00 U	1.00	0.0760	ng/kg	99		67-158		
12378-PeCDD	0.0796 J	5.00	0.0681	ng/kg	103		70-142		
123478-HxCDD	5.00 U	5.00	0.0263	ng/kg	99		70-164		
123678-HxCDD	0.0344 J	5.00	0.0291	ng/kg	92		76-134		
123789-HxCDD	5.00 U	5.00	0.0306	ng/kg	94		64-162		
1234678-HpCDD	0.0682 J	5.00	0.0395	ng/kg	91		70-140		

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Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
OCDD	0.286	J	10.0	0.0305	ng/kg	91		78-144		
2378-TCDF	1.00	U	1.00	0.0678	ng/kg	98		75-158		
12378-PeCDF	0.0421	J	5.00	0.0314	ng/kg	95		80-134		
23478-PeCDF	0.0576	J	5.00	0.0324	ng/kg	93		68-160		
123478-HxCDF	0.0398	J	5.00	0.0242	ng/kg	94		72-134		
123678-HxCDF	0.0310	J	5.00	0.0233	ng/kg	93		84-130		
123789-HxCDF	0.0558	J	5.00	0.0306	ng/kg	93		78-130		
234678-HxCDF	0.0316	J	5.00	0.0229	ng/kg	93		70-156		
1234678-HpCDF	0.0368	J	5.00	0.0134	ng/kg	93		82-122		
1234789-HpCDF	5.00	U	5.00	0.0225	ng/kg	91		78-138		
OCDF	0.112	J	10.0	0.0583	ng/kg	90		63-170		
Batch number: 13228001	Sample number(s): 7154020									
2378-TCDD	1.00	J	2.00	0.570	pg/l	102		60-150		
12378-PeCDD	2.06	J	10.0	0.587	pg/l	109		60-150		
123478-HxCDD	2.40	J	10.0	0.347	pg/l	106		60-150		
123678-HxCDD	2.98	J	10.0	0.373	pg/l	99		60-150		
123789-HxCDD	2.30	J	10.0	0.394	pg/l	102		60-150		
1234678-HpCDD	2.77	J	10.0	0.362	pg/l	100		60-150		
OCDD	7.37	J	20.0	0.313	pg/l	103		60-150		
2378-TCDF	2.00	U	2.00	0.386	pg/l	108		60-150		
12378-PeCDF	1.79	J	10.0	0.263	pg/l	110		60-150		
23478-PeCDF	1.38	J	10.0	0.240	pg/l	109		60-150		
123478-HxCDF	2.10	J	10.0	0.209	pg/l	104		60-150		
123678-HxCDF	2.29	J	10.0	0.210	pg/l	105		60-150		
123789-HxCDF	1.61	J	10.0	0.224	pg/l	101		60-150		
234678-HxCDF	2.02	J	10.0	0.199	pg/l	102		60-150		
1234678-HpCDF	2.23	J	10.0	0.176	pg/l	102		60-150		
1234789-HpCDF	2.18	J	10.0	0.209	pg/l	100		60-150		
OCDF	6.01	J	20.0	0.366	pg/l	99		60-150		
Batch number: 13227001	Sample number(s): 7154022-7154023,7154025-7154026									
TEQ WHO 2005 - EDLx0.0	0.0110				ng/kg					
Batch number: 13228001	Sample number(s): 7154020									
TEQ WHO 2005 - EDLx0.0	2.16				pg/l					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13225SLA026	Sample number(s): 7154022-7154026 UNSPK: P152828								
Acenaphthene	96	97	48-127	2	30				
Acenaphthylene	101	103	49-121	2	30				
Anthracene	100	102	52-126	3	30				
Benzo(a)anthracene	96	98	44-143	3	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(a)pyrene	90	92	44-140	2	30				
Benzo(b)fluoranthene	124	124	26-142	2	30				
Benzo(e)pyrene	94	96	70-130	3	30				
Benzo(g,h,i)perylene	43	42	33-141	1	30				
Benzo(k)fluoranthene	97	98	54-142	3	30				
Butylbenzylphthalate	149	145	49-151	2	30				
Di-n-butylphthalate	125	130	52-147	4	30				
Chrysene	93	95	29-148	3	30				
Dibenz(a,h)anthracene	56	55	20-137	1	30				
Diethylphthalate	107	109	43-145	3	30				
Dimethylphthalate	102	104	58-129	2	30				
Bis(2-Ethylhexyl)phthalate	133	129	39-167	2	30				
Fluoranthene	99	103	40-148	4	30				
Fluorene	98	100	51-137	3	30				
Indeno(1,2,3-cd)pyrene	54	53	17-136	0	30				
1-Methylnaphthalene	103	107	50-131	5	30				
2-Methylnaphthalene	102	105	35-152	4	30				
Naphthalene	96	99	31-148	3	30				
N-Nitrosodimethylamine	94	95	48-113	2	30				
Di-n-octylphthalate	184*	183*	52-162	0	30				
Phenanthrene	94	97	29-142	4	30				
Pyrene	106	109	26-143	3	30				
Batch number: 13224A16A	Sample number(s): 7154023-7154024,7154026 UNSPK: P156754								
11a TPH by EPA 8015B GRO	64	77	39-118	30	30				
Batch number: 132250009A	Sample number(s): 7154022-7154024 UNSPK: P152828								
2,4-D	79	79	42-143	0	35				
Dalapon	29	0*	19-109	200*	50				
2,4-DB	121	116	10-179	4	50				
Dicamba	98	92	45-147	6	50				
Dinoseb	26	26	10-52	1	35				
2,4-DP (Dichlorprop)	133	130	32-171	2	50				
MCPA	94	89	23-169	5	50				
MCPP (Mecoprop)	82	82	24-164	1	50				
2,4,5-T	91	87	12-172	4	35				
2,4,5-TP	112	106	10-142	6	35				
Batch number: 132240016A	Sample number(s): 7154023 UNSPK: 7154023								
Aldrin	92	99	16-126	7	50				
Alpha BHC	91	98	14-140	7	50				
Beta BHC	97	102	10-173	5	50				
Gamma BHC - Lindane	93	97	30-137	5	50				
p,p-DDD	91	101	43-149	10	50				
p,p-DDE	96	107	18-161	11	50				
p,p-DDT	89	97	12-193	8	50				
Delta BHC	93	97	13-153	4	50				
Dieldrin	90	98	19-154	8	50				
Endosulfan I	86	94	16-137	10	50				
Endosulfan II	89	99	10-156	10	50				
Endosulfan Sulfate	93	97	10-181	4	50				
Endrin	87	93	30-152	7	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Endrin Aldehyde	78	84	10-152	6	35				
Endrin Ketone	86	89	10-160	4	50				
Heptachlor	90	97	16-152	7	50				
Heptachlor Epoxide	92	98	17-167	7	50				
Methoxychlor	92	99	34-168	7	50				
Batch number: 132250001A	Sample number(s): 7154022-7154026 UNSPK: P152828								
PCB-1016	89	87	16-146	3	50				
PCB-1260	91	89	40-134	2	50				
Batch number: 132250011A	Sample number(s): 7154022,7154024 UNSPK: P152828								
Aldrin	109	97	16-126	11	50				
Alpha BHC	102	95	14-140	7	50				
Beta BHC	107	100	10-173	6	50				
Gamma BHC - Lindane	112	96	30-137	15	50				
p,p-DDD	114	105	43-149	8	50				
p,p-DDE	136	119	18-161	13	50				
p,p-DDT	188	147	12-193	25	50				
Delta BHC	112	115	13-153	2	50				
Dieldrin	116	105	19-154	10	50				
Endosulfan I	106	96	16-137	10	50				
Endosulfan II	135	117	10-156	14	50				
Endosulfan Sulfate	117	107	10-181	9	50				
Endrin	112	101	30-152	11	50				
Endrin Aldehyde	106	95	10-152	11	35				
Endrin Ketone	107	100	10-160	7	50				
Heptachlor	118	97	16-152	20	50				
Heptachlor Epoxide	138	113	17-167	20	50				
Methoxychlor	111	104	34-168	7	50				
Batch number: 132260015A	Sample number(s): 7154022-7154026 UNSPK: P156754								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	169*	117	49-123	37*	20				
EFH (C21-C30)	279*	-24*	49-123	109*	20				
EFH (C30-C40)	635*	9*	49-123	146*	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 132200637001	Sample number(s): 7154022-7154026 UNSPK: P152828 BKG: P152828								
Aluminum	3208 (2)	2690 (2)	75-125	4	20	17,700	18,400	4	20
Antimony	34*	38*	75-125	14	20	3.92 U	4.00 U	0 (1)	20
Arsenic	107	106	75-125	1	20	1.69 J	2.35 J	33* (1)	20
Barium	104	102	75-125	0	20	90.4	89.5	1	20
Beryllium	106	105	75-125	0	20	0.609 J	0.614 J	1 (1)	20
Boron	95	94	75-125	0	20	11.9	11.7	2 (1)	20
Cadmium	98	105	75-125	8	20	0.573 J	0.497 J	14 (1)	20
Calcium	210 (2)	171 (2)	75-125	4	20	3,310	3,300	0	20
Chromium	121	118	75-125	1	20	19.6	19.8	1	20
Cobalt	98	98	75-125	1	20	5.35	5.36	0	20
Copper	115	117	75-125	2	20	14.6	14.6	1	20
Iron	1992 (2)	1863 (2)	75-125	1	20	20,000	20,000	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Lead	107	133*	75-125	13	20	15.1	14.8	2 (1)	20
Lithium	103	102	75-125	0	20	19.3	19.7	2 (1)	20
Magnesium	361 (2)	296 (2)	75-125	3	20	3,960	4,020	1	20
Manganese	125 (2)	133 (2)	75-125	1	20	282	267	5	20
Molybdenum	97	98	75-125	2	20	0.837 J	0.469 J	56* (1)	20
Nickel	101	101	75-125	1	20	11.6	11.6	0	20
Phosphorus	110 (2)	149 (2)	75-125	7	20	408	401	2	20
Potassium	157*	149*	75-125	2	20	3,220	3,290	2	20
Sodium	104	103	75-125	0	20	63.3 J	58.9 J	7 (1)	20
Tin	90	90	75-125	1	20	2.70 J	2.88 J	7 (1)	20
Titanium	391 (2)	369 (2)	75-125	1	20	961	1,020	6	20
Vanadium	120	119	75-125	0	20	36.3	36.9	1	20
Zinc	105	198*	75-125	26*	20	104	96.1	7	20
Zirconium	96	95	75-125	0	20	2.48 J	3.24 J	27* (1)	20
Batch number: 132200637001A	Sample number(s): 7154022-7154026 UNSPK: P152828 BKG: P152828								
Silver	120	152*	75-125	25*	20	0.0424 J	0.0480 J	13 (1)	20
Strontium	145*	307*	75-125	32*	20	22.9	29.6	25*	20
Thallium	122	182*	75-125	29*	20	0.257	0.350	31* (1)	20
Batch number: 132200637001B	Sample number(s): 7154022-7154026 UNSPK: P152828 BKG: P152828								
Selenium	112	136*	75-125	19	20	0.141 J	0.160 J	13 (1)	20
Batch number: 132200638001	Sample number(s): 7154022-7154026 UNSPK: P152828 BKG: P152828								
3a Mercury 7471A	119	123	65-135	6	20	0.0221	0.0217	2 (1)	20
Batch number: 13220039402A	Sample number(s): 7154022-7154026 BKG: 7154022								
15a pH by 9045D						6.91	6.99	1	3
Batch number: 13220121522A	Sample number(s): 7154020 BKG: 7154020								
28b pH (9040B and 9040C)						5.5	5.5	0	3
Batch number: 13221162402B	Sample number(s): 7154022-7154026 BKG: 7154023								
14a Moisture Content by 160.3						13.4	12.9	4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 12b Volatile Organics EPA8260B
Batch number: Y132281AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7154020	109	106	97	91
Blank	111	105	98	90
LCS	107	105	100	98
LCSD	106	106	101	100

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Surrogate Quality Control

Limits: 86-118 80-120 88-110 86-115

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13225SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7154022	93	101	98
7154023	93	103	103
7154024	89	98	101
7154025	86	91	102
7154026	89	98	104
Blank	74	81	88
LCS	90	98	105
MS	88	88	101
MSD	87	89	105
Limits:	54-129	59-125	61-125

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13225WAH026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7154020	66	79	96
Blank	79	83	84
LCS	93	96	110
LCSD	73	93	104
Limits:	44-137	62-141	51-136

Analysis Name: 8b SVOCs by EPA 8270D
Batch number: 13225WAI026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7154020	45	67	95	90	92	106
Blank	48	65	74	76	78	92
LCS	63	81	101	98	95	105
LCSD	63	80	90	94	93	102
Limits:	20-110	20-110	30-110	40-130	45-130	45-130

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13224A16A

	Trifluorotoluene-F
7154023	71
7154024	72
7154026	71
Blank	78
LCS	83
MS	67
MSD	76
Limits:	61-122

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Surrogate Quality Control

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13224A20A

	Trifluorotoluene-F
7154020	87
7154021	86
Blank	86
LCS	122
LCSD	116
Limits:	63-135

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 132220010A

	2,4-Dichlorophenylacetic acid
7154020	61
Blank	62
LCS	75
LCSD	76
Limits:	50-150

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132240016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7154023	92	95
Blank	105	125*
LCS	107	124*
MS	95	91
MSD	102	98
Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132250001A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7154022	92	71
7154023	83	65
7154024	79	54
7154025	100	89
7154026	111	100
Blank	109	109
LCS	105	106
LCSD	113	115
MS	101	96
MSD	95	92
Limits:	45-120	45-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132250009A

	2,4-Dichlorophenylacetic

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Surrogate Quality Control

	acid
7154022	65
7154023	62
7154024	62
Blank	61
LCS	71
MS	66
MSD	64
Limits:	50-150

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132250011A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7154022	99	100
7154024	99	106
Blank	109	130*
LCS	110	133*
MS	103	114
MSD	95	107
Limits:	50-130	20-120

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132260003A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7154020	83	78
Blank	90	96
LCS	87	100
LCSD	83	95
Limits:	60-140	20-120

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132260004A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7154020	79	61
Blank	91	88
LCS	105	91
LCSD	105	99
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132250021A

	Chlorobenzene	Orthoterphenyl
7154020	104	91
Blank	93	100
LCS	99	107
LCSD	104	110

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Surrogate Quality Control

Limits: 45-126 69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132260015A

	Chlorobenzene	Orthoterphenyl
7154022	84	71
7154023	90	81
7154024	96	95
7154025	98	105
7154026	100	97
Blank	97	103
LCS	101	107
MS	103	111
MSD	97	101
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13227001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7154022	75	104	66	67	71	78
7154023	62	78	55	56	56	65
7154025	64	81	65	66	66	67
7154026	83	95	68	75	72	76
Blank	66	76	61	69	68	69
OPR	60	76	54	57	59	66
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7154022	76	87	84	105	77	79
7154023	66	71	64	79	68	67
7154025	75	74	71	82	73	78
7154026	85	74	64	92	81	83
Blank	81	64	60	81	73	81
OPR	68	59	54	77	66	69
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7154022	80	91	93	77	96
7154023	68	76	79	65	77
7154025	77	84	86	67	81
7154026	81	87	86	79	92
Blank	78	83	79	63	82
OPR	69	73	68	56	73
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13228001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1409993
Reported: 08/21/13 at 02:13 PM

Surrogate Quality Control

7154020	57	81	70	74	76	92
Blank	61	90	75	76	76	92
OPR	69	97	78	80	82	90
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7154020	77	76	78	73	66	72
Blank	82	84	86	81	70	76
OPR	82	87	91	90	77	81
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7154020	69	75	76	67	82	
Blank	73	83	85	70	88	
OPR	81	85	88	74	90	
Limits:	28-130	23-140	17-157	24-169	24-185	

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SSFL Phase 3 Chain of Custody

13013 1409993 7154020 -26

CDM Smith

DateShipped: 8/7/2013
CarrierName: FedEx
AirbillNo: 796416013175

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130807-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB-080713	8/7/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB-080713	8/7/13 15:00	WQ	None	5 - 250 mL Amber	10 day					X	X	X			X							X														TIC for Tetralin only
EB-080713	8/7/13 15:00	WQ	None	4 - 1 L Amber	10 day									X							X															
EB-080713	8/7/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																	
EB-080713	8/7/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																					X										
EB-080713	8/7/13 15:00	WQ	HCl	6 - 40 mL Vial	10 day																		X		X											

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	8/7/2013	1600							Brenely	8.8.13	915
									Barcley		

SSFL Phase 3 Chain of Custody

13013 1409993 7154020-26

CDM Smith

DateShipped: 8/7/2013
CarrierName: FedEx
AirbillNo: 796416013175

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130807-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-080713	8/7/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-575-SA8-SB-0.0-0.5	8/7/13 07:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X					X	X	X			X											
SL-575-SA8-SB-0.0-0.5	8/7/13 07:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-575-SA8-SB-4.0-5.0	8/7/13 08:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X					X	X	X			X											
SL-575-SA8-SB-4.0-5.0	8/7/13 08:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-575-SA8-SB-4.0-5.0	8/7/13 08:20	SO	None	2 - Encore	10 day																			X												
SL-575-SA8-SB-9.0-10.0	8/7/13 09:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X						X	X	X			X											
SL-575-SA8-SB-9.0-10.0	8/7/13 09:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-575-SA8-SB-9.0-10.0	8/7/13 09:15	SO	None	2 - Encore	10 day																			X												
SL-566-SA8-SB-0.0-0.5	8/7/13 12:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-566-SA8-SB-0.0-0.5	8/7/13 12:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-566-SA8-SB-4.0-5.0	8/7/13 12:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-566-SA8-SB-4.0-5.0	8/7/13 12:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-566-SA8-SB-4.0-5.0	8/7/13 12:40	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: Steve Meyer

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Meyer	08/07/2013	1600									
									Brandy Bennett	8.8.13	915

COC Rev 2

COC: 20130807-02, Page 1 of 1

1 of 1

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Environmental Sample Administration Receipt Documentation Log

1409993

Client/Project: CDM

Date of Receipt: 8.8.13

Time of Receipt: 915

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	4.4	TB	WI	Y	B	
2	↓	1.6	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Barclay 2299 **Date/Time:** 8-8-13 952

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH087

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 22, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/09/2013
Group Number: 1410304
SDG: PH087
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-080813 Water	7155504
SL-565-SA8-SB-0.0-0.5 Soil	7155505
SL-565-SA8-SB-4.0-5.0 Soil	7155506
SL-567-SA8-SB-0.0-0.5 Soil	7155507
SL-567-SA8-SB-4.0-5.0 Soil	7155508
SL-567-SA8-SB-9.0-10.0 Soil	7155509

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,



Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB-080813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7155504
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 08:00

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB808 SDG#: PH087-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13224A20A	08/12/2013 13:06	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13224A20A	08/12/2013 13:06	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155505
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 07:40 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56500 SDG#: PH087-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	0.50	J	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.1	J	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.1	J	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	4.0		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.86	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.2	J	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	3.9		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	4.7		1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	J	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.0	J	1.8	0.70	1
12969	Naphthalene	91-20-3	1.3	J	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	2.4		1.8	0.70	1
12969	Pyrene	129-00-0	3.3		1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	6.2	J	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	4.1	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	38		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	92		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155505
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 07:40 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56500 SDG#: PH087-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,900		40.6	7.31	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.751	1
06935	Arsenic	7440-38-2	4.15		4.06	0.710	1
06946	Barium	7440-39-3	127		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.910	J	1.01	0.0680	1
07914	Boron	7440-42-8	8.92	J	10.1	0.852	1
06949	Cadmium	7440-43-9	1.28		1.01	0.0771	1
01650	Calcium	7440-70-2	6,410		20.3	3.39	1
06951	Chromium	7440-47-3	33.4		3.04	0.162	1
06952	Cobalt	7440-48-4	8.48		1.01	0.100	1
06953	Copper	7440-50-8	21.3		2.03	0.294	1
01654	Iron	7439-89-6	30,800		203	18.4	5
06955	Lead	7439-92-1	11.5		3.04	0.507	1
01656	Lithium	7439-93-2	30.5		4.1	0.34	1
01657	Magnesium	7439-95-4	6,000		10.1	1.69	1
06958	Manganese	7439-96-5	425		1.01	0.0842	1
06960	Molybdenum	7439-98-7	0.535	J	2.03	0.172	1
06961	Nickel	7440-02-0	18.2		2.03	0.132	1
10145	Phosphorus	7723-14-0	297		10.1	2.93	1
01662	Potassium	7440-09-7	4,990		101	8.46	1
01667	Sodium	7440-23-5	100	J	101	16.9	1
06969	Tin	7440-31-5	3.47	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,530		1.01	0.172	1
06971	Vanadium	7440-62-2	64.3		1.01	0.132	1
06972	Zinc	7440-66-6	76.4		4.06	0.203	1
10146	Zirconium	7440-67-7	4.54	J	5.07	0.852	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.245	J	0.406	0.101	2
06142	Silver	7440-22-4	0.0483	J	0.203	0.0264	2
06144	Strontium	7440-24-6	33.0		0.406	0.0690	2
06145	Thallium	7440-28-0	0.356		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0160	J	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.50		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155505
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 07:40 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56500 SDG#: PH087-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0747	JQ	1.03	0.0507	1
11031	12378-PeCDD	40321-76-4	0.175	JBQ	5.16	0.0688	1
11031	123478-HxCDD	39227-28-6	0.356	JQ	5.16	0.0774	1
11031	123678-HxCDD	57653-85-7	1.03	JB	5.16	0.0840	1
11031	123789-HxCDD	19408-74-3	0.843	J	5.16	0.0838	1
11031	1234678-HpCDD	35822-46-9	23.3	B	5.16	0.0941	1
11031	OCDD	3268-87-9	198	B	10.3	0.0475	1
11031	2378-TCDF	51207-31-9	0.283	J	1.03	0.0774	1
11031	12378-PeCDF	57117-41-6	0.890	JB	5.16	0.0501	1
11031	23478-PeCDF	57117-31-4	0.451	J	5.16	0.0494	1
11031	123478-HxCDF	70648-26-9	0.323	JBQ	5.16	0.0414	1
11031	123678-HxCDF	57117-44-9	0.273	JB	5.16	0.0426	1
11031	123789-HxCDF	72918-21-9	0.475	JB	5.16	0.0435	1
11031	234678-HxCDF	60851-34-5	0.275	JBQ	5.16	0.0402	1
11031	1234678-HpCDF	67562-39-4	2.64	JB	5.16	0.0360	1
11031	1234789-HpCDF	55673-89-7	0.297	J	5.16	0.0455	1
11031	OCDF	39001-02-0	5.11	JB	10.3	0.0397	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.776				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	86	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155505
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 07:40 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56500 SDG#: PH087-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155505
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 07:40 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56500 SDG#: PH087-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/16/2013 14:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/15/2013 00:55	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/15/2013 23:52	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 14:44	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06946	Barium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 17:38	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/21/2013 17:41	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 06:37	Deborah A Krady	1
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 15:09	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 15:09	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 06:00	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 15:09	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155505
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 07:40 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56500 SDG#: PH087-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:26	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13221039401A	08/09/2013 20:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155506
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 08:30 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56540 SDG#: PH087-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.78	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.78	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J	21	7.0	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.78	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.6	J	2.0	0.78	1
12969	2-Methylnaphthalene	91-57-6	1.0	J	2.0	0.78	1
12969	Naphthalene	91-20-3	2.0	U	2.0	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.78	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	25.61
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.2	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C15-C20)	n.a.	5.9	U	5.9	2.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155506
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 08:30 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56540 SDG#: PH087-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.9	U	5.9	2.4	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.9	U	5.9	2.4	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,300		45.3	8.17	1
06944	Antimony	7440-36-0	4.53	U	4.53	0.838	1
06935	Arsenic	7440-38-2	4.30	J	4.53	0.793	1
06946	Barium	7440-39-3	164		1.13	0.0374	1
06947	Beryllium	7440-41-7	0.992	J	1.13	0.0759	1
07914	Boron	7440-42-8	8.72	J	11.3	0.951	1
06949	Cadmium	7440-43-9	1.11	J	1.13	0.0861	1
01650	Calcium	7440-70-2	13,000		22.7	3.78	1
06951	Chromium	7440-47-3	39.5		3.40	0.181	1
06952	Cobalt	7440-48-4	11.9		1.13	0.112	1
06953	Copper	7440-50-8	19.0		2.27	0.328	1
01654	Iron	7439-89-6	35,500		227	20.5	5
06955	Lead	7439-92-1	11.7		3.40	0.566	1
01656	Lithium	7439-93-2	23.8		4.5	0.39	1
01657	Magnesium	7439-95-4	7,610		11.3	1.89	1
06958	Manganese	7439-96-5	457		1.13	0.0940	1
06960	Molybdenum	7439-98-7	2.27	U	2.27	0.193	1
06961	Nickel	7440-02-0	18.9		2.27	0.147	1
10145	Phosphorus	7723-14-0	176		11.3	3.27	1
01662	Potassium	7440-09-7	2,670		113	9.45	1
01667	Sodium	7440-23-5	667		113	18.9	1
06969	Tin	7440-31-5	3.57	J	11.3	0.249	1
06970	Titanium	7440-32-6	1,270		1.13	0.193	1
06971	Vanadium	7440-62-2	71.9		1.13	0.147	1
06972	Zinc	7440-66-6	59.4		4.53	0.227	1
10146	Zirconium	7440-67-7	2.95	J	5.66	0.951	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.453	U	0.453	0.113	2
06142	Silver	7440-22-4	0.0458	J	0.227	0.0294	2
06144	Strontium	7440-24-6	53.0		0.453	0.0770	2
06145	Thallium	7440-28-0	0.325		0.227	0.0340	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0198		0.0190	0.0114	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22.3 C.	n.a.	7.82		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	15.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155506
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 08:30 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56540 SDG#: PH087-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155506
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 08:30 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56540 SDG#: PH087-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.102 JQ	1.17	0.0425	1
11031	12378-PeCDD	40321-76-4	0.0923 JBQ	5.83	0.0478	1
11031	123478-HxCDD	39227-28-6	0.0928 J	5.83	0.0265	1
11031	123678-HxCDD	57653-85-7	0.0836 JBQ	5.83	0.0277	1
11031	123789-HxCDD	19408-74-3	0.0868 JQ	5.83	0.0274	1
11031	1234678-HpCDD	35822-46-9	0.135 JBQ	5.83	0.0280	1
11031	OCDD	3268-87-9	0.679 JB	11.7	0.0297	1
11031	2378-TCDF	51207-31-9	0.0357 JQ	1.17	0.0353	1
11031	12378-PeCDF	57117-41-6	0.143 JB	5.83	0.0239	1
11031	23478-PeCDF	57117-31-4	0.127 JQ	5.83	0.0221	1
11031	123478-HxCDF	70648-26-9	0.104 JBQ	5.83	0.0168	1
11031	123678-HxCDF	57117-44-9	0.109 JBQ	5.83	0.0171	1
11031	123789-HxCDF	72918-21-9	0.0636 JB	5.83	0.0211	1
11031	234678-HxCDF	60851-34-5	0.0646 JBQ	5.83	0.0161	1
11031	1234678-HpCDF	67562-39-4	0.0637 JBQ	5.83	0.0137	1
11031	1234789-HpCDF	55673-89-7	0.0715 J	5.83	0.0197	1
11031	OCDF	39001-02-0	0.0492 JBQ	11.7	0.0408	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0208			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155506
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 08:30 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56540 SDG#: PH087-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155506
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 08:30 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56540 SDG#: PH087-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 07:57	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/13/2013 02:29	Laura M Krieger	25.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322132004	08/09/2013 14:22	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322132004	08/09/2013 14:22	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/15/2013 01:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/15/2013 20:05	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 18:38	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
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06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 17:52	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/21/2013 17:56	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 06:41	Deborah A Krady	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-565-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155506
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 08:30 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56540 SDG#: PH087-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 15:11	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 15:11	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 06:02	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 15:11	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:28	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13221039401A	08/09/2013 20:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155507
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 12:50 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH087-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	20	U	20	7.9	10
12969	Acenaphthylene	208-96-8	20	U	20	3.9	10
12969	Anthracene	120-12-7	20	U	20	3.9	10
12969	Benzo(a)anthracene	56-55-3	20	U	20	7.9	10
12969	Benzo(a)pyrene	50-32-8	20	U	20	7.9	10
12969	Benzo(b)fluoranthene	205-99-2	20	U	20	7.9	10
12969	Benzo(e)pyrene	192-97-2	200	U	200	39	10
12969	Benzo(g,h,i)perylene	191-24-2	20	U	20	7.9	10
12969	Benzo(k)fluoranthene	207-08-9	20	U	20	7.9	10
12969	Butylbenzylphthalate	85-68-7	210	U	210	71	10
12969	Di-n-butylphthalate	84-74-2	210	U	210	71	10
12969	Chrysene	218-01-9	5.5	J	20	3.9	10
12969	Dibenz(a,h)anthracene	53-70-3	20	U	20	7.9	10
12969	Diethylphthalate	84-66-2	210	U	210	71	10
12969	Dimethylphthalate	131-11-3	210	U	210	71	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	210	U	210	71	10
12969	Fluoranthene	206-44-0	20	U	20	7.9	10
12969	Fluorene	86-73-7	20	U	20	7.9	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	20	U	20	7.9	10
12969	1-Methylnaphthalene	90-12-0	20	U	20	7.9	10
12969	2-Methylnaphthalene	91-57-6	20	U	20	7.9	10
12969	Naphthalene	91-20-3	20	U	20	7.9	10
12969	N-Nitrosodimethylamine	62-75-9	20	U	20	7.9	10
12969	Di-n-octylphthalate	117-84-0	210	U	210	71	10
12969	Phenanthrene	85-01-8	20	U	20	7.9	10
12969	Pyrene	129-00-0	20	U	20	7.9	10
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	42	U	42	14	1
10401	Dalapon	75-99-0	110	U	110	51	1
10401	2,4-DB	94-82-6	20	U	20	7.2	1
10401	Dicamba	1918-00-9	14	U	14	4.7	1
10401	Dinoseb	88-85-7	28	U	28	11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	20	U	20	11	1
10401	MCPA	94-74-6	2,900	U	2,900	890	1
10401	MCPP (Mecoprop)	93-65-2	2,900	U	2,900	880	1
10401	2,4,5-T	93-76-5	2.0	U	2.0	0.96	1
10401	2,4,5-TP	93-72-1	2.0	U	2.0	0.88	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.98	U	0.98	0.20	1
10590	Alpha BHC	319-84-6	0.98	U	0.98	0.20	1
10590	Beta BHC	319-85-7	2.7		2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.98	U	0.98	0.20	1
10590	Chlordane	57-74-9	20	U	20	4.7	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155507
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 12:50 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH087-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	p,p-DDT	50-29-3	1.0	J	2.0	0.41	1
10590	Delta BHC	319-86-8	0.98	U	0.98	0.53	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.98	U	0.98	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.71	1
10590	Heptachlor	76-44-8	0.98	U	0.98	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.98	U	0.98	0.20	1
10590	Methoxychlor	72-43-5	7.9	U	7.9	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.41	1
10590	Toxaphene	8001-35-2	39	U	39	17	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.9	1
10592	PCB-1242	53469-21-9	20	U	20	4.9	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.2	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	30	U	30	12	5
12952	EFH (C15-C20)	n.a.	30	U	30	12	5
12952	EFH (C21-C30)	n.a.	43		30	12	5
12952	EFH (C30-C40)	n.a.	200		59	24	5
12952	EFH (C8-C11)	n.a.	30	U	30	12	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,200		45.5	8.20	1
06944	Antimony	7440-36-0	4.55	U	4.55	0.842	1
06935	Arsenic	7440-38-2	4.21	J	4.55	0.797	1
06946	Barium	7440-39-3	137		1.14	0.0376	1
06947	Beryllium	7440-41-7	1.07	J	1.14	0.0762	1
07914	Boron	7440-42-8	9.45	J	11.4	0.956	1
06949	Cadmium	7440-43-9	1.43		1.14	0.0865	1
01650	Calcium	7440-70-2	7,220		22.8	3.80	1
06951	Chromium	7440-47-3	42.5		3.41	0.182	1
06952	Cobalt	7440-48-4	10.6		1.14	0.113	1
06953	Copper	7440-50-8	24.4		2.28	0.330	1
01654	Iron	7439-89-6	37,800		228	20.6	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155507
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 12:50 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH087-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	11.4		3.41	0.569	1
01656	Lithium	7439-93-2	26.5		4.6	0.39	1
01657	Magnesium	7439-95-4	7,910		11.4	1.90	1
06958	Manganese	7439-96-5	506		1.14	0.0944	1
06960	Molybdenum	7439-98-7	0.913	J	2.28	0.193	1
06961	Nickel	7440-02-0	23.0		2.28	0.148	1
10145	Phosphorus	7723-14-0	359		11.4	3.29	1
01662	Potassium	7440-09-7	5,980		114	9.49	1
01667	Sodium	7440-23-5	88.0	J	114	19.0	1
06969	Tin	7440-31-5	3.45	J	11.4	0.250	1
06970	Titanium	7440-32-6	1,550		1.14	0.193	1
06971	Vanadium	7440-62-2	79.0		1.14	0.148	1
06972	Zinc	7440-66-6	78.5		4.55	0.228	1
10146	Zirconium	7440-67-7	4.11	J	5.69	0.956	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.323	J	0.455	0.114	2
06142	Silver	7440-22-4	0.0553	J	0.228	0.0296	2
06144	Strontium	7440-24-6	38.2		0.455	0.0774	2
06145	Thallium	7440-28-0	0.389		0.228	0.0341	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.48		0.0100	0.0100	1
	The pH was measured in water at 22.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	15.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155507
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 12:50 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH087-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.16	U	1.16	0.0401	1
11031	12378-PeCDD	40321-76-4	0.161	JBQ	5.82	0.0612	1
11031	123478-HxCDD	39227-28-6	0.0803	J	5.82	0.0418	1
11031	123678-HxCDD	57653-85-7	0.478	JB	5.82	0.0449	1
11031	123789-HxCDD	19408-74-3	0.663	J	5.82	0.0419	1
11031	1234678-HpCDD	35822-46-9	2.81	JB	5.82	0.0446	1
11031	OCDD	3268-87-9	22.8	B	11.6	0.0310	1
11031	2378-TCDF	51207-31-9	0.325	JQ	1.16	0.0951	1
11031	12378-PeCDF	57117-41-6	0.416	JB	5.82	0.0484	1
11031	23478-PeCDF	57117-31-4	5.82	U	5.82	0.0462	1
11031	123478-HxCDF	70648-26-9	0.102	JBQ	5.82	0.0303	1
11031	123678-HxCDF	57117-44-9	0.146	JB	5.82	0.0316	1
11031	123789-HxCDF	72918-21-9	0.864	JB	5.82	0.0309	1
11031	234678-HxCDF	60851-34-5	0.128	JB	5.82	0.0275	1
11031	1234678-HpCDF	67562-39-4	0.524	JB	5.82	0.0245	1
11031	1234789-HpCDF	55673-89-7	0.0896	JQ	5.82	0.0273	1
11031	OCDF	39001-02-0	0.759	JBQ	11.6	0.0329	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.289				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	100	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	83	24 - 169
13C12-12378-PeCDF	98	24 - 185
13C12-23478-PeCDF	95	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	80	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155507
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 12:50 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH087-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155507
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 12:50 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH087-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 15:12	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 17:38	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132240016A	08/19/2013 23:14	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/15/2013 01:32	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132240016A	08/13/2013 16:25	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/16/2013 01:15	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 19:35	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06946	Barium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 18:00	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/21/2013 18:03	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155507
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 12:50 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56700 SDG#: PH087-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 06:52	Deborah A Krady	1
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 15:18	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 15:18	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 06:03	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 15:18	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:30	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13221039401A	08/09/2013 20:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155508
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 13:25 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56740 SDG#: PH087-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.0	U	2.0	0.79	1
12969	Acenaphthylene	208-96-8	2.0	U	2.0	0.39	1
12969	Anthracene	120-12-7	2.0	U	2.0	0.39	1
12969	Benzo(a)anthracene	56-55-3	2.0	U	2.0	0.79	1
12969	Benzo(a)pyrene	50-32-8	2.0	U	2.0	0.79	1
12969	Benzo(b)fluoranthene	205-99-2	2.0	U	2.0	0.79	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0	U	2.0	0.79	1
12969	Benzo(k)fluoranthene	207-08-9	2.0	U	2.0	0.79	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.1	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.1	1
12969	Chrysene	218-01-9	2.0	U	2.0	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	2.0	U	2.0	0.79	1
12969	Diethylphthalate	84-66-2	21	U	21	7.1	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.1	1
12969	Fluoranthene	206-44-0	2.0	U	2.0	0.79	1
12969	Fluorene	86-73-7	2.0	U	2.0	0.79	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0	U	2.0	0.79	1
12969	1-Methylnaphthalene	90-12-0	2.0	U	2.0	0.79	1
12969	2-Methylnaphthalene	91-57-6	2.0	U	2.0	0.79	1
12969	Naphthalene	91-20-3	2.0	U	2.0	0.79	1
12969	N-Nitrosodimethylamine	62-75-9	2.0	U	2.0	0.79	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.1	1
12969	Phenanthrene	85-01-8	2.0	U	2.0	0.79	1
12969	Pyrene	129-00-0	2.0	U	2.0	0.79	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	22.56
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	42	U	42	14	1
10401	Dalapon	75-99-0	110	U	110	52	1
10401	2,4-DB	94-82-6	20	U	20	7.3	1
10401	Dicamba	1918-00-9	14	U	14	4.7	1
10401	Dinoseb	88-85-7	28	U	28	11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	20	U	20	11	1
10401	MCPA	94-74-6	2,900	U	2,900	890	1
10401	MCPP (Mecoprop)	93-65-2	2,900	U	2,900	880	1
10401	2,4,5-T	93-76-5	2.4		2.0	0.96	1
10401	2,4,5-TP	93-72-1	2.0	U	2.0	0.88	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.99	U	0.99	0.20	1
10590	Alpha BHC	319-84-6	0.99	U	0.99	0.20	1
10590	Beta BHC	319-85-7	2.3	U	2.3	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.99	U	0.99	0.20	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155508
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 13:25 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56740 SDG#: PH087-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	20	U	20	4.8	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.42	1
10590	Delta BHC	319-86-8	0.99	U	0.99	0.54	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.99	U	0.99	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.2	U	2.2	0.72	1
10590	Heptachlor	76-44-8	0.99	U	0.99	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.99	U	0.99	0.20	1
10590	Methoxychlor	72-43-5	8.0	U	8.0	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.42	1
10590	Toxaphene	8001-35-2	39	U	39	17	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.1	1
10592	PCB-1232	11141-16-5	20	U	20	4.9	1
10592	PCB-1242	53469-21-9	20	U	20	4.9	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.3	1
10592	PCB-1260	11096-82-5	20	U	20	4.7	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	6.0	U	6.0	2.4	1
12952	EFH (C15-C20)	n.a.	6.0	U	6.0	2.4	1
12952	EFH (C21-C30)	n.a.	6.0	U	6.0	2.4	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.8	1
12952	EFH (C8-C11)	n.a.	6.0	U	6.0	2.4	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,000		46.9	8.45	1
06944	Antimony	7440-36-0	4.69	U	4.69	0.867	1
06935	Arsenic	7440-38-2	4.84		4.69	0.820	1
06946	Barium	7440-39-3	122		1.17	0.0387	1
06947	Beryllium	7440-41-7	0.794	J	1.17	0.0785	1
07914	Boron	7440-42-8	12.4		11.7	0.984	1
06949	Cadmium	7440-43-9	1.32		1.17	0.0890	1
01650	Calcium	7440-70-2	55,600		23.4	3.91	1
06951	Chromium	7440-47-3	39.3		3.51	0.187	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155508
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 13:25 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56740 SDG#: PH087-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	10.1		1.17	0.116	1
06953	Copper	7440-50-8	22.4		2.34	0.340	1
01654	Iron	7439-89-6	33,800		234	21.2	5
06955	Lead	7439-92-1	9.93		3.51	0.586	1
01656	Lithium	7439-93-2	28.4		4.7	0.40	1
01657	Magnesium	7439-95-4	8,330		11.7	1.96	1
06958	Manganese	7439-96-5	431		1.17	0.0972	1
06960	Molybdenum	7439-98-7	0.581	J	2.34	0.199	1
06961	Nickel	7440-02-0	20.7		2.34	0.152	1
10145	Phosphorus	7723-14-0	493		11.7	3.39	1
01662	Potassium	7440-09-7	3,800		117	9.77	1
01667	Sodium	7440-23-5	137		117	19.6	1
06969	Tin	7440-31-5	3.52	J	11.7	0.258	1
06970	Titanium	7440-32-6	1,550		1.17	0.199	1
06971	Vanadium	7440-62-2	74.6		1.17	0.152	1
06972	Zinc	7440-66-6	73.1		4.69	0.234	1
10146	Zirconium	7440-67-7	4.30	J	5.86	0.984	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.122	J	0.469	0.117	2
06142	Silver	7440-22-4	0.0426	J	0.234	0.0305	2
06144	Strontium	7440-24-6	135		1.17	0.199	5
06145	Thallium	7440-28-0	0.339		0.234	0.0351	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0192	U	0.0192	0.0115	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.91		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	16.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155508
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 13:25 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56740 SDG#: PH087-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.17	U	1.17	0.0535	1
11031	12378-PeCDD	40321-76-4	5.84	U	5.84	0.0620	1
11031	123478-HxCDD	39227-28-6	5.84	U	5.84	0.0268	1
11031	123678-HxCDD	57653-85-7	5.84	U	5.84	0.0300	1
11031	123789-HxCDD	19408-74-3	0.0767	J	5.84	0.0302	1
11031	1234678-HpCDD	35822-46-9	5.84	U	5.84	0.0470	1
11031	OCDD	3268-87-9	0.512	JBQ	11.7	0.0556	1
11031	2378-TCDF	51207-31-9	1.17	U	1.17	0.0423	1
11031	12378-PeCDF	57117-41-6	0.0817	JBQ	5.84	0.0284	1
11031	23478-PeCDF	57117-31-4	0.0483	JQ	5.84	0.0262	1
11031	123478-HxCDF	70648-26-9	0.0321	JBQ	5.84	0.0176	1
11031	123678-HxCDF	57117-44-9	0.0280	JBQ	5.84	0.0184	1
11031	123789-HxCDF	72918-21-9	5.84	U	5.84	0.0213	1
11031	234678-HxCDF	60851-34-5	5.84	U	5.84	0.0174	1
11031	1234678-HpCDF	67562-39-4	0.0503	JBQ	5.84	0.0157	1
11031	1234789-HpCDF	55673-89-7	0.0313	JQ	5.84	0.0211	1
11031	OCDF	39001-02-0	0.0655	JBQ	11.7	0.0593	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00765				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	58	26 - 123
13C12-234678-HxCDF	57	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155508
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 13:25 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56740 SDG#: PH087-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155508
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 13:25 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56740 SDG#: PH087-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 08:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/13/2013 03:07	Laura M Krieger	22.56
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322132004	08/09/2013 14:23	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322132004	08/09/2013 14:24	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 18:04	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132240016A	08/19/2013 23:30	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/15/2013 01:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132240016A	08/13/2013 16:25	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/15/2013 20:26	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 20:32	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06946	Barium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 18:07	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/21/2013 18:11	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155508
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 13:25 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56740 SDG#: PH087-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 06:56	Deborah A Krady	1
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 15:20	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 15:20	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 06:05	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 15:20	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:32	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13221039401A	08/09/2013 20:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155509
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 14:40 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56790 SDG#: PH087-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.37
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	42	U	42	14	1
10401	Dalapon	75-99-0	110	U	110	51	1
10401	2,4-DB	94-82-6	20	U	20	7.2	1
10401	Dicamba	1918-00-9	14	U	14	4.7	1
10401	Dinoseb	88-85-7	28	U	28	11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	20	U	20	11	1
10401	MCPA	94-74-6	2,900	U	2,900	890	1
10401	MCPP (Mecoprop)	93-65-2	2,900	U	2,900	880	1
10401	2,4,5-T	93-76-5	2.0	U	2.0	0.96	1
10401	2,4,5-TP	93-72-1	2.0	U	2.0	0.88	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.97	U	0.97	0.20	1
10590	Alpha BHC	319-84-6	0.97	U	0.97	0.20	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.97	U	0.97	0.20	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155509
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 14:40 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56790 SDG#: PH087-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	20	U	20	4.7	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.39	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.39	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.41	1
10590	Delta BHC	319-86-8	0.97	U	0.97	0.53	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.39	1
10590	Endosulfan I	959-98-8	0.97	U	0.97	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.39	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.39	1
10590	Endrin	72-20-8	2.0	U	2.0	0.39	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.39	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.70	1
10590	Heptachlor	76-44-8	0.97	U	0.97	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.97	U	0.97	0.20	1
10590	Methoxychlor	72-43-5	7.8	U	7.8	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.41	1
10590	Toxaphene	8001-35-2	39	U	39	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	39	U	39	12	1
10592	Aroclor 5442	12642-23-8	39	U	39	12	1
10592	Aroclor 5460	11126-42-4	39	U	39	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.9	1
10592	PCB-1221	11104-28-2	20	U	20	6.0	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.9	1
10592	PCB-1254	11097-69-1	20	U	20	5.2	1
10592	PCB-1260	11096-82-5	20	U	20	4.6	1
10592	PCB-1262	37324-23-5	20	U	20	3.9	1
10592	PCB-1268	11100-14-4	20	U	20	3.9	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	35,700		46.8	8.44	1
06944	Antimony	7440-36-0	4.68	U	4.68	0.867	1
06935	Arsenic	7440-38-2	4.77		4.68	0.820	1
06946	Barium	7440-39-3	120		1.17	0.0386	1
06947	Beryllium	7440-41-7	1.14	J	1.17	0.0785	1
07914	Boron	7440-42-8	6.76	J	11.7	0.984	1
06949	Cadmium	7440-43-9	1.28		1.17	0.0890	1
01650	Calcium	7440-70-2	13,400		23.4	3.91	1
06951	Chromium	7440-47-3	41.1		3.51	0.187	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155509
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 14:40 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56790 SDG#: PH087-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	10.9		1.17	0.116	1
06953	Copper	7440-50-8	19.1		2.34	0.340	1
01654	Iron	7439-89-6	36,100		234	21.2	5
06955	Lead	7439-92-1	10.3		3.51	0.585	1
01656	Lithium	7439-93-2	29.1		4.7	0.40	1
01657	Magnesium	7439-95-4	7,200		11.7	1.96	1
06958	Manganese	7439-96-5	354		1.17	0.0972	1
06960	Molybdenum	7439-98-7	2.34	U	2.34	0.199	1
06961	Nickel	7440-02-0	21.2		2.34	0.152	1
10145	Phosphorus	7723-14-0	180		11.7	3.38	1
01662	Potassium	7440-09-7	2,650		117	9.77	1
01667	Sodium	7440-23-5	247		117	19.6	1
06969	Tin	7440-31-5	3.86	J	11.7	0.258	1
06970	Titanium	7440-32-6	1,340		1.17	0.199	1
06971	Vanadium	7440-62-2	73.1		1.17	0.152	1
06972	Zinc	7440-66-6	63.1		4.68	0.234	1
10146	Zirconium	7440-67-7	3.81	J	5.85	0.984	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.468	U	0.468	0.117	2
06142	Silver	7440-22-4	0.0677	J	0.234	0.0304	2
06144	Strontium	7440-24-6	55.5		0.468	0.0796	2
06145	Thallium	7440-28-0	0.320		0.234	0.0351	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0136	J	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.06		0.0100	0.0100	1
	The pH was measured in water at 22.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155509
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 14:40 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56790 SDG#: PH087-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13225SLA026	08/15/2013 09:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13225SLA026	08/14/2013 08:30	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/13/2013 03:45	Laura M Krieger	24.37
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322132004	08/09/2013 14:25	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322132004	08/09/2013 14:25	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 18:31	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132240016A	08/19/2013 23:45	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132250001A	08/15/2013 02:08	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132250001A	08/13/2013 16:25	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132240016A	08/13/2013 16:25	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/16/2013 18:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06946	Barium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 18:15	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/21/2013 18:18	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 07:00	Deborah A Krady	1
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 15:22	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 15:22	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 06:10	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-567-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7155509
LL Group # 1410304
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/08/2013 14:40 by SM

Submitted: 08/09/2013 09:05
Reported: 08/22/2013 07:46

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

56790 SDG#: PH087-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 15:22	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:34	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13221039401A	08/09/2013 20:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410304
Reported: 08/22/13 at 07:46 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13225SLA026	Sample number(s): 7155505-7155509									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	105		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	116		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	107		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	111		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	115		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	101		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	111		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	108		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	105		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	104		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	105		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	109		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	107		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	108		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	88		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	110		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	100		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		79-112		
Batch number: 13224A16A	Sample number(s): 7155506,7155508-7155509									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	95		67-119		
Batch number: 13224A20A	Sample number(s): 7155504									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	102	102	75-135	0	30
Batch number: 132250009A	Sample number(s): 7155507-7155509									
2,4-D	36	U	36.	12	ug/kg	103		59-122		
Dalapon	90	U	90.	44	ug/kg	45		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	108		54-131		
Dicamba	12	U	12.	4.0	ug/kg	83		60-123		
Dinoseb	24	U	24.	9.0	ug/kg	12		10-36		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	132		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	85		60-127		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	93		54-134		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410304
Reported: 08/22/13 at 07:46 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	105		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	111		63-130		
Batch number: 132240016A	Sample number(s): 7155507-7155509									
Aldrin	0.83	U	0.83	0.17	ug/kg	96		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	104		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	107		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	103		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	106		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	107		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	101		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	108		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	106		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	101		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	107		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	112		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	95		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	100		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	112		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	98		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	104		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	105		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132250001A	Sample number(s): 7155505-7155509									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	76	73	36-106	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	97		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	102		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132260015A	Sample number(s): 7155505-7155509									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	101		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	103		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	105		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	73		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	92		49-107		
Batch number: 132230637001	Sample number(s): 7155505-7155509									
Aluminum	9.14	J	40.0	7.21	mg/kg	97		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	101		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	101		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	98		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	101		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410304
Reported: 08/22/13 at 07:46 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Calcium	20.0 U	20.0	3.34	mg/kg	99		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	101		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	105		80-120		
Iron	40.0 U	40.0	3.62	mg/kg	96		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	101		80-120		
Lithium	4.0 U	4.0	0.34	mg/kg	96		80-120		
Magnesium	10.0 U	10.0	1.67	mg/kg	99		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	101		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	101		80-120		
Nickel	2.00 U	2.00	0.130	mg/kg	104		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	102		80-120		
Potassium	100 U	100.	8.34	mg/kg	98		80-120		
Sodium	100 U	100.	16.7	mg/kg	97		80-120		
Tin	1.77 J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00 U	1.00	0.130	mg/kg	102		80-120		
Zinc	4.00 U	4.00	0.200	mg/kg	100		80-120		
Zirconium	5.00 U	5.00	0.840	mg/kg	99		80-120		
Batch number: 132230637001A	Sample number(s): 7155505-7155509								
Silver	0.200 U	0.200	0.0260	mg/kg	108		80-120		
Strontium	0.400 U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	114		80-120		
Batch number: 132230637001B	Sample number(s): 7155505-7155509								
Selenium	0.400 U	0.400	0.100	mg/kg	103		80-120		
Batch number: 132310638001	Sample number(s): 7155505-7155509								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	102		85-120		
Batch number: 13221039401A	Sample number(s): 7155505-7155509								
15a pH by 9045D					99		95-105		
Batch number: 13226162401A	Sample number(s): 7155505-7155509								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13227001	Sample number(s): 7155505-7155508								
2378-TCDD	1.00 U	1.00	0.0760	ng/kg	99		67-158		
12378-PeCDD	0.0796 J	5.00	0.0681	ng/kg	103		70-142		
123478-HxCDD	5.00 U	5.00	0.0263	ng/kg	99		70-164		
123678-HxCDD	0.0344 J	5.00	0.0291	ng/kg	92		76-134		
123789-HxCDD	5.00 U	5.00	0.0306	ng/kg	94		64-162		
1234678-HpCDD	0.0682 J	5.00	0.0395	ng/kg	91		70-140		
OCDD	0.286 J	10.0	0.0305	ng/kg	91		78-144		
2378-TCDF	1.00 U	1.00	0.0678	ng/kg	98		75-158		
12378-PeCDF	0.0421 J	5.00	0.0314	ng/kg	95		80-134		
23478-PeCDF	0.0576 J	5.00	0.0324	ng/kg	93		68-160		
123478-HxCDF	0.0398 J	5.00	0.0242	ng/kg	94		72-134		
123678-HxCDF	0.0310 J	5.00	0.0233	ng/kg	93		84-130		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410304
Reported: 08/22/13 at 07:46 AM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123789-HxCDF	0.0558	J	5.00	0.0306	ng/kg	93		78-130		
234678-HxCDF	0.0316	J	5.00	0.0229	ng/kg	93		70-156		
1234678-HpCDF	0.0368	J	5.00	0.0134	ng/kg	93		82-122		
1234789-HpCDF	5.00	U	5.00	0.0225	ng/kg	91		78-138		
OCDF	0.112	J	10.0	0.0583	ng/kg	90		63-170		
TEQ WHO 2005 - EDLx0.0	0.0110				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13225SLA026	Sample number(s): 7155505-7155509 UNSPK: P152828								
Acenaphthene	96	97	48-127	2	30				
Acenaphthylene	101	103	49-121	2	30				
Anthracene	100	102	52-126	3	30				
Benzo(a)anthracene	96	98	44-143	3	30				
Benzo(a)pyrene	90	92	44-140	2	30				
Benzo(b)fluoranthene	124	124	26-142	2	30				
Benzo(e)pyrene	94	96	70-130	3	30				
Benzo(g,h,i)perylene	43	42	33-141	1	30				
Benzo(k)fluoranthene	97	98	54-142	3	30				
Butylbenzylphthalate	149	145	49-151	2	30				
Di-n-butylphthalate	125	130	52-147	4	30				
Chrysene	93	95	29-148	3	30				
Dibenz(a,h)anthracene	56	55	20-137	1	30				
Diethylphthalate	107	109	43-145	3	30				
Dimethylphthalate	102	104	58-129	2	30				
Bis(2-Ethylhexyl)phthalate	133	129	39-167	2	30				
Fluoranthene	99	103	40-148	4	30				
Fluorene	98	100	51-137	3	30				
Indeno(1,2,3-cd)pyrene	54	53	17-136	0	30				
1-Methylnaphthalene	103	107	50-131	5	30				
2-Methylnaphthalene	102	105	35-152	4	30				
Naphthalene	96	99	31-148	3	30				
N-Nitrosodimethylamine	94	95	48-113	2	30				
Di-n-octylphthalate	184*	183*	52-162	0	30				
Phenanthrene	94	97	29-142	4	30				
Pyrene	106	109	26-143	3	30				
Batch number: 13224A16A	Sample number(s): 7155506,7155508-7155509 UNSPK: P156754								
11a TPH by EPA 8015B GRO	64	77	39-118	30	30				
Batch number: 132250009A	Sample number(s): 7155507-7155509 UNSPK: P152828								
2,4-D	79	79	42-143	0	35				
Dalapon	29	0*	19-109	200*	50				
2,4-DB	121	116	10-179	4	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410304
Reported: 08/22/13 at 07:46 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dicamba	98	92	45-147	6	50				
Dinoseb	26	26	10-52	1	35				
2,4-DP (Dichlorprop)	133	130	32-171	2	50				
MCPA	94	89	23-169	5	50				
MCPP (Mecoprop)	82	82	24-164	1	50				
2,4,5-T	91	87	12-172	4	35				
2,4,5-TP	112	106	10-142	6	35				
Batch number: 132240016A	Sample number(s): 7155507-7155509 UNSPK: P154023								
Aldrin	92	99	16-126	7	50				
Alpha BHC	91	98	14-140	7	50				
Beta BHC	97	102	10-173	5	50				
Gamma BHC - Lindane	93	97	30-137	5	50				
p,p-DDD	91	101	43-149	10	50				
p,p-DDE	96	107	18-161	11	50				
p,p-DDT	89	97	12-193	8	50				
Delta BHC	93	97	13-153	4	50				
Dieldrin	90	98	19-154	8	50				
Endosulfan I	86	94	16-137	10	50				
Endosulfan II	89	99	10-156	10	50				
Endosulfan Sulfate	93	97	10-181	4	50				
Endrin	87	93	30-152	7	50				
Endrin Aldehyde	78	84	10-152	6	35				
Endrin Ketone	86	89	10-160	4	50				
Heptachlor	90	97	16-152	7	50				
Heptachlor Epoxide	92	98	17-167	7	50				
Methoxychlor	92	99	34-168	7	50				
Batch number: 132250001A	Sample number(s): 7155505-7155509 UNSPK: P152828								
PCB-1016	89	87	16-146	3	50				
PCB-1260	91	89	40-134	2	50				
Batch number: 132260015A	Sample number(s): 7155505-7155509 UNSPK: P156754								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	169*	117	49-123	37*	20				
EFH (C21-C30)	279*	-24*	49-123	109*	20				
EFH (C30-C40)	635*	9*	49-123	146*	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 132230637001	Sample number(s): 7155505-7155509 UNSPK: P156754 BKG: P156754								
Aluminum	1713 (2)	1700 (2)	75-125	0	20	17,100	17,600	3	20
Antimony	62*	64*	75-125	3	20	4.00 U	4.00 U	0 (1)	20
Arsenic	98	101	75-125	3	20	3.21 J	3.57 J	11 (1)	20
Barium	97	98	75-125	1	20	86.0	86.9	1	20
Beryllium	99	100	75-125	0	20	0.582 J	0.577 J	1 (1)	20
Boron	97	96	75-125	1	20	5.16 J	4.66 J	10 (1)	20
Cadmium	92	96	75-125	4	20	0.964 J	0.991 J	3 (1)	20
Calcium	278 (2)	401 (2)	75-125	4	20	12,500	21,400	52*	20
Chromium	106	108	75-125	1	20	24.6	25.5	4	20
Cobalt	89	92	75-125	3	20	6.23	5.94	5	20
Copper	106	106	75-125	0	20	14.5	14.2	2	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410304
Reported: 08/22/13 at 07:46 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Iron	329 (2)	571 (2)	75-125	1	20	22,600	22,700	0	20
Lead	92	97	75-125	4	20	5.84	6.00	3 (1)	20
Lithium	94	95	75-125	0	20	18.9	18.8	1 (1)	20
Magnesium	201 (2)	222 (2)	75-125	1	20	5,700	5,890	3	20
Manganese	0 (2)	38 (2)	75-125	6	20	293	271	8	20
Molybdenum	93	96	75-125	3	20	0.455 J	2.00 U	200* (1)	20
Nickel	90	95	75-125	5	20	13.8	13.7	0	20
Phosphorus	95	98	75-125	1	20	317	341	7	20
Potassium	137*	136*	75-125	0	20	1,620	1,600	1	20
Sodium	97	97	75-125	0	20	556	600	8	20
Tin	86	89	75-125	3	20	2.98 J	3.08 J	3 (1)	20
Titanium	309 (2)	289 (2)	75-125	1	20	1,270	1,250	1	20
Vanadium	107	109	75-125	1	20	45.1	46.0	2	20
Zinc	96	102	75-125	3	20	48.4	48.7	1	20
Zirconium	95	96	75-125	1	20	2.26 J	4.02 J	56* (1)	20
Batch number: 132230637001A	Sample number(s): 7155505-7155509 UNSPK: P156754 BKG: P156754								
Silver	104	102	75-125	1	20	0.0490 J	0.200 U	200* (1)	20
Strontium	136*	116	75-125	4	20	28.3	30.5	8	20
Thallium	104	109	75-125	3	20	0.216	0.226	4 (1)	20
Batch number: 132230637001B	Sample number(s): 7155505-7155509 UNSPK: P156754 BKG: P156754								
Selenium	100	99	75-125	1	20	0.400 U	0.400 U	0 (1)	20
Batch number: 132310638001	Sample number(s): 7155505-7155509 UNSPK: P156754 BKG: P156754								
3a Mercury 7471A	112	111	65-135	1	20	0.0162 U	0.0160 U	0 (1)	20
Batch number: 13221039401A	Sample number(s): 7155505-7155509 BKG: 7155505								
15a pH by 9045D						7.50	7.52	0	3
Batch number: 13226162401A	Sample number(s): 7155505-7155509 BKG: P156754								
14a Moisture Content by 160.3						11.9	12.1	2	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13225SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7155505	84	92	105
7155506	88	95	98
7155507	87	94	101
7155508	87	95	99
7155509	91	98	103
Blank	74	81	88

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410304
Reported: 08/22/13 at 07:46 AM

Surrogate Quality Control

LCS	90	98	105
MS	88	88	101
MSD	87	89	105
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13224A16A

	Trifluorotoluene-F
7155506	67
7155508	79
7155509	71
Blank	78
LCS	83
MS	67
MSD	76
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13224A20A

	Trifluorotoluene-F
7155504	86
Blank	86
LCS	122
LCSD	116
Limits:	63-135

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132240016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7155507	97	95
7155508	104	104
7155509	100	109
Blank	105	125*
LCS	107	124*
MS	95	91
MSD	102	98
Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132250001A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7155505	109	99
7155506	105	105
7155507	105	90
7155508	106	96
7155509	110	105
Blank	109	109
LCS	105	106

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410304
Reported: 08/22/13 at 07:46 AM

Surrogate Quality Control

LCSD	113	115
MS	101	96
MSD	95	92
Limits:	45-120	45-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132250009A

	2,4-Dichlorophenylacetic acid
7155507	62
7155508	58
7155509	56
Blank	61
LCS	71
MS	66
MSD	64
Limits:	50-150

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132260015A

	Chlorobenzene	Orthoterphenyl
7155505	91	97
7155506	96	77
7155507	88	72
7155508	90	81
7155509	93	75
Blank	97	103
LCS	101	107
MS	103	111
MSD	97	101
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13227001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7155505	77	86	63	69	67	81
7155506	64	78	61	68	64	65
7155507	77	95	67	70	72	82
7155508	64	78	56	58	57	63
Blank	66	76	61	69	68	69
OPR	60	76	54	57	59	66
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7155505	77	79	71	87	72	78
7155506	75	67	64	80	70	74
7155507	77	84	80	100	77	82
7155508	72	67	62	79	67	71

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410304
Reported: 08/22/13 at 07:46 AM

Surrogate Quality Control

Blank	81	64	60	81	73	81
OPR	68	59	54	77	66	69
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7155505	76	87	89	74	89	
7155506	75	80	80	64	79	
7155507	82	92	89	83	98	
7155508	70	79	80	65	76	
Blank	78	83	79	63	82	
OPR	69	73	68	56	73	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1410304 7155504-09

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/8/2013
CarrierName: FedEx
AirbillNo: 796424999600

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130808-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9040 (Water)	pH 9045 (Soil)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-080813	8/8/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-565-SA8-SB-0.0-0.5	8/8/13 07:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-565-SA8-SB-0.0-0.5	8/8/13 07:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-565-SA8-SB-4.0-5.0	8/8/13 08:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-565-SA8-SB-4.0-5.0	8/8/13 08:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-565-SA8-SB-4.0-5.0	8/8/13 08:30	SO	None	2 - Encore	10 day																			X												
SL-567-SA8-SB-0.0-0.5	8/8/13 12:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X	X			X											
SL-567-SA8-SB-0.0-0.5	8/8/13 12:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-567-SA8-SB-4.0-5.0	8/8/13 13:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X	X			X											
SL-567-SA8-SB-4.0-5.0	8/8/13 13:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-567-SA8-SB-4.0-5.0	8/8/13 13:25	SO	None	2 - Encore	10 day																			X												
SL-567-SA8-SB-9.0-10.0	8/8/13 14:40	SO	None	1 - SS-Sleeve	10 day	X	X					X			X						X	X			X											
SL-567-SA8-SB-9.0-10.0	8/8/13 14:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-567-SA8-SB-9.0-10.0	8/8/13 14:40	SO	None	2 - Encore	10 day																			X												
SL-567-SA8-SB-9.0-10.0	8/8/13 14:40	SO	None	1 - 16 oz glass	10 day	X	X					X			X						X	X			X											

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	08/08/2013	1600									
										8/9/13	0905

COC Rev 2

COC: 20130808-01, Page 1 of 1

1 of 1

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1410304

Client/Project: CDM Smith

Date of Receipt: 8/9/13

Time of Receipt: 0905

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.9	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: ∅

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3647 **Date/Time:** 8/9/13 0927

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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SAMPLE DELIVERY GROUP

PH088

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 28, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/10/2013
Group Number: 1410581
SDG: PH088
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-080913 Water	7156752
SL-530-SA8-SB-0.0-0.5 Soil	7156753
SL-530-SA8-SB-4.0-5.0 Soil	7156754
SL-530-SA8-SB-4.0-5.0MS Soil	7156755
SL-530-SA8-SB-4.0-5.0MSD Soil	7156756
SL-530-SA8-SB-4.0-5.0DUP Soil	7156757
SL-830-SA8-SB-4.0-5.0 Soil	7156758
SL-538-SA8-SB-0.0-0.5 Soil	7156759
SL-538-SA8-SB-4.0-5.0 Soil	7156760
SL-538-SA8-SB-4.0-5.0MS Soil	7156761
SL-538-SA8-SB-4.0-5.0MSD Soil	7156762
SL-538-SA8-SB-4.0-5.0DUP Soil	7156763
SL-838-SA8-SB-4.0-5.0 Soil	7156764
SL-541-SA8-SB-0.0-0.5 Soil	7156765
SL-541-SA8-SB-4.0-5.0 Soil	7156766
SL-607-SA8-SB-0.0-0.5 Soil	7156767
SL-607-SA8-SB-5.0-6.0 Soil	7156768

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB-080913 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7156752
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 08:00

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

530-T SDG#: PH088-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13224A20A	08/12/2013 13:28	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13224A20A	08/12/2013 13:28	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156753
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:25 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53000 SDG#: PH088-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.3	J	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.4	J	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	3.0		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.2	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.2	J	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	6.4		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	3.4		1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.97	J	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	2.0		1.8	0.70	1
12969	Naphthalene	91-20-3	2.6		1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	2.6		1.8	0.70	1
12969	Pyrene	129-00-0	2.9		1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18		18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	2.7	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	18		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	39		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156753
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:25 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53000 SDG#: PH088-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,800		40.9	7.37	1
06944	Antimony	7440-36-0	4.09	U	4.09	0.756	1
06935	Arsenic	7440-38-2	4.74		4.09	0.715	1
06946	Barium	7440-39-3	111		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.827	J	1.02	0.0685	1
07914	Boron	7440-42-8	10.9		10.2	0.858	1
06949	Cadmium	7440-43-9	1.36		1.02	0.0777	1
01650	Calcium	7440-70-2	21,900		20.4	3.41	1
06951	Chromium	7440-47-3	35.2		3.07	0.163	1
06952	Cobalt	7440-48-4	10.5		1.02	0.101	1
06953	Copper	7440-50-8	21.8		2.04	0.296	1
01654	Iron	7439-89-6	30,800		204	18.5	5
06955	Lead	7439-92-1	12.9		3.07	0.511	1
01656	Lithium	7439-93-2	20.8		4.1	0.35	1
01657	Magnesium	7439-95-4	6,920		10.2	1.71	1
06958	Manganese	7439-96-5	569		1.02	0.0848	1
06960	Molybdenum	7439-98-7	0.344	J	2.04	0.174	1
06961	Nickel	7440-02-0	18.4		2.04	0.133	1
10145	Phosphorus	7723-14-0	567		10.2	2.95	1
01662	Potassium	7440-09-7	5,640		102	8.52	1
01667	Sodium	7440-23-5	107		102	17.1	1
06969	Tin	7440-31-5	3.29	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,350		1.02	0.174	1
06971	Vanadium	7440-62-2	63.8		1.02	0.133	1
06972	Zinc	7440-66-6	71.6		4.09	0.204	1
10146	Zirconium	7440-67-7	3.40	J	5.11	0.858	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.288	J	0.409	0.102	2
06142	Silver	7440-22-4	0.0433	J	0.204	0.0266	2
06144	Strontium	7440-24-6	48.5		0.409	0.0695	2
06145	Thallium	7440-28-0	0.326		0.204	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0318		0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.27		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156753
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:25 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53000 SDG#: PH088-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0335	1
11031	12378-PeCDD	40321-76-4	0.0754	JB	5.13	0.0553	1
11031	123478-HxCDD	39227-28-6	0.144	J	5.13	0.0346	1
11031	123678-HxCDD	57653-85-7	0.316	JB	5.13	0.0378	1
11031	123789-HxCDD	19408-74-3	0.292	J	5.13	0.0372	1
11031	1234678-HpCDD	35822-46-9	5.30	B	5.13	0.0662	1
11031	OCDD	3268-87-9	44.9	B	10.3	0.0316	1
11031	2378-TCDF	51207-31-9	0.226	J	1.03	0.0643	1
11031	12378-PeCDF	57117-41-6	1.02	JB	5.13	0.0401	1
11031	23478-PeCDF	57117-31-4	0.138	JB	5.13	0.0377	1
11031	123478-HxCDF	70648-26-9	0.154	JB	5.13	0.0235	1
11031	123678-HxCDF	57117-44-9	0.177	JB	5.13	0.0232	1
11031	123789-HxCDF	72918-21-9	0.150	JB	5.13	0.0266	1
11031	234678-HxCDF	60851-34-5	0.127	JBQ	5.13	0.0218	1
11031	1234678-HpCDF	67562-39-4	0.964	JB	5.13	0.0288	1
11031	1234789-HpCDF	55673-89-7	0.108	J	5.13	0.0365	1
11031	OCDF	39001-02-0	2.73	JB	10.3	0.0360	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.371				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156753
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:25 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53000 SDG#: PH088-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156753
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:25 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53000 SDG#: PH088-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLE026	08/16/2013 10:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLE026	08/15/2013 08:45	Anna E Stager	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270006A	08/16/2013 13:26	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270006A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/15/2013 22:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 21:29	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06946	Barium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 18:22	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/21/2013 18:26	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 07:04	Deborah A Krady	1
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 15:25	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 15:25	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 06:12	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 15:25	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156753
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:25 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53000 SDG#: PH088-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:36	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401A	08/10/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156754
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	0.48	J	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.56
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156754
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	7.1		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	6.1	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,400		45.4	8.18	1
06944	Antimony	7440-36-0	4.54	U	4.54	0.840	1
06935	Arsenic	7440-38-2	3.64	J	4.54	0.795	1
06946	Barium	7440-39-3	97.6		1.14	0.0375	1
06947	Beryllium	7440-41-7	0.661	J	1.14	0.0760	1
07914	Boron	7440-42-8	5.86	J	11.4	0.953	1
06949	Cadmium	7440-43-9	1.09	J	1.14	0.0863	1
01650	Calcium	7440-70-2	14,200		22.7	3.79	1
06951	Chromium	7440-47-3	27.9		3.41	0.182	1
06952	Cobalt	7440-48-4	7.07		1.14	0.112	1
06953	Copper	7440-50-8	16.4		2.27	0.329	1
01654	Iron	7439-89-6	25,600		45.4	4.11	1
06955	Lead	7439-92-1	6.63		3.41	0.568	1
01656	Lithium	7439-93-2	21.5		4.5	0.39	1
01657	Magnesium	7439-95-4	6,470		11.4	1.90	1
06958	Manganese	7439-96-5	332		1.14	0.0942	1
06960	Molybdenum	7439-98-7	0.516	J	2.27	0.193	1
06961	Nickel	7440-02-0	15.6		2.27	0.148	1
10145	Phosphorus	7723-14-0	360		11.4	3.28	1
01662	Potassium	7440-09-7	1,840		114	9.47	1
01667	Sodium	7440-23-5	631		114	19.0	1
06969	Tin	7440-31-5	3.38	J	11.4	0.250	1
06970	Titanium	7440-32-6	1,440		1.14	0.193	1
06971	Vanadium	7440-62-2	51.2		1.14	0.148	1
06972	Zinc	7440-66-6	54.9		4.54	0.227	1
10146	Zirconium	7440-67-7	2.57	J	5.68	0.953	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.454	U	0.454	0.114	2
06142	Silver	7440-22-4	0.0556	J	0.227	0.0295	2
06144	Strontium	7440-24-6	32.1		0.454	0.0772	2
06145	Thallium	7440-28-0	0.245		0.227	0.0341	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184	U	0.0184	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.41		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156754
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156754
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0439	1
11031	12378-PeCDD	40321-76-4	5.46	U	5.46	0.0499	1
11031	123478-HxCDD	39227-28-6	5.46	U	5.46	0.0232	1
11031	123678-HxCDD	57653-85-7	5.46	U	5.46	0.0258	1
11031	123789-HxCDD	19408-74-3	0.0392	JQ	5.46	0.0250	1
11031	1234678-HpCDD	35822-46-9	0.252	JBQ	5.46	0.0361	1
11031	OCDD	3268-87-9	1.59	JB	10.9	0.0277	1
11031	2378-TCDF	51207-31-9	1.09	U	1.09	0.0337	1
11031	12378-PeCDF	57117-41-6	0.0519	JBQ	5.46	0.0222	1
11031	23478-PeCDF	57117-31-4	0.0416	JBQ	5.46	0.0204	1
11031	123478-HxCDF	70648-26-9	5.46	U	5.46	0.0126	1
11031	123678-HxCDF	57117-44-9	5.46	U	5.46	0.0138	1
11031	123789-HxCDF	72918-21-9	0.0236	JBQ	5.46	0.0161	1
11031	234678-HxCDF	60851-34-5	0.0159	JBQ	5.46	0.0120	1
11031	1234678-HpCDF	67562-39-4	0.0604	JBQ	5.46	0.0148	1
11031	1234789-HpCDF	55673-89-7	0.0212	JQ	5.46	0.0199	1
11031	OCDF	39001-02-0	0.158	JBQ	10.9	0.0325	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.000454				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156754
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156754
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLE026	08/16/2013 08:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLE026	08/15/2013 08:45	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/12/2013 23:57	Laura M Krieger	22.56
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322232014	08/10/2013 12:42	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322232014	08/10/2013 12:42	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270006A	08/16/2013 13:45	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270006A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/15/2013 20:47	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 22:25	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06946	Barium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 17:15	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 06:14	Deborah A Krady	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156754
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 14:55	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 14:55	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 05:49	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 14:55	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:38	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401A	08/10/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156755
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	39		1.9	0.75	1
12969	Acenaphthylene	208-96-8	40		1.9	0.37	1
12969	Anthracene	120-12-7	40		1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	39		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	39		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	41		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	35		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	39		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	40		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	47		20	6.7	1
12969	Di-n-butylphthalate	84-74-2	46		20	6.7	1
12969	Chrysene	218-01-9	40		1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	42		1.9	0.75	1
12969	Diethylphthalate	84-66-2	42		20	6.7	1
12969	Dimethylphthalate	131-11-3	41		20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	49		20	6.7	1
12969	Fluoranthene	206-44-0	38		1.9	0.75	1
12969	Fluorene	86-73-7	40		1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	41		1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	41		1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	41		1.9	0.75	1
12969	Naphthalene	91-20-3	39		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	37		1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	44		20	6.7	1
12969	Phenanthrene	85-01-8	39		1.9	0.75	1
12969	Pyrene	129-00-0	38		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	7.2		1.0	0.2	22.48
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	170		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	180		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	4.8	J	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156755
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	20		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	42		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,300		45.4	8.18	1
06944	Antimony	7440-36-0	35.2		4.54	0.840	1
06935	Arsenic	7440-38-2	20.3		4.54	0.795	1
06946	Barium	7440-39-3	317		1.14	0.0375	1
06947	Beryllium	7440-41-7	6.29		1.14	0.0760	1
07914	Boron	7440-42-8	227		11.4	0.953	1
06949	Cadmium	7440-43-9	6.30		1.14	0.0863	1
01650	Calcium	7440-70-2	15,500		22.7	3.79	1
06951	Chromium	7440-47-3	52.1		3.41	0.182	1
06952	Cobalt	7440-48-4	57.7		1.14	0.112	1
06953	Copper	7440-50-8	46.4		2.27	0.329	1
01654	Iron	7439-89-6	26,000		45.4	4.11	1
06955	Lead	7439-92-1	22.3		3.41	0.568	1
01656	Lithium	7439-93-2	129		4.5	0.39	1
01657	Magnesium	7439-95-4	6,930		11.4	1.90	1
06958	Manganese	7439-96-5	333		1.14	0.0942	1
06960	Molybdenum	7439-98-7	212		2.27	0.193	1
06961	Nickel	7440-02-0	66.5		2.27	0.148	1
10145	Phosphorus	7723-14-0	467		11.4	3.28	1
01662	Potassium	7440-09-7	3,390		114	9.47	1
01667	Sodium	7440-23-5	1,730		114	19.0	1
06969	Tin	7440-31-5	394		11.4	0.250	1
06970	Titanium	7440-32-6	1,790		1.14	0.193	1
06971	Vanadium	7440-62-2	112		1.14	0.148	1
06972	Zinc	7440-66-6	109		4.54	0.227	1
10146	Zirconium	7440-67-7	110		5.68	0.953	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.26		0.454	0.114	2
06142	Silver	7440-22-4	11.9		0.227	0.0295	2
06144	Strontium	7440-24-6	44.5		0.454	0.0772	2
06145	Thallium	7440-28-0	0.718		0.227	0.0341	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.207		0.0185	0.0111	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	11.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156755
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.4		1.09	0.0682	1
11031	12378-PeCDD	40321-76-4	113	B	5.46	0.0955	1
11031	123478-HxCDD	39227-28-6	108		5.46	0.0516	1
11031	123678-HxCDD	57653-85-7	107	B	5.46	0.0589	1
11031	123789-HxCDD	19408-74-3	103		5.46	0.0555	1
11031	1234678-HpCDD	35822-46-9	102	B	5.46	0.0814	1
11031	OCDD	3268-87-9	210	B	10.9	0.0465	1
11031	2378-TCDF	51207-31-9	21.8		1.09	0.0656	1
11031	12378-PeCDF	57117-41-6	102	B	5.46	0.0563	1
11031	23478-PeCDF	57117-31-4	103	B	5.46	0.0503	1
11031	123478-HxCDF	70648-26-9	104	B	5.46	0.0669	1
11031	123678-HxCDF	57117-44-9	101	B	5.46	0.0682	1
11031	123789-HxCDF	72918-21-9	97.3	B	5.46	0.0730	1
11031	234678-HxCDF	60851-34-5	101	B	5.46	0.0649	1
11031	1234678-HpCDF	67562-39-4	100	B	5.46	0.0561	1
11031	1234789-HpCDF	55673-89-7	98.4		5.46	0.0659	1
11031	OCDF	39001-02-0	188	B	10.9	0.0473	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	70	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156755
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLE026	08/16/2013 09:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLE026	08/15/2013 08:45	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/13/2013 00:35	Laura M Krieger	22.48
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322232014	08/10/2013 12:42	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322232014	08/10/2013 12:43	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270006A	08/16/2013 14:03	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270006A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/16/2013 00:13	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/17/2013 23:22	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06946	Barium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 17:26	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 06:26	Deborah A Krady	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156755
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 15:02	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 15:02	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 05:55	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 15:02	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:50	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156756
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	37		1.9	0.75	1
12969	Acenaphthylene	208-96-8	39		1.9	0.37	1
12969	Anthracene	120-12-7	39		1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	37		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	38		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	39		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	34		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	38		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	38		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	45		20	6.7	1
12969	Di-n-butylphthalate	84-74-2	44		20	6.7	1
12969	Chrysene	218-01-9	38		1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	40		1.9	0.75	1
12969	Diethylphthalate	84-66-2	41		20	6.7	1
12969	Dimethylphthalate	131-11-3	40		20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	46		20	6.7	1
12969	Fluoranthene	206-44-0	38		1.9	0.75	1
12969	Fluorene	86-73-7	38		1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	40		1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	40		1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	40		1.9	0.75	1
12969	Naphthalene	91-20-3	38		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	44		20	6.7	1
12969	Phenanthrene	85-01-8	38		1.9	0.75	1
12969	Pyrene	129-00-0	37		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	9.7		1.1	0.2	25.3
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	160		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.8	1
10592	PCB-1232	11141-16-5	19	U	19	4.7	1
10592	PCB-1242	53469-21-9	19	U	19	4.7	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	170		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	3.3	J	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156756
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.9		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	6.6	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,200		45.4	8.18	1
06944	Antimony	7440-36-0	36.1		4.54	0.840	1
06935	Arsenic	7440-38-2	20.9		4.54	0.795	1
06946	Barium	7440-39-3	320		1.14	0.0375	1
06947	Beryllium	7440-41-7	6.31		1.14	0.0760	1
07914	Boron	7440-42-8	225		11.4	0.953	1
06949	Cadmium	7440-43-9	6.55		1.14	0.0863	1
01650	Calcium	7440-70-2	16,000		22.7	3.79	1
06951	Chromium	7440-47-3	52.6		3.41	0.182	1
06952	Cobalt	7440-48-4	59.4		1.14	0.112	1
06953	Copper	7440-50-8	46.6		2.27	0.329	1
01654	Iron	7439-89-6	26,300		45.4	4.11	1
06955	Lead	7439-92-1	23.2		3.41	0.568	1
01656	Lithium	7439-93-2	129		4.5	0.39	1
01657	Magnesium	7439-95-4	6,970		11.4	1.90	1
06958	Manganese	7439-96-5	354		1.14	0.0942	1
06960	Molybdenum	7439-98-7	218		2.27	0.193	1
06961	Nickel	7440-02-0	69.7		2.27	0.148	1
10145	Phosphorus	7723-14-0	471		11.4	3.28	1
01662	Potassium	7440-09-7	3,380		114	9.47	1
01667	Sodium	7440-23-5	1,740		114	19.0	1
06969	Tin	7440-31-5	406		11.4	0.250	1
06970	Titanium	7440-32-6	1,770		1.14	0.193	1
06971	Vanadium	7440-62-2	113		1.14	0.148	1
06972	Zinc	7440-66-6	113		4.54	0.227	1
10146	Zirconium	7440-67-7	111		5.68	0.953	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.24		0.454	0.114	2
06142	Silver	7440-22-4	11.7		0.227	0.0295	2
06144	Strontium	7440-24-6	42.6		0.454	0.0772	2
06145	Thallium	7440-28-0	0.742		0.227	0.0341	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.205		0.0185	0.0111	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	11.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156756
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.9		1.12	0.105	1
11031	12378-PeCDD	40321-76-4	116	B	5.60	0.118	1
11031	123478-HxCDD	39227-28-6	114		5.60	0.0664	1
11031	123678-HxCDD	57653-85-7	104	B	5.60	0.0748	1
11031	123789-HxCDD	19408-74-3	106		5.60	0.0742	1
11031	1234678-HpCDD	35822-46-9	104	B	5.60	0.0944	1
11031	OCDD	3268-87-9	208	B	11.2	0.0479	1
11031	2378-TCDF	51207-31-9	22.0		1.12	0.0915	1
11031	12378-PeCDF	57117-41-6	107	B	5.60	0.0858	1
11031	23478-PeCDF	57117-31-4	108	B	5.60	0.0813	1
11031	123478-HxCDF	70648-26-9	105	B	5.60	0.0884	1
11031	123678-HxCDF	57117-44-9	106	B	5.60	0.0905	1
11031	123789-HxCDF	72918-21-9	102	B	5.60	0.106	1
11031	234678-HxCDF	60851-34-5	99.0	B	5.60	0.0856	1
11031	1234678-HpCDF	67562-39-4	103	B	5.60	0.0938	1
11031	1234789-HpCDF	55673-89-7	102		5.60	0.130	1
11031	OCDF	39001-02-0	191	B	11.2	0.0813	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	56	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156756
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLE026	08/16/2013 09:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLE026	08/15/2013 08:45	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/13/2013 01:13	Laura M Krieger	25.3
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322232014	08/10/2013 12:43	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322232014	08/10/2013 12:43	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270006A	08/16/2013 14:21	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270006A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/15/2013 21:28	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/18/2013 00:19	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06946	Barium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 17:30	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 06:29	Deborah A Krady	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156756
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 15:04	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 15:04	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 05:56	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 15:04	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:52	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156757
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,000		45.4	8.18	1
06944	Antimony	7440-36-0	4.54	U	4.54	0.840	1
06935	Arsenic	7440-38-2	4.05	J	4.54	0.795	1
06946	Barium	7440-39-3	98.6		1.14	0.0375	1
06947	Beryllium	7440-41-7	0.655	J	1.14	0.0760	1
07914	Boron	7440-42-8	5.28	J	11.4	0.953	1
06949	Cadmium	7440-43-9	1.12	J	1.14	0.0863	1
01650	Calcium	7440-70-2	24,300		22.7	3.79	1
06951	Chromium	7440-47-3	29.0		3.41	0.182	1
06952	Cobalt	7440-48-4	6.74		1.14	0.112	1
06953	Copper	7440-50-8	16.2		2.27	0.329	1
01654	Iron	7439-89-6	25,700		45.4	4.11	1
06955	Lead	7439-92-1	6.80		3.41	0.568	1
01656	Lithium	7439-93-2	21.3		4.5	0.39	1
01657	Magnesium	7439-95-4	6,690		11.4	1.90	1
06958	Manganese	7439-96-5	307		1.14	0.0942	1
06960	Molybdenum	7439-98-7	2.27	U	2.27	0.193	1
06961	Nickel	7440-02-0	15.5		2.27	0.148	1
10145	Phosphorus	7723-14-0	387		11.4	3.28	1
01662	Potassium	7440-09-7	1,820		114	9.47	1
01667	Sodium	7440-23-5	681		114	19.0	1
06969	Tin	7440-31-5	3.50	J	11.4	0.250	1
06970	Titanium	7440-32-6	1,420		1.14	0.193	1
06971	Vanadium	7440-62-2	52.3		1.14	0.148	1
06972	Zinc	7440-66-6	55.3		4.54	0.227	1
10146	Zirconium	7440-67-7	4.56	J	5.68	0.953	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.454	U	0.454	0.114	2
06142	Silver	7440-22-4	0.227	U	0.227	0.0295	2
06144	Strontium	7440-24-6	34.6		0.454	0.0772	2
06145	Thallium	7440-28-0	0.256		0.227	0.0341	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182	U	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.48		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	11.9		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	12.1		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156757
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:45 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53040 SDG#: PH088-03DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06946	Barium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 17:23	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 06:22	Deborah A Krady	1
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 14:59	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 14:59	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 05:53	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 14:59	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:48	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401A	08/10/2013 16:15	Clayton C Litchmore	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-830-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156758
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:50 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83040 SDG#: PH088-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.2	J	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.3	U	1.3	0.3	29.27
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-830-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156758
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:50 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83040 SDG#: PH088-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	4.8	J	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	4.8	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		44.3	7.99	1
06944	Antimony	7440-36-0	4.43	U	4.43	0.820	1
06935	Arsenic	7440-38-2	3.12	J	4.43	0.775	1
06946	Barium	7440-39-3	93.4		1.11	0.0365	1
06947	Beryllium	7440-41-7	0.631	J	1.11	0.0742	1
07914	Boron	7440-42-8	4.11	J	11.1	0.930	1
06949	Cadmium	7440-43-9	0.964	J	1.11	0.0842	1
01650	Calcium	7440-70-2	7,280		22.1	3.70	1
06951	Chromium	7440-47-3	23.7		3.32	0.177	1
06952	Cobalt	7440-48-4	6.66		1.11	0.110	1
06953	Copper	7440-50-8	13.2		2.21	0.321	1
01654	Iron	7439-89-6	23,300		44.3	4.01	1
06955	Lead	7439-92-1	6.18		3.32	0.554	1
01656	Lithium	7439-93-2	18.9		4.4	0.38	1
01657	Magnesium	7439-95-4	5,570		11.1	1.85	1
06958	Manganese	7439-96-5	373		1.11	0.0919	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	16.2		2.21	0.144	1
10145	Phosphorus	7723-14-0	281		11.1	3.20	1
01662	Potassium	7440-09-7	1,440		111	9.24	1
01667	Sodium	7440-23-5	538		111	18.5	1
06969	Tin	7440-31-5	3.25	J	11.1	0.244	1
06970	Titanium	7440-32-6	1,170		1.11	0.188	1
06971	Vanadium	7440-62-2	43.5		1.11	0.144	1
06972	Zinc	7440-66-6	46.7		4.43	0.221	1
10146	Zirconium	7440-67-7	2.39	J	5.54	0.930	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.443	U	0.443	0.111	2
06142	Silver	7440-22-4	0.0357	J	0.221	0.0288	2
06144	Strontium	7440-24-6	25.1		0.443	0.0753	2
06145	Thallium	7440-28-0	0.212	J	0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0181	U	0.0181	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.1 C.	n.a.	8.72		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-830-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156758
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:50 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83040 SDG#: PH088-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-830-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156758
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:50 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83040 SDG#: PH088-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0498	1
11031	12378-PeCDD	40321-76-4	5.46	U	5.46	0.0551	1
11031	123478-HxCDD	39227-28-6	0.0499	JQ	5.46	0.0267	1
11031	123678-HxCDD	57653-85-7	0.0902	JBQ	5.46	0.0289	1
11031	123789-HxCDD	19408-74-3	0.0771	JQ	5.46	0.0285	1
11031	1234678-HpCDD	35822-46-9	0.146	JB	5.46	0.0318	1
11031	OCDD	3268-87-9	0.845	JB	10.9	0.0318	1
11031	2378-TCDF	51207-31-9	1.09	U	1.09	0.0409	1
11031	12378-PeCDF	57117-41-6	0.0889	JB	5.46	0.0279	1
11031	23478-PeCDF	57117-31-4	0.0571	JBQ	5.46	0.0248	1
11031	123478-HxCDF	70648-26-9	0.0715	JBQ	5.46	0.0174	1
11031	123678-HxCDF	57117-44-9	0.0473	JBQ	5.46	0.0178	1
11031	123789-HxCDF	72918-21-9	0.0850	JB	5.46	0.0227	1
11031	234678-HxCDF	60851-34-5	0.0513	JBQ	5.46	0.0162	1
11031	1234678-HpCDF	67562-39-4	0.0572	JB	5.46	0.0158	1
11031	1234789-HpCDF	55673-89-7	0.0620	JQ	5.46	0.0205	1
11031	OCDF	39001-02-0	0.173	JBQ	10.9	0.0409	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0134				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-830-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156758
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:50 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83040 SDG#: PH088-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-830-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156758
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:50 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83040 SDG#: PH088-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/16/2013 12:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/13/2013 04:23	Laura M Krieger	29.27
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322232014	08/10/2013 12:45	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322232014	08/10/2013 12:45	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270006A	08/16/2013 14:40	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270006A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/15/2013 21:07	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/18/2013 01:15	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06946	Barium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 18:37	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-830-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156758
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 07:50 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83040 SDG#: PH088-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 07:08	Deborah A Krady	1
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 15:27	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 15:27	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 06:14	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 15:27	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:54	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401A	08/10/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156759
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:10 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53800 SDG#: PH088-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	0.80	J	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	0.86	J	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	2.0		1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.74	J	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	0.76	J	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	2.6		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	6.6	J	19	6.4	1
12969	Fluoranthene	206-44-0	2.7		1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	0.82	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.3	J	1.8	0.71	1
12969	Pyrene	129-00-0	2.4		1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	12		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	29		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156759
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:10 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53800 SDG#: PH088-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,100		41.6	7.50	1
06944	Antimony	7440-36-0	4.16	U	4.16	0.770	1
06935	Arsenic	7440-38-2	5.02		4.16	0.729	1
06946	Barium	7440-39-3	105		1.04	0.0343	1
06947	Beryllium	7440-41-7	0.851	J	1.04	0.0697	1
07914	Boron	7440-42-8	10.6		10.4	0.874	1
06949	Cadmium	7440-43-9	1.36		1.04	0.0791	1
01650	Calcium	7440-70-2	21,200		20.8	3.48	1
06951	Chromium	7440-47-3	37.3		3.12	0.167	1
06952	Cobalt	7440-48-4	8.86		1.04	0.103	1
06953	Copper	7440-50-8	21.8		2.08	0.302	1
01654	Iron	7439-89-6	33,900		208	18.8	5
06955	Lead	7439-92-1	16.1		3.12	0.520	1
01656	Lithium	7439-93-2	23.3		4.2	0.35	1
01657	Magnesium	7439-95-4	7,350		10.4	1.74	1
06958	Manganese	7439-96-5	443		1.04	0.0864	1
06960	Molybdenum	7439-98-7	0.282	J	2.08	0.177	1
06961	Nickel	7440-02-0	19.7		2.08	0.135	1
10145	Phosphorus	7723-14-0	537		10.4	3.01	1
01662	Potassium	7440-09-7	5,480		104	8.68	1
01667	Sodium	7440-23-5	93.6	J	104	17.4	1
06969	Tin	7440-31-5	3.26	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,380		1.04	0.177	1
06971	Vanadium	7440-62-2	68.5		1.04	0.135	1
06972	Zinc	7440-66-6	74.0		4.16	0.208	1
10146	Zirconium	7440-67-7	2.78	J	5.20	0.874	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.255	J	0.416	0.104	2
06142	Silver	7440-22-4	0.0589	J	0.208	0.0271	2
06144	Strontium	7440-24-6	43.4		0.416	0.0708	2
06145	Thallium	7440-28-0	0.345		0.208	0.0312	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0212		0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.53		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156759
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:10 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53800 SDG#: PH088-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0675	JQ	1.06	0.0397	1
11031	12378-PeCDD	40321-76-4	0.869	JB	5.29	0.0720	1
11031	123478-HxCDD	39227-28-6	1.26	J	5.29	0.0929	1
11031	123678-HxCDD	57653-85-7	11.5	B	5.29	0.0971	1
11031	123789-HxCDD	19408-74-3	3.32	J	5.29	0.0988	1
11031	1234678-HpCDD	35822-46-9	175	B	5.29	0.145	1
11031	OCDD	3268-87-9	1,280	B	10.6	0.0966	1
11031	2378-TCDF	51207-31-9	0.343	JQ	1.06	0.0892	1
11031	12378-PeCDF	57117-41-6	1.93	JB	5.29	0.0561	1
11031	23478-PeCDF	57117-31-4	0.615	JBQ	5.29	0.0537	1
11031	123478-HxCDF	70648-26-9	1.40	JB	5.29	0.0725	1
11031	123678-HxCDF	57117-44-9	1.17	JB	5.29	0.0727	1
11031	123789-HxCDF	72918-21-9	0.989	JB	5.29	0.0854	1
11031	234678-HxCDF	60851-34-5	1.98	JB	5.29	0.0684	1
11031	1234678-HpCDF	67562-39-4	14.5	B	5.29	0.0532	1
11031	1234789-HpCDF	55673-89-7	0.807	J	5.29	0.0747	1
11031	OCDF	39001-02-0	8.30	JB	10.6	0.0451	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	5.27				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	58	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156759
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:10 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53800 SDG#: PH088-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156759
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:10 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53800 SDG#: PH088-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/16/2013 13:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270006A	08/16/2013 14:58	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270006A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132260015A	08/15/2013 22:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132260015A	08/15/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13227001	08/18/2013 02:12	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13227001	08/15/2013 14:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06944	Antimony	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06935	Arsenic	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06946	Barium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06947	Beryllium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
07914	Boron	SW-846 6010C	1	132230637001	08/21/2013 18:44	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
01650	Calcium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06951	Chromium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06952	Cobalt	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06953	Copper	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
01654	Iron	SW-846 6010C	1	132230637001	08/21/2013 18:48	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
01656	Lithium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
01657	Magnesium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06958	Manganese	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06960	Molybdenum	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06961	Nickel	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
10145	Phosphorus	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
01662	Potassium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
01667	Sodium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06969	Tin	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06970	Titanium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06971	Vanadium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06972	Zinc	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
10146	Zirconium	SW-846 6010C	1	132230637001	08/20/2013 07:12	Deborah A Krady	1
06141	Selenium	SW-846 6020A	1	132230637001B	08/14/2013 15:29	David K Beck	2
06142	Silver	SW-846 6020A	1	132230637001A	08/14/2013 15:29	David K Beck	2
06144	Strontium	SW-846 6020A	1	132230637001A	08/19/2013 06:16	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156759
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:10 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53800 SDG#: PH088-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132230637001A	08/14/2013 15:29	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638001	08/20/2013 11:56	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637001	08/12/2013 23:01	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638001	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638001	08/20/2013 02:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401A	08/10/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401A	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156760
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.3	J	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	26.15
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156760
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,000		45.2	8.15	1
06944	Antimony	7440-36-0	4.52	U	4.52	0.837	1
06935	Arsenic	7440-38-2	6.65		4.52	0.792	1
06946	Barium	7440-39-3	96.2		1.13	0.0373	1
06947	Beryllium	7440-41-7	0.841	J	1.13	0.0758	1
07914	Boron	7440-42-8	8.87	J	11.3	0.950	1
06949	Cadmium	7440-43-9	1.13	U	1.13	0.0859	1
01650	Calcium	7440-70-2	31,300		22.6	3.78	1
06951	Chromium	7440-47-3	34.1		3.39	0.181	1
06952	Cobalt	7440-48-4	8.54		1.13	0.112	1
06953	Copper	7440-50-8	15.1		2.26	0.328	1
01654	Iron	7439-89-6	30,700		90.5	8.19	2
06955	Lead	7439-92-1	9.62		3.39	0.565	1
01656	Lithium	7439-93-2	25.4		4.5	0.38	1
01657	Magnesium	7439-95-4	7,020		11.3	1.89	1
06958	Manganese	7439-96-5	409		1.13	0.0939	1
06960	Molybdenum	7439-98-7	0.230	J	2.26	0.192	1
06961	Nickel	7440-02-0	17.8		2.26	0.147	1
10145	Phosphorus	7723-14-0	347		11.3	3.27	1
01662	Potassium	7440-09-7	3,340		113	9.43	1
01667	Sodium	7440-23-5	93.5	J	113	18.9	1
06969	Tin	7440-31-5	3.63	J	11.3	0.249	1
06970	Titanium	7440-32-6	1,580		2.26	0.384	2
06971	Vanadium	7440-62-2	62.0		1.13	0.147	1
06972	Zinc	7440-66-6	61.3		4.52	0.226	1
10146	Zirconium	7440-67-7	8.30		5.65	0.950	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.190	J	0.452	0.113	2
06142	Silver	7440-22-4	0.0323	J	0.226	0.0294	2
06144	Strontium	7440-24-6	47.2		0.452	0.0769	2
06145	Thallium	7440-28-0	0.411		0.226	0.0339	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0191	U	0.0191	0.0115	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.86		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156760
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156760
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.11	U	1.11	0.0502	1
11031	12378-PeCDD	40321-76-4	5.55	U	5.55	0.0467	1
11031	123478-HxCDD	39227-28-6	0.0716	JBQ	5.55	0.0420	1
11031	123678-HxCDD	57653-85-7	0.381	JB	5.55	0.0459	1
11031	123789-HxCDD	19408-74-3	0.179	JB	5.55	0.0445	1
11031	1234678-HpCDD	35822-46-9	6.07	B	5.55	0.0535	1
11031	OCDD	3268-87-9	56.6	B	11.1	0.0409	1
11031	2378-TCDF	51207-31-9	1.11	U	1.11	0.0439	1
11031	12378-PeCDF	57117-41-6	0.0709	JB	5.55	0.0278	1
11031	23478-PeCDF	57117-31-4	0.0502	JBQ	5.55	0.0247	1
11031	123478-HxCDF	70648-26-9	0.106	JB	5.55	0.0209	1
11031	123678-HxCDF	57117-44-9	0.107	JBQ	5.55	0.0213	1
11031	123789-HxCDF	72918-21-9	0.0716	JBQ	5.55	0.0255	1
11031	234678-HxCDF	60851-34-5	0.0895	JB	5.55	0.0194	1
11031	1234678-HpCDF	67562-39-4	0.543	JB	5.55	0.0173	1
11031	1234789-HpCDF	55673-89-7	0.0459	JBQ	5.55	0.0254	1
11031	OCDF	39001-02-0	0.552	JB	11.1	0.0337	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.161				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	95	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	95	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	102	24 - 185
13C12-23478-PeCDF	103	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	91	26 - 123
13C12-234678-HxCDF	93	28 - 136
13C12-123789-HxCDF	95	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	96	26 - 138
13C12-OCDF	91	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156760
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156760
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/16/2013 11:00	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13226A16A	08/14/2013 21:51	Laura M Krieger	26.15
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322232014	08/10/2013 13:06	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322232014	08/10/2013 13:06	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270007A	08/16/2013 17:45	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270007A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 03:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/22/2013 10:03	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06944	Antimony	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06946	Barium	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
07914	Boron	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
01650	Calcium	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06951	Chromium	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06953	Copper	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
01654	Iron	SW-846 6010C	1	132230637002	08/23/2013 00:50	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
01656	Lithium	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06958	Manganese	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06961	Nickel	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
01662	Potassium	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
01667	Sodium	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06969	Tin	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06970	Titanium	SW-846 6010C	1	132230637002	08/23/2013 00:50	John W Yanzuk II	2
06971	Vanadium	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06972	Zinc	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156760
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132230637002	08/22/2013 19:25	John P Hook	1
06141	Selenium	SW-846 6020A	1	132230637002B	08/16/2013 10:05	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132230637002A	08/16/2013 10:05	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132230637002A	08/16/2013 10:05	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637002A	08/16/2013 10:05	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638002	08/21/2013 11:09	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637002	08/12/2013 23:14	Annamaria Stipkovits	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132340637001	08/22/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638002	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638002	08/21/2013 04:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401B	08/10/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401B	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156761
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	37		1.9	0.77	1
12969	Acenaphthylene	208-96-8	40		1.9	0.38	1
12969	Anthracene	120-12-7	39		1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	38		1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	38		1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	39		1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	34		20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	33		1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	39		1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	45		21	6.9	1
12969	Di-n-butylphthalate	84-74-2	45		21	6.9	1
12969	Chrysene	218-01-9	38		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	37		1.9	0.77	1
12969	Diethylphthalate	84-66-2	41		21	6.9	1
12969	Dimethylphthalate	131-11-3	40		21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	50		21	6.9	1
12969	Fluoranthene	206-44-0	38		1.9	0.77	1
12969	Fluorene	86-73-7	38		1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	37		1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	40		1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	40		1.9	0.77	1
12969	Naphthalene	91-20-3	38		1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	34		1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	43		21	6.9	1
12969	Phenanthrene	85-01-8	38		1.9	0.77	1
12969	Pyrene	129-00-0	37		1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	7.9		1.1	0.2	24.65
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	190		20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	210		20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	2.9	J	5.8	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156761
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.3	J	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	6.3	J	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,200		45.2	8.15	1
06944	Antimony	7440-36-0	30.6		4.52	0.837	1
06935	Arsenic	7440-38-2	22.5		4.52	0.792	1
06946	Barium	7440-39-3	328		1.13	0.0373	1
06947	Beryllium	7440-41-7	6.36		1.13	0.0758	1
07914	Boron	7440-42-8	230		11.3	0.950	1
06949	Cadmium	7440-43-9	5.34		1.13	0.0859	1
01650	Calcium	7440-70-2	21,600		22.6	3.78	1
06951	Chromium	7440-47-3	57.5		3.39	0.181	1
06952	Cobalt	7440-48-4	61.5		1.13	0.112	1
06953	Copper	7440-50-8	44.8		2.26	0.328	1
01654	Iron	7439-89-6	31,400		90.5	8.19	2
06955	Lead	7439-92-1	25.6		3.39	0.565	1
01656	Lithium	7439-93-2	140		4.5	0.38	1
01657	Magnesium	7439-95-4	7,680		11.3	1.89	1
06958	Manganese	7439-96-5	447		1.13	0.0939	1
06960	Molybdenum	7439-98-7	210		2.26	0.192	1
06961	Nickel	7440-02-0	71.3		2.26	0.147	1
10145	Phosphorus	7723-14-0	478		11.3	3.27	1
01662	Potassium	7440-09-7	5,300		113	9.43	1
01667	Sodium	7440-23-5	1,220		113	18.9	1
06969	Tin	7440-31-5	408		11.3	0.249	1
06970	Titanium	7440-32-6	1,870		2.26	0.384	2
06971	Vanadium	7440-62-2	123		1.13	0.147	1
06972	Zinc	7440-66-6	119		4.52	0.226	1
10146	Zirconium	7440-67-7	114		5.65	0.950	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.86		0.452	0.113	2
06142	Silver	7440-22-4	15.7		0.226	0.0294	2
06144	Strontium	7440-24-6	66.0		0.452	0.0769	2
06145	Thallium	7440-28-0	1.07		0.226	0.0339	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.216		0.0182	0.0109	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	13.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156761
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

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53840 SDG#: PH088-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	26.2		1.14	0.135	1
11031	12378-PeCDD	40321-76-4	129	B	5.70	0.153	1
11031	123478-HxCDD	39227-28-6	123	B	5.70	0.0897	1
11031	123678-HxCDD	57653-85-7	126	B	5.70	0.104	1
11031	123789-HxCDD	19408-74-3	124	B	5.70	0.111	1
11031	1234678-HpCDD	35822-46-9	123	B	5.70	0.121	1
11031	OCDD	3268-87-9	273	B	11.4	0.0594	1
11031	2378-TCDF	51207-31-9	26.2		1.14	0.121	1
11031	12378-PeCDF	57117-41-6	129	B	5.70	0.107	1
11031	23478-PeCDF	57117-31-4	128	B	5.70	0.0913	1
11031	123478-HxCDF	70648-26-9	120	B	5.70	0.0931	1
11031	123678-HxCDF	57117-44-9	119	B	5.70	0.0912	1
11031	123789-HxCDF	72918-21-9	113	B	5.70	0.116	1
11031	234678-HxCDF	60851-34-5	118	B	5.70	0.0915	1
11031	1234678-HpCDF	67562-39-4	117	B	5.70	0.0796	1
11031	1234789-HpCDF	55673-89-7	113	B	5.70	0.0956	1
11031	OCDF	39001-02-0	225	B	11.4	0.0667	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	91	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	99	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	102	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	93	26 - 138
13C12-OCDF	96	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156761
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

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53840 SDG#: PH088-06MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/16/2013 11:34	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13226A16A	08/14/2013 22:29	Laura M Krieger	24.65
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322232014	08/10/2013 13:06	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322232014	08/10/2013 13:06	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270007A	08/16/2013 18:03	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270007A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 03:45	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/22/2013 10:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06944	Antimony	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06946	Barium	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
07914	Boron	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
01650	Calcium	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06951	Chromium	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06953	Copper	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
01654	Iron	SW-846 6010C	1	132230637002	08/23/2013 01:01	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
01656	Lithium	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06958	Manganese	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06961	Nickel	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
01662	Potassium	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
01667	Sodium	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06969	Tin	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06970	Titanium	SW-846 6010C	1	132230637002	08/23/2013 01:01	John W Yanzuk II	2
06971	Vanadium	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06972	Zinc	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156761
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132230637002	08/22/2013 19:36	John P Hook	1
06141	Selenium	SW-846 6020A	1	132230637002B	08/16/2013 10:12	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132230637002A	08/16/2013 10:12	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132230637002A	08/16/2013 10:12	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637002A	08/16/2013 10:12	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638002	08/21/2013 11:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637002	08/12/2013 23:14	Annamaria Stipkovits	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132340637001	08/22/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638002	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638002	08/21/2013 04:40	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401B	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156762
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	38		1.9	0.77	1
12969	Acenaphthylene	208-96-8	40		1.9	0.38	1
12969	Anthracene	120-12-7	40		1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	39		1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	39		1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	40		1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	35		20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	34		1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	40		1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	47		21	6.9	1
12969	Di-n-butylphthalate	84-74-2	45		21	6.9	1
12969	Chrysene	218-01-9	39		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	38		1.9	0.77	1
12969	Diethylphthalate	84-66-2	42		21	6.9	1
12969	Dimethylphthalate	131-11-3	40		21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	62		21	6.9	1
12969	Fluoranthene	206-44-0	39		1.9	0.77	1
12969	Fluorene	86-73-7	39		1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	38		1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	42		1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	41		1.9	0.77	1
12969	Naphthalene	91-20-3	39		1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	45		21	6.9	1
12969	Phenanthrene	85-01-8	38		1.9	0.77	1
12969	Pyrene	129-00-0	37		1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.6		1.2	0.2	26.6
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	190		20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	210		20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	3.4	J	5.8	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156762
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	6.8		5.8	2.3	1
12952	EFH (C30-C40)	n.a.	11	J	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,200		45.2	8.15	1
06944	Antimony	7440-36-0	31.0		4.52	0.837	1
06935	Arsenic	7440-38-2	22.7		4.52	0.792	1
06946	Barium	7440-39-3	333		1.13	0.0373	1
06947	Beryllium	7440-41-7	6.48		1.13	0.0758	1
07914	Boron	7440-42-8	232		11.3	0.950	1
06949	Cadmium	7440-43-9	5.33		1.13	0.0859	1
01650	Calcium	7440-70-2	18,400		22.6	3.78	1
06951	Chromium	7440-47-3	58.4		3.39	0.181	1
06952	Cobalt	7440-48-4	63.1		1.13	0.112	1
06953	Copper	7440-50-8	45.4		2.26	0.328	1
01654	Iron	7439-89-6	33,400		90.5	8.19	2
06955	Lead	7439-92-1	26.0		3.39	0.565	1
01656	Lithium	7439-93-2	141		4.5	0.38	1
01657	Magnesium	7439-95-4	7,690		11.3	1.89	1
06958	Manganese	7439-96-5	508		1.13	0.0939	1
06960	Molybdenum	7439-98-7	212		2.26	0.192	1
06961	Nickel	7440-02-0	73.0		2.26	0.147	1
10145	Phosphorus	7723-14-0	464		11.3	3.27	1
01662	Potassium	7440-09-7	5,110		113	9.43	1
01667	Sodium	7440-23-5	1,210		113	18.9	1
06969	Tin	7440-31-5	413		11.3	0.249	1
06970	Titanium	7440-32-6	1,930		2.26	0.384	2
06971	Vanadium	7440-62-2	125		1.13	0.147	1
06972	Zinc	7440-66-6	119		4.52	0.226	1
10146	Zirconium	7440-67-7	114		5.65	0.950	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.41		0.452	0.113	2
06142	Silver	7440-22-4	12.4		0.226	0.0294	2
06144	Strontium	7440-24-6	49.8		0.452	0.0769	2
06145	Thallium	7440-28-0	0.839		0.226	0.0339	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.220		0.0186	0.0112	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	13.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156762
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	26.3		1.15	0.138	1
11031	12378-PeCDD	40321-76-4	133	B	5.73	0.171	1
11031	123478-HxCDD	39227-28-6	127	B	5.73	0.111	1
11031	123678-HxCDD	57653-85-7	126	B	5.73	0.123	1
11031	123789-HxCDD	19408-74-3	126	B	5.73	0.124	1
11031	1234678-HpCDD	35822-46-9	127	B	5.73	0.115	1
11031	OCDD	3268-87-9	315	B	11.5	0.0775	1
11031	2378-TCDF	51207-31-9	26.7		1.15	0.120	1
11031	12378-PeCDF	57117-41-6	125	B	5.73	0.106	1
11031	23478-PeCDF	57117-31-4	127	B	5.73	0.0973	1
11031	123478-HxCDF	70648-26-9	119	B	5.73	0.104	1
11031	123678-HxCDF	57117-44-9	118	B	5.73	0.0978	1
11031	123789-HxCDF	72918-21-9	117	B	5.73	0.130	1
11031	234678-HxCDF	60851-34-5	116	B	5.73	0.0925	1
11031	1234678-HpCDF	67562-39-4	113	B	5.73	0.0784	1
11031	1234789-HpCDF	55673-89-7	111	B	5.73	0.110	1
11031	OCDF	39001-02-0	219	B	11.5	0.0800	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	91	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	86	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	81	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156762
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/16/2013 12:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13226A16A	08/14/2013 23:07	Laura M Krieger	26.6
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322232014	08/10/2013 13:07	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322232014	08/10/2013 13:06	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270007A	08/16/2013 18:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270007A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 04:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/22/2013 11:56	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06944	Antimony	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06946	Barium	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
07914	Boron	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
01650	Calcium	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06951	Chromium	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06953	Copper	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
01654	Iron	SW-846 6010C	1	132230637002	08/23/2013 01:05	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
01656	Lithium	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06958	Manganese	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06961	Nickel	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
01662	Potassium	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
01667	Sodium	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06969	Tin	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06970	Titanium	SW-846 6010C	1	132230637002	08/23/2013 01:05	John W Yanzuk II	2
06971	Vanadium	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06972	Zinc	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156762
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132230637002	08/22/2013 19:40	John P Hook	1
06141	Selenium	SW-846 6020A	1	132230637002B	08/16/2013 10:14	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132230637002A	08/16/2013 10:14	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132230637002A	08/16/2013 10:14	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637002A	08/16/2013 10:14	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638002	08/21/2013 11:17	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637002	08/12/2013 23:14	Annamaria Stipkovits	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132340637001	08/22/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638002	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638002	08/21/2013 04:40	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401B	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156763
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,600		45.2	8.15	1
06944	Antimony	7440-36-0	4.52	U	4.52	0.837	1
06935	Arsenic	7440-38-2	6.21		4.52	0.792	1
06946	Barium	7440-39-3	95.6		1.13	0.0373	1
06947	Beryllium	7440-41-7	0.848	J	1.13	0.0758	1
07914	Boron	7440-42-8	8.16	J	11.3	0.950	1
06949	Cadmium	7440-43-9	1.13	U	1.13	0.0859	1
01650	Calcium	7440-70-2	19,000		22.6	3.78	1
06951	Chromium	7440-47-3	34.2		3.39	0.181	1
06952	Cobalt	7440-48-4	8.22		1.13	0.112	1
06953	Copper	7440-50-8	15.5		2.26	0.328	1
01654	Iron	7439-89-6	31,000		90.5	8.19	2
06955	Lead	7439-92-1	9.36		3.39	0.565	1
01656	Lithium	7439-93-2	25.2		4.5	0.38	1
01657	Magnesium	7439-95-4	7,120		11.3	1.89	1
06958	Manganese	7439-96-5	390		1.13	0.0939	1
06960	Molybdenum	7439-98-7	2.26	U	2.26	0.192	1
06961	Nickel	7440-02-0	17.8		2.26	0.147	1
10145	Phosphorus	7723-14-0	355		11.3	3.27	1
01662	Potassium	7440-09-7	3,330		113	9.43	1
01667	Sodium	7440-23-5	93.2	J	113	18.9	1
06969	Tin	7440-31-5	3.63	J	11.3	0.249	1
06970	Titanium	7440-32-6	1,530		2.26	0.384	2
06971	Vanadium	7440-62-2	62.2		1.13	0.147	1
06972	Zinc	7440-66-6	61.6		4.52	0.226	1
10146	Zirconium	7440-67-7	8.13		5.65	0.950	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.155	J	0.452	0.113	2
06142	Silver	7440-22-4	0.226	U	0.226	0.0294	2
06144	Strontium	7440-24-6	44.8		0.452	0.0769	2
06145	Thallium	7440-28-0	0.368		0.226	0.0339	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0190	U	0.0190	0.0114	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.87		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	13.3		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	11.8		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156763
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06944	Antimony	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06946	Barium	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
07914	Boron	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
01650	Calcium	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06951	Chromium	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06953	Copper	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
01654	Iron	SW-846 6010C	1	132230637002	08/23/2013 00:57	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
01656	Lithium	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06958	Manganese	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06961	Nickel	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
01662	Potassium	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
01667	Sodium	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06969	Tin	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06970	Titanium	SW-846 6010C	1	132230637002	08/23/2013 00:57	John W Yanzuk II	2
06971	Vanadium	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06972	Zinc	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132230637002	08/22/2013 19:33	John P Hook	1
06141	Selenium	SW-846 6020A	1	132230637002B	08/16/2013 10:09	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132230637002A	08/16/2013 10:09	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132230637002A	08/16/2013 10:09	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637002A	08/16/2013 10:09	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638002	08/21/2013 11:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637002	08/12/2013 23:14	Annamaria Stipkovits	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132340637001	08/22/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638002	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638002	08/21/2013 04:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401B	08/10/2013 16:15	Clayton C Litchmore	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401B	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-538-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156763
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:20 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53840 SDG#: PH088-06DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401B	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-838-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156764
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:30 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83840 SDG#: PH088-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	0.47	J	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.4	U	1.4	0.3	29.48
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-838-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156764
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:30 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83840 SDG#: PH088-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	3.3	J	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	5.6	J	12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,300		44.8	8.07	1
06944	Antimony	7440-36-0	4.48	U	4.48	0.829	1
06935	Arsenic	7440-38-2	5.72		4.48	0.784	1
06946	Barium	7440-39-3	98.0		1.12	0.0370	1
06947	Beryllium	7440-41-7	0.888	J	1.12	0.0750	1
07914	Boron	7440-42-8	8.43	J	11.2	0.941	1
06949	Cadmium	7440-43-9	1.12	U	1.12	0.0851	1
01650	Calcium	7440-70-2	17,800		22.4	3.74	1
06951	Chromium	7440-47-3	35.9		3.36	0.179	1
06952	Cobalt	7440-48-4	9.43		1.12	0.111	1
06953	Copper	7440-50-8	16.5		2.24	0.325	1
01654	Iron	7439-89-6	32,500		89.6	8.11	2
06955	Lead	7439-92-1	10.3		3.36	0.560	1
01656	Lithium	7439-93-2	25.5		4.5	0.38	1
01657	Magnesium	7439-95-4	7,330		11.2	1.87	1
06958	Manganese	7439-96-5	457		1.12	0.0929	1
06960	Molybdenum	7439-98-7	0.247	J	2.24	0.190	1
06961	Nickel	7440-02-0	19.3		2.24	0.146	1
10145	Phosphorus	7723-14-0	371		11.2	3.24	1
01662	Potassium	7440-09-7	3,440		112	9.34	1
01667	Sodium	7440-23-5	95.5	J	112	18.7	1
06969	Tin	7440-31-5	3.66	J	11.2	0.246	1
06970	Titanium	7440-32-6	1,520		2.24	0.381	2
06971	Vanadium	7440-62-2	65.5		1.12	0.146	1
06972	Zinc	7440-66-6	63.5		4.48	0.224	1
10146	Zirconium	7440-67-7	8.38		5.60	0.941	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.195	J	0.448	0.112	2
06142	Silver	7440-22-4	0.0412	J	0.224	0.0291	2
06144	Strontium	7440-24-6	52.8		0.448	0.0761	2
06145	Thallium	7440-28-0	0.431		0.224	0.0336	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182	U	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.95		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-838-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156764
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:30 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83840 SDG#: PH088-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-838-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156764
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:30 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83840 SDG#: PH088-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.106	JQ	1.14	0.0556	1
11031	12378-PeCDD	40321-76-4	0.196	JBQ	5.72	0.0722	1
11031	123478-HxCDD	39227-28-6	0.243	JBQ	5.72	0.0539	1
11031	123678-HxCDD	57653-85-7	1.07	JB	5.72	0.0618	1
11031	123789-HxCDD	19408-74-3	0.526	JB	5.72	0.0618	1
11031	1234678-HpCDD	35822-46-9	18.2	B	5.72	0.0869	1
11031	OCDD	3268-87-9	166	B	11.4	0.0542	1
11031	2378-TCDF	51207-31-9	0.104	JQ	1.14	0.0717	1
11031	12378-PeCDF	57117-41-6	0.250	JBQ	5.72	0.0412	1
11031	23478-PeCDF	57117-31-4	0.106	JBQ	5.72	0.0345	1
11031	123478-HxCDF	70648-26-9	0.178	JBQ	5.72	0.0382	1
11031	123678-HxCDF	57117-44-9	0.198	JBQ	5.72	0.0415	1
11031	123789-HxCDF	72918-21-9	0.120	JB	5.72	0.0495	1
11031	234678-HxCDF	60851-34-5	0.217	JBQ	5.72	0.0374	1
11031	1234678-HpCDF	67562-39-4	1.43	JB	5.72	0.0298	1
11031	1234789-HpCDF	55673-89-7	0.139	JB	5.72	0.0448	1
11031	OCDF	39001-02-0	1.45	JBQ	11.4	0.0453	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.419				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	88	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	94	24 - 185
13C12-23478-PeCDF	98	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	87	26 - 138
13C12-OCDF	81	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-838-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156764
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:30 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83840 SDG#: PH088-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-838-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156764
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:30 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83840 SDG#: PH088-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/16/2013 15:06	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13226A16A	08/14/2013 18:41	Laura M Krieger	29.48
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322232014	08/10/2013 12:46	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322232014	08/10/2013 12:46	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270007A	08/16/2013 18:40	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270007A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 04:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/22/2013 12:53	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06944	Antimony	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06946	Barium	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
07914	Boron	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
01650	Calcium	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06951	Chromium	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06953	Copper	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
01654	Iron	SW-846 6010C	1	132230637002	08/23/2013 01:13	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
01656	Lithium	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06958	Manganese	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06961	Nickel	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
01662	Potassium	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
01667	Sodium	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06969	Tin	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06970	Titanium	SW-846 6010C	1	132230637002	08/23/2013 01:13	John W Yanzuk II	2
06971	Vanadium	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06972	Zinc	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-838-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156764
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 09:30 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83840 SDG#: PH088-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132230637002	08/22/2013 19:48	John P Hook	1
06141	Selenium	SW-846 6020A	1	132230637002B	08/16/2013 10:19	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132230637002A	08/16/2013 10:19	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132230637002A	08/16/2013 10:19	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637002A	08/16/2013 10:19	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638002	08/21/2013 11:19	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637002	08/12/2013 23:14	Annamaria Stipkovits	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132340637001	08/22/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638002	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638002	08/21/2013 04:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401B	08/10/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401B	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156765
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:35 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH088-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	2.1		1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8		1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	4.2		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.94	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.4	J	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	3.4		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	3.8		1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.97	J	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8		1.8	0.70	1
12969	Pyrene	129-00-0	3.4		1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	25	J	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	4.5	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	34		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	74		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156765
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:35 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH088-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,300		41.5	7.47	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.767	1
06935	Arsenic	7440-38-2	4.47		4.15	0.725	1
06946	Barium	7440-39-3	104		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.822	J	1.04	0.0694	1
07914	Boron	7440-42-8	14.1		10.4	0.871	1
06949	Cadmium	7440-43-9	0.103	J	1.04	0.0788	1
01650	Calcium	7440-70-2	50,500		20.7	3.46	1
06951	Chromium	7440-47-3	36.4		3.11	0.166	1
06952	Cobalt	7440-48-4	9.19		1.04	0.103	1
06953	Copper	7440-50-8	20.1		2.07	0.301	1
01654	Iron	7439-89-6	30,500		82.9	7.50	2
06955	Lead	7439-92-1	15.8		3.11	0.518	1
01656	Lithium	7439-93-2	25.6		4.1	0.35	1
01657	Magnesium	7439-95-4	8,490		10.4	1.73	1
06958	Manganese	7439-96-5	416		1.04	0.0860	1
06960	Molybdenum	7439-98-7	0.200	J	2.07	0.176	1
06961	Nickel	7440-02-0	18.5		2.07	0.135	1
10145	Phosphorus	7723-14-0	740		10.4	3.00	1
01662	Potassium	7440-09-7	6,700		104	8.64	1
01667	Sodium	7440-23-5	116		104	17.3	1
06969	Tin	7440-31-5	3.64	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,430		2.07	0.352	2
06971	Vanadium	7440-62-2	67.6		1.04	0.135	1
06972	Zinc	7440-66-6	78.5		4.15	0.207	1
10146	Zirconium	7440-67-7	4.89	J	5.18	0.871	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.478		0.415	0.104	2
06142	Silver	7440-22-4	0.0560	J	0.207	0.0269	2
06144	Strontium	7440-24-6	92.9		1.04	0.176	5
06145	Thallium	7440-28-0	0.490		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0108	J	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.89		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156765
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:35 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH088-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0596	1
11031	12378-PeCDD	40321-76-4	0.203	JB	5.24	0.135	1
11031	123478-HxCDD	39227-28-6	0.0999	JBQ	5.24	0.0499	1
11031	123678-HxCDD	57653-85-7	0.220	JB	5.24	0.0562	1
11031	123789-HxCDD	19408-74-3	0.147	JBQ	5.24	0.0584	1
11031	1234678-HpCDD	35822-46-9	3.06	JB	5.24	0.0872	1
11031	OCDD	3268-87-9	28.8	B	10.5	0.0389	1
11031	2378-TCDF	51207-31-9	0.603	J	1.05	0.149	1
11031	12378-PeCDF	57117-41-6	11.7	B	5.24	0.0924	1
11031	23478-PeCDF	57117-31-4	0.307	JBQ	5.24	0.0812	1
11031	123478-HxCDF	70648-26-9	0.212	JBQ	5.24	0.0485	1
11031	123678-HxCDF	57117-44-9	0.664	JB	5.24	0.0480	1
11031	123789-HxCDF	72918-21-9	5.24	U	5.24	0.0683	1
11031	234678-HxCDF	60851-34-5	0.400	JB	5.24	0.0460	1
11031	1234678-HpCDF	67562-39-4	0.796	JB	5.24	0.0288	1
11031	1234789-HpCDF	55673-89-7	0.0930	JB	5.24	0.0434	1
11031	OCDF	39001-02-0	1.23	JB	10.5	0.0478	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.793				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	88	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	79	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156765
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:35 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH088-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156765
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:35 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH088-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/16/2013 15:41	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270007A	08/16/2013 18:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270007A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 04:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/22/2013 13:49	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06944	Antimony	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06946	Barium	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
07914	Boron	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
01650	Calcium	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06951	Chromium	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06953	Copper	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
01654	Iron	SW-846 6010C	1	132230637002	08/23/2013 01:16	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
01656	Lithium	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06958	Manganese	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06961	Nickel	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
01662	Potassium	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
01667	Sodium	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06969	Tin	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06970	Titanium	SW-846 6010C	1	132230637002	08/23/2013 01:16	John W Yanzuk II	2
06971	Vanadium	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06972	Zinc	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132230637002	08/22/2013 19:52	John P Hook	1
06141	Selenium	SW-846 6020A	1	132230637002B	08/16/2013 10:21	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132230637002A	08/16/2013 10:21	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132230637002A	08/19/2013 12:35	Choon Y Tian	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156765
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:35 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54100 SDG#: PH088-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132230637002A	08/16/2013 10:21	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638002	08/21/2013 11:21	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637002	08/12/2013 23:14	Annamaria Stipkovits	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132340637001	08/22/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638002	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638002	08/21/2013 04:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401B	08/10/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401B	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156766
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:55 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54140 SDG#: PH088-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	0.95	J	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	0.48	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	27.35
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	8.5	J	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	2.7	J	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156766
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:55 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54140 SDG#: PH088-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.8		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	13		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,600		43.3	7.80	1
06944	Antimony	7440-36-0	4.33	U	4.33	0.801	1
06935	Arsenic	7440-38-2	3.34	J	4.33	0.758	1
06946	Barium	7440-39-3	117		1.08	0.0357	1
06947	Beryllium	7440-41-7	0.917	J	1.08	0.0725	1
07914	Boron	7440-42-8	13.6		10.8	0.909	1
06949	Cadmium	7440-43-9	0.108	J	1.08	0.0823	1
01650	Calcium	7440-70-2	35,400		21.6	3.62	1
06951	Chromium	7440-47-3	39.5		3.25	0.173	1
06952	Cobalt	7440-48-4	9.88		1.08	0.107	1
06953	Copper	7440-50-8	20.6		2.16	0.314	1
01654	Iron	7439-89-6	36,500		86.6	7.84	2
06955	Lead	7439-92-1	10.9		3.25	0.541	1
01656	Lithium	7439-93-2	28.0		4.3	0.37	1
01657	Magnesium	7439-95-4	8,990		10.8	1.81	1
06958	Manganese	7439-96-5	474		1.08	0.0898	1
06960	Molybdenum	7439-98-7	0.225	J	2.16	0.184	1
06961	Nickel	7440-02-0	21.0		2.16	0.141	1
10145	Phosphorus	7723-14-0	787		10.8	3.13	1
01662	Potassium	7440-09-7	7,080		108	9.03	1
01667	Sodium	7440-23-5	146		108	18.1	1
06969	Tin	7440-31-5	3.59	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,640		2.16	0.368	2
06971	Vanadium	7440-62-2	73.6		1.08	0.141	1
06972	Zinc	7440-66-6	82.8		4.33	0.216	1
10146	Zirconium	7440-67-7	4.73	J	5.41	0.909	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.316	J	0.433	0.108	2
06142	Silver	7440-22-4	0.0413	J	0.216	0.0281	2
06144	Strontium	7440-24-6	74.0		0.433	0.0736	2
06145	Thallium	7440-28-0	0.397		0.216	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.95		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156766
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:55 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54140 SDG#: PH088-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156766
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:55 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54140 SDG#: PH088-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0734	1
11031	12378-PeCDD	40321-76-4	5.40	U	5.40	0.0883	1
11031	123478-HxCDD	39227-28-6	0.0483	JBQ	5.40	0.0342	1
11031	123678-HxCDD	57653-85-7	5.40	U	5.40	0.0362	1
11031	123789-HxCDD	19408-74-3	0.0490	JBQ	5.40	0.0365	1
11031	1234678-HpCDD	35822-46-9	0.310	JBQ	5.40	0.0387	1
11031	OCDD	3268-87-9	1.81	JB	10.8	0.0326	1
11031	2378-TCDF	51207-31-9	1.08	U	1.08	0.0760	1
11031	12378-PeCDF	57117-41-6	5.40	U	5.40	0.0399	1
11031	23478-PeCDF	57117-31-4	0.0867	JBQ	5.40	0.0381	1
11031	123478-HxCDF	70648-26-9	0.0442	JBQ	5.40	0.0223	1
11031	123678-HxCDF	57117-44-9	0.0731	JBQ	5.40	0.0226	1
11031	123789-HxCDF	72918-21-9	0.0319	JBQ	5.40	0.0305	1
11031	234678-HxCDF	60851-34-5	5.40	U	5.40	0.0207	1
11031	1234678-HpCDF	67562-39-4	0.0588	JB	5.40	0.0163	1
11031	1234789-HpCDF	55673-89-7	0.0418	JBQ	5.40	0.0254	1
11031	OCDF	39001-02-0	0.0876	JBQ	10.8	0.0438	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00111				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	97	24 - 185
13C12-23478-PeCDF	97	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	100	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156766
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:55 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54140 SDG#: PH088-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156766
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:55 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54140 SDG#: PH088-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/16/2013 16:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/13/2013 05:39	Laura M Krieger	27.35
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322232014	08/10/2013 13:08	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322232014	08/10/2013 13:08	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270007A	08/16/2013 19:35	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270007A	08/15/2013 16:20	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 05:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/22/2013 14:46	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06944	Antimony	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06946	Barium	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
07914	Boron	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
01650	Calcium	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06951	Chromium	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06953	Copper	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
01654	Iron	SW-846 6010C	1	132230637002	08/23/2013 01:20	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
01656	Lithium	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06958	Manganese	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06961	Nickel	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
01662	Potassium	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
01667	Sodium	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06969	Tin	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06970	Titanium	SW-846 6010C	1	132230637002	08/23/2013 01:20	John W Yanzuk II	2
06971	Vanadium	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06972	Zinc	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-541-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156766
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:55 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54140 SDG#: PH088-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132230637002	08/22/2013 20:03	John P Hook	1
06141	Selenium	SW-846 6020A	1	132230637002B	08/16/2013 10:28	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132230637002A	08/16/2013 10:28	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132230637002A	08/16/2013 10:28	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132230637002A	08/16/2013 10:28	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638002	08/21/2013 11:23	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637002	08/12/2013 23:14	Annamaria Stipkovits	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132340637001	08/22/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638002	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638002	08/21/2013 04:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401B	08/10/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401B	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156767
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 12:15 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH088-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.1	J	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	0.83	J	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	2.8		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.84	J	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	0.71	J	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	29		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	3.4		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	16	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.8		1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.97	J	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	0.88	J	1.7	0.70	1
12969	Naphthalene	91-20-3	1.1	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.5	J	1.7	0.70	1
12969	Pyrene	129-00-0	1.8		1.7	0.70	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	19	J	37	12	1
10401	Dalapon	75-99-0	93	U	93	46	1
10401	2,4-DB	94-82-6	32		18	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	11		1.8	0.35	1
10590	p,p-DDT	50-29-3	9.8		1.8	0.37	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156767
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 12:15 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH088-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	0.61	J	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	0.54	J	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.23	J	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	3.3	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	26		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	56		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,500		41.0	7.39	1
06944	Antimony	7440-36-0	0.791	J	4.10	0.759	1
06935	Arsenic	7440-38-2	5.19		4.10	0.718	1
06946	Barium	7440-39-3	96.1		1.03	0.0338	1
06947	Beryllium	7440-41-7	0.805	J	1.03	0.0687	1
07914	Boron	7440-42-8	13.5		10.3	0.861	1
06949	Cadmium	7440-43-9	0.182	J	1.03	0.0779	1
01650	Calcium	7440-70-2	47,500		20.5	3.43	1
06951	Chromium	7440-47-3	34.0		3.08	0.164	1
06952	Cobalt	7440-48-4	8.79		1.03	0.102	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156767
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 12:15 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH088-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06953	Copper	7440-50-8	20.2	2.05	0.297	1
01654	Iron	7439-89-6	33,500	82.0	7.42	2
06955	Lead	7439-92-1	27.4	3.08	0.513	1
01656	Lithium	7439-93-2	21.6	4.1	0.35	1
01657	Magnesium	7439-95-4	7,850	10.3	1.71	1
06958	Manganese	7439-96-5	413	1.03	0.0851	1
06960	Molybdenum	7439-98-7	0.353 J	2.05	0.174	1
06961	Nickel	7440-02-0	17.9	2.05	0.133	1
10145	Phosphorus	7723-14-0	728	10.3	2.96	1
01662	Potassium	7440-09-7	6,440	103	8.55	1
01667	Sodium	7440-23-5	107	103	17.1	1
06969	Tin	7440-31-5	3.36 J	10.3	0.226	1
06970	Titanium	7440-32-6	1,290	2.05	0.349	2
06971	Vanadium	7440-62-2	62.0	1.03	0.133	1
06972	Zinc	7440-66-6	82.4	4.10	0.205	1
10146	Zirconium	7440-67-7	5.58	5.13	0.861	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.401 J	0.410	0.103	2
06142	Silver	7440-22-4	0.0541 J	0.205	0.0267	2
06144	Strontium	7440-24-6	79.5	1.03	0.174	5
06145	Thallium	7440-28-0	0.419	0.205	0.0308	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0213	0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.77	0.0100	0.0100	1
	The pH was measured in water at 21.1 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.4	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156767
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 12:15 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH088-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0760	1
11031	12378-PeCDD	40321-76-4	0.187	JBQ	5.12	0.0935	1
11031	123478-HxCDD	39227-28-6	0.201	JBQ	5.12	0.0726	1
11031	123678-HxCDD	57653-85-7	0.269	JBQ	5.12	0.0822	1
11031	123789-HxCDD	19408-74-3	0.413	JB	5.12	0.0865	1
11031	1234678-HpCDD	35822-46-9	8.77	B	5.12	0.0944	1
11031	OCDD	3268-87-9	55.8	B	10.2	0.0527	1
11650	2378-TCDF-Conf	51207-31-9	1.48	C	1.02	0.0884	1
11031	12378-PeCDF	57117-41-6	0.487	JBQ	5.12	0.0880	1
11031	23478-PeCDF	57117-31-4	0.194	JBQ	5.12	0.0801	1
11031	123478-HxCDF	70648-26-9	0.288	JB	5.12	0.0432	1
11031	123678-HxCDF	57117-44-9	0.328	JBQ	5.12	0.0459	1
11031	123789-HxCDF	72918-21-9	5.12	U	5.12	0.0630	1
11031	234678-HxCDF	60851-34-5	0.336	JB	5.12	0.0408	1
11031	1234678-HpCDF	67562-39-4	1.01	JBQ	5.12	0.0385	1
11031	1234789-HpCDF	55673-89-7	0.0890	JBQ	5.12	0.0495	1
11031	OCDF	39001-02-0	1.67	JB	10.2	0.0423	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.357				1

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156767
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 12:15 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH088-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/16/2013 16:52	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 18:58	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132240016A	08/20/2013 00:00	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270007A	08/16/2013 19:54	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270007A	08/15/2013 16:20	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132240016A	08/13/2013 16:25	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 08:17	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/22/2013 15:43	Joseph D Anderson	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	13232002	08/26/2013 21:55	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06944	Antimony	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06946	Barium	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
07914	Boron	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
01650	Calcium	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06951	Chromium	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06953	Copper	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
01654	Iron	SW-846 6010C	1	132230637002	08/23/2013 01:24	John W Yanzuk II	2
06955	Lead	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
01656	Lithium	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06958	Manganese	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06961	Nickel	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156767
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 12:15 by SM

Submitted: 08/10/2013 09:45
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60700 SDG#: PH088-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
01662	Potassium	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
01667	Sodium	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06969	Tin	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06970	Titanium	SW-846 6010C	1	132230637002	08/23/2013 01:24	John W Yanzuk II	2
06971	Vanadium	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06972	Zinc	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132230637002	08/22/2013 20:07	John P Hook	1
06141	Selenium	SW-846 6020A	1	132230637002B	08/16/2013 10:30	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132230637002A	08/16/2013 10:30	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132230637002A	08/19/2013 12:37	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132230637002A	08/16/2013 10:30	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638002	08/21/2013 11:29	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637002	08/12/2013 23:14	Annamaria Stipkovits	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132340637001	08/22/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638002	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638002	08/21/2013 04:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401B	08/10/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401B	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156768
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:00 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60750 SDG#: PH088-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.4	U	1.4	0.3	32.22
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	39	U	39	13	1
10401	Dalapon	75-99-0	97	U	97	47	1
10401	2,4-DB	94-82-6	27		18	6.7	1
10401	Dicamba	1918-00-9	13	U	13	4.3	1
10401	Dinoseb	88-85-7	26	U	26	9.7	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.7	1
10401	MCPA	94-74-6	2,700	U	2,700	820	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	810	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.88	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.81	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156768
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:00 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60750 SDG#: PH088-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.38	1
10590	Delta BHC	319-86-8	0.91	U	0.91	0.49	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	12		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,800		42.9	7.73	1
06944	Antimony	7440-36-0	4.29	U	4.29	0.793	1
06935	Arsenic	7440-38-2	6.16		4.29	0.750	1
06946	Barium	7440-39-3	85.7		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.448	J	1.07	0.0718	1
07914	Boron	7440-42-8	8.28	J	10.7	0.900	1
06949	Cadmium	7440-43-9	0.303	J	1.07	0.0814	1
01650	Calcium	7440-70-2	206,000		214	35.8	10
06951	Chromium	7440-47-3	23.7		3.21	0.171	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156768
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:00 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60750 SDG#: PH088-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	5.86		1.07	0.106	1
06953	Copper	7440-50-8	7.59		2.14	0.311	1
01654	Iron	7439-89-6	19,000		42.9	3.88	1
06955	Lead	7439-92-1	7.40		3.21	0.536	1
01656	Lithium	7439-93-2	25.1		4.3	0.36	1
01657	Magnesium	7439-95-4	5,980		10.7	1.79	1
06958	Manganese	7439-96-5	427		1.07	0.0889	1
06960	Molybdenum	7439-98-7	2.14	U	2.14	0.182	1
06961	Nickel	7440-02-0	12.9		2.14	0.139	1
10145	Phosphorus	7723-14-0	391		10.7	3.10	1
01662	Potassium	7440-09-7	2,010		107	8.94	1
01667	Sodium	7440-23-5	103	J	107	17.9	1
06969	Tin	7440-31-5	2.93	J	10.7	0.236	1
06970	Titanium	7440-32-6	794		1.07	0.182	1
06971	Vanadium	7440-62-2	44.7		1.07	0.139	1
06972	Zinc	7440-66-6	44.7		4.29	0.214	1
10146	Zirconium	7440-67-7	3.56	J	5.36	0.900	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.411	J	0.429	0.107	2
06142	Silver	7440-22-4	0.0639	J	0.214	0.0279	2
06144	Strontium	7440-24-6	154		1.07	0.182	5
06145	Thallium	7440-28-0	0.311		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0144	J	0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.89		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156768
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:00 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60750 SDG#: PH088-11*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.08 U	1.08	0.0727	1
11031	12378-PeCDD	40321-76-4	0.114 JBQ	5.42	0.0744	1
11031	123478-HxCDD	39227-28-6	0.0729 JBQ	5.42	0.0294	1
11031	123678-HxCDD	57653-85-7	0.0949 JBQ	5.42	0.0330	1
11031	123789-HxCDD	19408-74-3	0.0774 JB	5.42	0.0381	1
11031	1234678-HpCDD	35822-46-9	0.0945 JBQ	5.42	0.0432	1
11031	OCDD	3268-87-9	0.627 JB	10.8	0.0372	1
11031	2378-TCDF	51207-31-9	0.0941 JQ	1.08	0.0608	1
11031	12378-PeCDF	57117-41-6	0.127 JBQ	5.42	0.0381	1
11031	23478-PeCDF	57117-31-4	0.158 JBQ	5.42	0.0348	1
11031	123478-HxCDF	70648-26-9	0.157 JBQ	5.42	0.0199	1
11031	123678-HxCDF	57117-44-9	0.131 JBQ	5.42	0.0199	1
11031	123789-HxCDF	72918-21-9	0.0820 JBQ	5.42	0.0277	1
11031	234678-HxCDF	60851-34-5	0.0691 JBQ	5.42	0.0148	1
11031	1234678-HpCDF	67562-39-4	0.0638 JBQ	5.42	0.0169	1
11031	1234789-HpCDF	55673-89-7	5.42 U	5.42	0.0271	1
11031	OCDF	39001-02-0	0.139 JBQ	10.8	0.0450	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00798			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	95	25 - 181
13C12-123478-HxCDD	93	32 - 141
13C12-123678-HxCDD	96	28 - 130
13C12-123789-HxCDD	91	28 - 130
13C12-1234678-HpCDD	102	23 - 140
13C12-OCDD	102	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	105	24 - 185
13C12-23478-PeCDF	105	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	95	26 - 123
13C12-234678-HxCDF	96	28 - 136
13C12-123789-HxCDF	89	29 - 147
13C12-1234678-HpCDF	114	28 - 143
13C12-1234789-HpCDF	94	26 - 138
13C12-OCDF	89	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156768
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:00 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60750 SDG#: PH088-11*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156768
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:00 by SM

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60750 SDG#: PH088-11*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/16/2013 17:28	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13224A16A	08/13/2013 06:18	Laura M Krieger	32.22
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322232014	08/10/2013 13:09	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322232014	08/10/2013 13:09	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 19:25	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132240016A	08/20/2013 00:31	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132270007A	08/16/2013 20:12	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132270007A	08/15/2013 16:20	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132240016A	08/13/2013 16:25	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 05:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/22/2013 16:40	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06944	Antimony	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06935	Arsenic	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06946	Barium	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06947	Beryllium	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
07914	Boron	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06949	Cadmium	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
01650	Calcium	SW-846 6010C	1	132230637002	08/23/2013 01:35	John W Yanzuk II	10
06951	Chromium	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06952	Cobalt	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06953	Copper	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
01654	Iron	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06955	Lead	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
01656	Lithium	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
01657	Magnesium	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06958	Manganese	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-607-SA8-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7156768
LL Group # 1410581
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/09/2013 13:00 by SM

Submitted: 08/10/2013 09:45
Reported: 08/28/2013 08:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60750 SDG#: PH088-11*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06960	Molybdenum	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06961	Nickel	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
01662	Potassium	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
01667	Sodium	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06969	Tin	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06970	Titanium	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06971	Vanadium	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06972	Zinc	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
10146	Zirconium	SW-846 6010C	1	132230637002	08/22/2013 20:11	John P Hook	1
06141	Selenium	SW-846 6020A	1	132230637002B	08/16/2013 10:33	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132230637002A	08/16/2013 10:33	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132230637002A	08/19/2013 12:39	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132230637002A	08/16/2013 10:33	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132310638002	08/21/2013 11:31	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132230637002	08/12/2013 23:14	Annamaria Stipkovits	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	2	132340637001	08/22/2013 23:08	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132230638002	08/13/2013 02:30	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	132310638002	08/21/2013 04:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13222039401B	08/10/2013 16:15	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13226162401B	08/14/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410581
Reported: 08/28/13 at 08:58 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13226SLB026	Sample number(s): 7156758-7156762,7156764-7156768									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	104		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	106		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	104		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	108		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	115		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	115		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	103		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	108		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	110		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	108		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	111		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	104		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	107		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	111		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	109		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	105		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	98		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	113		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	100		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	102		79-112		
Batch number: 13226SLE026	Sample number(s): 7156753-7156756									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	101		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	105		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	105		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	108		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	113		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	97		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	106		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	110		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	118		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	118		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	105		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	110		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	110		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	108		85-122		

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410581
Reported: 08/28/13 at 08:58 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	109		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	105		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	106		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	110		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	107		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	107		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	95		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	115		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	101		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	104		79-112		
Batch number: 13224A16A	Sample number(s): 7156754-7156756,7156758,7156766,7156768									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	95		67-119		
Batch number: 13224A20A	Sample number(s): 7156752									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	102	102	75-135	0	30
Batch number: 13226A16A	Sample number(s): 7156760-7156762,7156764									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	90		67-119		
Batch number: 132250009A	Sample number(s): 7156767-7156768									
2,4-D	36	U	36.	12	ug/kg	103		59-122		
Dalapon	90	U	90.	44	ug/kg	45		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	108		54-131		
Dicamba	12	U	12.	4.0	ug/kg	83		60-123		
Dinoseb	24	U	24.	9.0	ug/kg	12		10-36		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	132		65-158		
MCPA	2,500	U	2,500.	760	ug/kg	85		60-127		
MCPP (Mecoprop)	2,500	U	2,500.	750	ug/kg	93		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	105		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	111		63-130		
Batch number: 132240016A	Sample number(s): 7156767-7156768									
Aldrin	0.83	U	0.83	0.17	ug/kg	96		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	104		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	107		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	103		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	106		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	107		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	101		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	108		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	106		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	101		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	107		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	112		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	95		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	100		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	112		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	98		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	104		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	105		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410581
Reported: 08/28/13 at 08:58 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132270006A	Sample number(s): 7156753-7156756,7156758-7156759									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	72	76	36-106	5	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	104		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	108		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132270007A	Sample number(s): 7156760-7156762,7156764-7156768									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	78	76	36-106	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	99		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	114		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132260015A	Sample number(s): 7156753-7156756,7156758-7156759									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	101		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	103		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	105		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	73		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	92		49-107		
Batch number: 132280016A	Sample number(s): 7156760-7156762,7156764-7156768									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	92		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	99		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	97		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	91		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	75		49-107		
Batch number: 132230637001	Sample number(s): 7156753-7156759									
Aluminum	9.14	J	40.0	7.21	mg/kg	97		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	101		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	101		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	98		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	101		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	99		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	101		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	105		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410581
Reported: 08/28/13 at 08:58 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Iron	40.0	U	40.0	3.62	mg/kg	96		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	101		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	96		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	99		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	101		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	101		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	104		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	102		80-120		
Potassium	100	U	100.	8.34	mg/kg	98		80-120		
Sodium	100	U	100.	16.7	mg/kg	97		80-120		
Tin	1.77	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	100		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	99		80-120		
Batch number: 132230637001A	Sample number(s): 7156753-7156759									
Silver	0.200	U	0.200	0.0260	mg/kg	108		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	102		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	114		80-120		
Batch number: 132230637001B	Sample number(s): 7156753-7156759									
Selenium	0.400	U	0.400	0.100	mg/kg	103		80-120		
Batch number: 132230637002	Sample number(s): 7156760-7156768									
Aluminum	40.0	U	40.0	7.21	mg/kg	102		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	106		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	101		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	100		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	102		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	101		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	98		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	101		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	103		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	105		80-120		
Potassium	100	U	100.	8.34	mg/kg	101		80-120		
Sodium	100	U	100.	16.7	mg/kg	101		80-120		
Tin	1.70	J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	102		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	0.240	J	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	101		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410581
Reported: 08/28/13 at 08:58 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132230637002A	Sample number(s): 7156760-7156768									
Silver	0.200	U	0.200	0.0260	mg/kg	112		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	107		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	110		80-120		
Batch number: 132230637002B	Sample number(s): 7156760-7156768									
Selenium	0.400	U	0.400	0.100	mg/kg	108		80-120		
Batch number: 132310638001	Sample number(s): 7156753-7156759									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	102		85-120		
Batch number: 132310638002	Sample number(s): 7156760-7156768									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	112		85-120		
Batch number: 13222039401A	Sample number(s): 7156753-7156754,7156757-7156759									
15a pH by 9045D						99		95-105		
Batch number: 13222039401B	Sample number(s): 7156760,7156763-7156768									
15a pH by 9045D						99		95-105		
Batch number: 13226162401A	Sample number(s): 7156753-7156759									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
Batch number: 13226162401B	Sample number(s): 7156760-7156768									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13227001	Sample number(s): 7156753-7156756,7156758-7156759									
2378-TCDD	1.00	U	1.00	0.0760	ng/kg	99		67-158		
12378-PeCDD	0.0796	J	5.00	0.0681	ng/kg	103		70-142		
123478-HxCDD	5.00	U	5.00	0.0263	ng/kg	99		70-164		
123678-HxCDD	0.0344	J	5.00	0.0291	ng/kg	92		76-134		
123789-HxCDD	5.00	U	5.00	0.0306	ng/kg	94		64-162		
1234678-HpCDD	0.0682	J	5.00	0.0395	ng/kg	91		70-140		
OCDD	0.286	J	10.0	0.0305	ng/kg	91		78-144		
2378-TCDF	1.00	U	1.00	0.0678	ng/kg	98		75-158		
12378-PeCDF	0.0421	J	5.00	0.0314	ng/kg	95		80-134		
23478-PeCDF	0.0576	J	5.00	0.0324	ng/kg	93		68-160		
123478-HxCDF	0.0398	J	5.00	0.0242	ng/kg	94		72-134		
123678-HxCDF	0.0310	J	5.00	0.0233	ng/kg	93		84-130		
123789-HxCDF	0.0558	J	5.00	0.0306	ng/kg	93		78-130		
234678-HxCDF	0.0316	J	5.00	0.0229	ng/kg	93		70-156		
1234678-HpCDF	0.0368	J	5.00	0.0134	ng/kg	93		82-122		
1234789-HpCDF	5.00	U	5.00	0.0225	ng/kg	91		78-138		
OCDF	0.112	J	10.0	0.0583	ng/kg	90		63-170		
Batch number: 13232002	Sample number(s): 7156760-7156762,7156764-7156768									
2378-TCDD	1.00	U	1.00	0.0621	ng/kg	115		67-158		
12378-PeCDD	0.117	J	5.00	0.0628	ng/kg	111		70-142		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410581
Reported: 08/28/13 at 08:58 AM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123478-HxCDD	0.0685 J	5.00	0.0320	ng/kg	107		70-164		
123678-HxCDD	0.106 J	5.00	0.0358	ng/kg	108		76-134		
123789-HxCDD	0.0775 J	5.00	0.0369	ng/kg	103		64-162		
1234678-HpCDD	0.110 J	5.00	0.0348	ng/kg	103		70-140		
OCDD	0.396 J	10.0	0.0324	ng/kg	100		78-144		
2378-TCDF	1.00 U	1.00	0.0501	ng/kg	110		75-158		
2378-TCDF-Conf	1.00 U	1.00	0.0401	ng/kg	110		75-158		
12378-PeCDF	0.0798 J	5.00	0.0292	ng/kg	109		80-134		
23478-PeCDF	0.0923 J	5.00	0.0253	ng/kg	112		68-160		
123478-HxCDF	0.101 J	5.00	0.0183	ng/kg	101		72-134		
123678-HxCDF	0.0806 J	5.00	0.0182	ng/kg	100		84-130		
123789-HxCDF	0.0474 J	5.00	0.0242	ng/kg	98		78-130		
234678-HxCDF	0.0879 J	5.00	0.0169	ng/kg	99		70-156		
1234678-HpCDF	0.0933 J	5.00	0.0134	ng/kg	100		82-122		
1234789-HpCDF	0.0762 J	5.00	0.0210	ng/kg	100		78-138		
OCDF	0.201 J	10.0	0.0313	ng/kg	96		63-170		
Batch number: 13227001	Sample number(s): 7156753-7156756,7156758-7156759								
TEQ WHO 2005 - EDLx0.0	0.0110			ng/kg					
Batch number: 13232002	Sample number(s): 7156760-7156762,7156764-7156768								
TEQ WHO 2005 - EDLx0.0	0.190			ng/kg					

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13226SLB026	Sample number(s): 7156758-7156762,7156764-7156768 UNSPK: 7156760								
Acenaphthene	97	99	48-127	2	30				
Acenaphthylene	103	104	49-121	1	30				
Anthracene	101	103	52-126	2	30				
Benzo(a)anthracene	98	100	44-143	2	30				
Benzo(a)pyrene	99	102	44-140	3	30				
Benzo(b)fluoranthene	101	105	26-142	4	30				
Benzo(e)pyrene	90	91	70-130	1	30				
Benzo(g,h,i)perylene	86	88	33-141	2	30				
Benzo(k)fluoranthene	102	103	54-142	1	30				
Butylbenzylphthalate	117	121	49-151	3	30				
Di-n-butylphthalate	116	117	52-147	0	30				
Chrysene	100	102	29-148	3	30				
Dibenz(a,h)anthracene	97	99	20-137	2	30				
Diethylphthalate	107	110	43-145	3	30				
Dimethylphthalate	103	104	58-129	1	30				
Bis(2-Ethylhexyl)phthalate	112	142	39-167	21	30				
Fluoranthene	98	101	40-148	3	30				
Fluorene	100	100	51-137	1	30				

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Quality Control Summary

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Reported: 08/28/13 at 08:58 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Indeno(1,2,3-cd)pyrene	97	99	17-136	2	30				
1-Methylnaphthalene	105	109	50-131	4	30				
2-Methylnaphthalene	105	107	35-152	2	30				
Naphthalene	99	101	31-148	1	30				
N-Nitrosodimethylamine	89	85	48-113	4	30				
Di-n-octylphthalate	113	116	52-162	3	30				
Phenanthrene	99	100	29-142	1	30				
Pyrene	95	96	26-143	1	30				
Batch number: 13226SLE026	Sample number(s): 7156753-7156756 UNSPK: 7156754								
Acenaphthene	105	99	48-127	5	30				
Acenaphthylene	108	105	49-121	3	30				
Anthracene	107	104	52-126	3	30				
Benzo(a)anthracene	104	99	44-143	5	30				
Benzo(a)pyrene	105	101	44-140	5	30				
Benzo(b)fluoranthene	109	104	26-142	4	30				
Benzo(e)pyrene	95	92	70-130	3	30				
Benzo(g,h,i)perylene	103	101	33-141	3	30				
Benzo(k)fluoranthene	106	103	54-142	3	30				
Butylbenzylphthalate	125	121	49-151	3	30				
Di-n-butylphthalate	122	119	52-147	3	30				
Chrysene	104	101	29-148	4	30				
Dibenz(a,h)anthracene	111	107	20-137	4	30				
Diethylphthalate	112	110	43-145	2	30				
Dimethylphthalate	108	106	58-129	2	30				
Bis(2-Ethylhexyl)phthalate	130	122	39-167	6	30				
Fluoranthene	102	102	40-148	1	30				
Fluorene	106	101	51-137	5	30				
Indeno(1,2,3-cd)pyrene	110	106	17-136	4	30				
1-Methylnaphthalene	110	107	50-131	3	30				
2-Methylnaphthalene	109	107	35-152	2	30				
Naphthalene	104	101	31-148	3	30				
N-Nitrosodimethylamine	99	88	48-113	12	30				
Di-n-octylphthalate	119	117	52-162	2	30				
Phenanthrene	103	101	29-142	3	30				
Pyrene	102	99	26-143	4	30				
Batch number: 13224A16A	Sample number(s): 7156754-7156756,7156758,7156766,7156768 UNSPK: 7156754								
11a TPH by EPA 8015B GRO	64	77	39-118	30	30				
Batch number: 13226A16A	Sample number(s): 7156760-7156762,7156764 UNSPK: 7156760								
11a TPH by EPA 8015B GRO	64	64	39-118	8	30				
Batch number: 132250009A	Sample number(s): 7156767-7156768 UNSPK: P152828								
2,4-D	79	79	42-143	0	35				
Dalapon	29	0*	19-109	200*	50				
2,4-DB	121	116	10-179	4	50				
Dicamba	98	92	45-147	6	50				
Dinoseb	26	26	10-52	1	35				
2,4-DP (Dichlorprop)	133	130	32-171	2	50				
MCPA	94	89	23-169	5	50				
MCPP (Mecoprop)	82	82	24-164	1	50				

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
2,4,5-T	91	87	12-172	4	35						
2,4,5-TP	112	106	10-142	6	35						
Batch number: 132240016A	Sample number(s): 7156767-7156768 UNSPK: P154023										
Aldrin	92	99	16-126	7	50						
Alpha BHC	91	98	14-140	7	50						
Beta BHC	97	102	10-173	5	50						
Gamma BHC - Lindane	93	97	30-137	5	50						
p,p-DDD	91	101	43-149	10	50						
p,p-DDE	96	107	18-161	11	50						
p,p-DDT	89	97	12-193	8	50						
Delta BHC	93	97	13-153	4	50						
Dieldrin	90	98	19-154	8	50						
Endosulfan I	86	94	16-137	10	50						
Endosulfan II	89	99	10-156	10	50						
Endosulfan Sulfate	93	97	10-181	4	50						
Endrin	87	93	30-152	7	50						
Endrin Aldehyde	78	84	10-152	6	35						
Endrin Ketone	86	89	10-160	4	50						
Heptachlor	90	97	16-152	7	50						
Heptachlor Epoxide	92	98	17-167	7	50						
Methoxychlor	92	99	34-168	7	50						
Batch number: 132270006A	Sample number(s): 7156753-7156756,7156758-7156759 UNSPK: 7156754										
PCB-1016	89	83	16-146	7	50						
PCB-1260	93	89	40-134	4	50						
Batch number: 132270007A	Sample number(s): 7156760-7156762,7156764-7156768 UNSPK: 7156760										
PCB-1016	96	96	16-146	0	50						
PCB-1260	109	108	40-134	1	50						
Batch number: 132260015A	Sample number(s): 7156753-7156756,7156758-7156759 UNSPK: 7156754										
EFH (C12-C14)	0*	0*	49-123	0	20						
EFH (C15-C20)	169*	117	49-123	37*	20						
EFH (C21-C30)	279*	-24*	49-123	109*	20						
EFH (C30-C40)	635*	9*	49-123	146*	20						
EFH (C8-C11)	0*	0*	49-123	0	20						
Batch number: 132280016A	Sample number(s): 7156760-7156762,7156764-7156768 UNSPK: 7156760										
EFH (C12-C14)	86	96	49-123	10	20						
EFH (C15-C20)	101	116	49-123	14	20						
EFH (C21-C30)	110	142*	49-123	26*	20						
EFH (C30-C40)	108	197*	49-123	58*	20						
EFH (C8-C11)	78	77	49-123	1	20						
Batch number: 132230637001	Sample number(s): 7156753-7156759 UNSPK: 7156754 BKG: 7156754										
Aluminum	1713 (2)	1700 (2)	75-125	0	20	17,100		17,600		3	20
Antimony	62*	64*	75-125	3	20	4.00	U	4.00	U	0 (1)	20
Arsenic	98	101	75-125	3	20	3.21	J	3.57	J	11 (1)	20
Barium	97	98	75-125	1	20	86.0		86.9		1	20
Beryllium	99	100	75-125	0	20	0.582	J	0.577	J	1 (1)	20

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Quality Control Summary

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Boron	97	96	75-125	1	20	5.16	J	4.66	J	10 (1)	20
Cadmium	92	96	75-125	4	20	0.964	J	0.991	J	3 (1)	20
Calcium	278 (2)	401 (2)	75-125	4	20	12,500		21,400		52*	20
Chromium	106	108	75-125	1	20	24.6		25.5		4	20
Cobalt	89	92	75-125	3	20	6.23		5.94		5	20
Copper	106	106	75-125	0	20	14.5		14.2		2	20
Iron	329 (2)	571 (2)	75-125	1	20	22,600		22,700		0	20
Lead	92	97	75-125	4	20	5.84		6.00		3 (1)	20
Lithium	94	95	75-125	0	20	18.9		18.8		1 (1)	20
Magnesium	201 (2)	222 (2)	75-125	1	20	5,700		5,890		3	20
Manganese	0 (2)	38 (2)	75-125	6	20	293		271		8	20
Molybdenum	93	96	75-125	3	20	0.455	J	2.00	U	200* (1)	20
Nickel	90	95	75-125	5	20	13.8		13.7		0	20
Phosphorus	95	98	75-125	1	20	317		341		7	20
Potassium	137*	136*	75-125	0	20	1,620		1,600		1	20
Sodium	97	97	75-125	0	20	556		600		8	20
Tin	86	89	75-125	3	20	2.98	J	3.08	J	3 (1)	20
Titanium	309 (2)	289 (2)	75-125	1	20	1,270		1,250		1	20
Vanadium	107	109	75-125	1	20	45.1		46.0		2	20
Zinc	96	102	75-125	3	20	48.4		48.7		1	20
Zirconium	95	96	75-125	1	20	2.26	J	4.02	J	56* (1)	20
Batch number: 132230637001A	Sample number(s): 7156753-7156759 UNSPK: 7156754 BKG: 7156754										
Silver	104	102	75-125	1	20	0.0490	J	0.200	U	200* (1)	20
Strontium	136*	116	75-125	4	20	28.3		30.5		8	20
Thallium	104	109	75-125	3	20	0.216		0.226		4 (1)	20
Batch number: 132230637001B	Sample number(s): 7156753-7156759 UNSPK: 7156754 BKG: 7156754										
Selenium	100	99	75-125	1	20	0.400	U	0.400	U	0 (1)	20
Batch number: 132230637002	Sample number(s): 7156760-7156768 UNSPK: 7156760 BKG: 7156760										
Aluminum	2265 (2)	2304 (2)	75-125	0	20	24,300		23,900		2	20
Antimony	54*	55*	75-125	1	20	3.92	U	3.92	U	0 (1)	20
Arsenic	94	94	75-125	1	20	5.77		5.38		7 (1)	20
Barium	103	105	75-125	2	20	83.4		82.9		1	20
Beryllium	98	100	75-125	2	20	0.729	J	0.735	J	1 (1)	20
Boron	98	99	75-125	1	20	7.69	J	7.08	J	8 (1)	20
Cadmium	94	94	75-125	0	20	0.980	U	0.980	U	0 (1)	20
Calcium	-2143 (2)	-2856 (2)	75-125	16	20	27,100		16,400		49*	20
Chromium	103	107	75-125	1	20	29.6		29.6		0	20
Cobalt	94	96	75-125	2	20	7.40		7.13		4	20
Copper	105	107	75-125	1	20	13.1		13.5		3	20
Iron	630 (2)	2388 (2)	75-125	6	20	26,600		26,900		1	20
Lead	94	96	75-125	2	20	8.34		8.11		3 (1)	20
Lithium	101	102	75-125	1	20	22.0		21.9		1	20
Magnesium	294 (2)	297 (2)	75-125	0	20	6,080		6,170		1	20
Manganese	67 (2)	175 (2)	75-125	13	20	355		338		5	20
Molybdenum	93	94	75-125	1	20	0.199	J	1.96	U	200* (1)	20
Nickel	95	98	75-125	2	20	15.4		15.5		1	20

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Phosphorus	116	103	75-125	3	20	301	308	2	20
Potassium	174*	157*	75-125	4	20	2,890	2,890	0	20
Sodium	100	99	75-125	1	20	81.1 J	80.8 J	0 (1)	20
Tin	90	91	75-125	1	20	3.14 J	3.15 J	0 (1)	20
Titanium	252 (2)	305 (2)	75-125	3	20	1,370	1,320	4	20
Vanadium	107	111	75-125	2	20	53.8	53.9	0	20
Zinc	102	102	75-125	0	20	53.2	53.4	0	20
Zirconium	93	94	75-125	0	20	7.19	7.05	2 (1)	20
Batch number: 132230637002A	Sample number(s): 7156760-7156768 UNSPK: 7156760 BKG: 7156760								
Silver	138*	110	75-125	23*	20	0.0280 J	0.196 U	200* (1)	20
Strontium	208 (2)	29 (2)	75-125	28*	20	40.9	38.8	5	20
Thallium	146*	95	75-125	24*	20	0.356	0.319	11 (1)	20
Batch number: 132230637002B	Sample number(s): 7156760-7156768 UNSPK: 7156760 BKG: 7156760								
Selenium	118	98	75-125	17	20	0.165 J	0.134 J	20 (1)	20
Batch number: 132310638001	Sample number(s): 7156753-7156759 UNSPK: 7156754 BKG: 7156754								
3a Mercury 7471A	112	111	65-135	1	20	0.0162 U	0.0160 U	0 (1)	20
Batch number: 132310638002	Sample number(s): 7156760-7156768 UNSPK: 7156760 BKG: 7156760								
3a Mercury 7471A	119	118	65-135	2	20	0.0166 U	0.0165 U	0 (1)	20
Batch number: 13222039401A	Sample number(s): 7156753-7156754,7156757-7156759 BKG: 7156754								
15a pH by 9045D						8.41	8.48	1	3
Batch number: 13222039401B	Sample number(s): 7156760,7156763-7156768 BKG: 7156760								
15a pH by 9045D						7.86	7.87	0	3
Batch number: 13226162401A	Sample number(s): 7156753-7156759 BKG: 7156754								
14a Moisture Content by 160.3						11.9	12.1	2	20
14a Moisture Content by 160.3						11.9	12.1	2	20
14a Moisture Content by 160.3						11.9	12.1	2	20
Batch number: 13226162401B	Sample number(s): 7156760-7156768 BKG: 7156760								
14a Moisture Content by 160.3						13.3	11.8	12	20
14a Moisture Content by 160.3						13.3	11.8	12	20
14a Moisture Content by 160.3						13.3	11.8	12	20
Batch number: 13227001	Sample number(s): 7156753-7156756,7156758-7156759 UNSPK: 7156754								
2378-TCDD	103	107	40-135	6	20				
12378-PeCDD	104	104	40-135	3	20				
123478-HxCDD	99	102	40-135	5	20				
123678-HxCDD	98	93	40-135	3	20				
123789-HxCDD	94	95	40-135	3	20				
1234678-HpCDD	93	93	40-135	3	20				
OCDD	96	92	40-135	1	20				
2378-TCDF	100	98	40-135	1	20				
12378-PeCDF	93	95	40-135	5	20				
23478-PeCDF	94	97	40-135	5	20				
123478-HxCDF	95	94	40-135	1	20				
123678-HxCDF	93	94	40-135	4	20				

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
123789-HxCDF	89	91	40-135	4	20				
234678-HxCDF	93	88	40-135	2	20				
1234678-HpCDF	92	92	40-135	3	20				
1234789-HpCDF	90	91	40-135	4	20				
OCDF	86	85	40-135	1	20				
Batch number: 13232002	Sample number(s): 7156760-7156762,7156764-7156768 UNSPK: 7156760								
2378-TCDD	115	115	40-135	0	20				
12378-PeCDD	113	116	40-135	3	20				
123478-HxCDD	108	110	40-135	3	20				
123678-HxCDD	110	109	40-135	0	20				
123789-HxCDD	109	109	40-135	1	20				
1234678-HpCDD	103	106	40-135	3	20				
OCDD	95	113	40-135	14	20				
2378-TCDF	115	117	40-135	2	20				
2378-TCDF-Conf	115	117	40-135	2	20				
12378-PeCDF	113	109	40-135	3	20				
23478-PeCDF	112	110	40-135	1	20				
123478-HxCDF	105	103	40-135	1	20				
123678-HxCDF	104	103	40-135	0	20				
123789-HxCDF	99	102	40-135	3	20				
234678-HxCDF	103	101	40-135	1	20				
1234678-HpCDF	102	99	40-135	3	20				
1234789-HpCDF	99	97	40-135	2	20				
OCDF	98	95	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13226SLB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7156758	96	102	113
7156759	84	91	103
7156760	91	102	110
7156761	89	99	109
7156762	93	102	111
7156764	94	104	112
7156765	84	94	101
7156766	91	102	110
7156767	88	90	104
7156768	86	95	103
Blank	92	103	113
LCS	92	104	113
MS	89	99	109

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410581
Reported: 08/28/13 at 08:58 AM

Surrogate Quality Control

MSD	93	102	111
Limits:	54-129	59-125	61-125

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13226SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7156753	82	86	103
7156754	89	98	106
7156755	90	101	108
7156756	89	96	105
Blank	89	100	106
LCS	92	102	107
MS	90	101	108
MSD	89	96	105
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13224A16A

	Trifluorotoluene-F
7156754	74
7156755	67
7156756	76
7156758	71
7156766	70
7156768	75
Blank	78
LCS	83
MS	67
MSD	76
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13224A20A

	Trifluorotoluene-F
7156752	86
Blank	86
LCS	122
LCSD	116
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13226A16A

	Trifluorotoluene-F
7156760	74
7156761	74
7156762	74
7156764	76

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410581
Reported: 08/28/13 at 08:58 AM

Surrogate Quality Control

Blank	82	
LCS	88	
MS	74	
MSD	74	
Limits:	61-122	

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132240016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7156767	90	131*
7156768	94	110
Blank	105	125*
LCS	107	124*
MS	95	91
MSD	102	98
Limits:	50-130	20-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132250009A

	2,4-Dichlorophenylacetic acid
7156767	52
7156768	60
Blank	61
LCS	71
MS	66
MSD	64
Limits:	50-150

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132270006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7156753	104	100
7156754	112	100
7156755	96	92
7156756	87	84
7156758	107	102
7156759	98	96
Blank	114	105
LCS	109	104
LCSD	113	111
MS	96	92
MSD	87	84
Limits:	45-120	45-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132270007A

	Tetrachloro-m-xylene	Decachlorobiphenyl

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410581
Reported: 08/28/13 at 08:58 AM

Surrogate Quality Control

7156760	109	103
7156761	102	104
7156762	101	106
7156764	107	104
7156765	98	97
7156766	98	98
7156767	100	95
7156768	93	92
Blank	110	112
LCS	104	109
LCSD	108	122*
MS	102	104
MSD	101	106
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132260015A

	Chlorobenzene	Orthoterphenyl
7156753	93	98
7156754	92	99
7156755	103	111
7156756	97	101
7156758	99	102
7156759	92	94
Blank	97	103
LCS	101	107
MS	103	111
MSD	97	101
Limits:	37-125	66-123

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132280016A

	Chlorobenzene	Orthoterphenyl
7156760	87	90
7156761	87	80
7156762	87	81
7156764	87	85
7156765	81	88
7156766	82	86
7156767	83	76
7156768	75	79
Blank	88	97
LCS	87	92
MS	87	80
MSD	87	81
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13227001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410581
Reported: 08/28/13 at 08:58 AM

Surrogate Quality Control

7156753	75	85	70	76	76	79
7156754	67	83	63	67	67	68
7156755	69	85	68	71	70	79
7156756	56	74	62	64	64	68
7156758	58	75	61	66	64	64
7156759	73	84	62	69	67	71
Blank	66	76	61	69	68	69
MS	69	85	68	71	70	79
MSD	56	74	62	64	64	68
OPR	60	76	54	57	59	66
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7156753	83	79	74	81	81	87
7156754	81	76	64	81	75	78
7156755	77	79	70	84	76	78
7156756	79	70	62	71	71	76
7156758	72	72	62	76	73	77
7156759	75	69	58	84	75	79
Blank	81	64	60	81	73	81
MS	77	79	70	84	76	78
MSD	79	70	62	71	71	76
OPR	68	59	54	77	66	69
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7156753	86	88	93	77	84
7156754	79	85	85	67	84
7156755	80	82	86	71	84
7156756	72	78	79	57	73
7156758	74	76	79	63	77
7156759	78	77	75	68	84
Blank	78	83	79	63	82
MS	80	82	86	71	84
MSD	72	78	79	57	73
OPR	69	73	68	56	73
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13232002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7156760	69	103	84	91	93	95
7156761	66	102	78	83	82	82
7156762	63	90	78	85	86	79
7156764	72	98	77	83	82	83
7156765	67	90	76	84	83	76
7156766	64	97	74	82	82	78
7156767	72	96	80	86	87	82
7156768	67	105	85	95	96	89
Blank	68	93	79	89	86	84

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410581
Reported: 08/28/13 at 08:58 AM

Surrogate Quality Control

MS	66	102	78	83	82	82
MSD	63	90	78	85	86	79
OPR	74	116	82	87	88	94
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7156760	104	96	91	95	83	85
7156761	93	93	96	91	76	78
7156762	95	84	81	79	77	82
7156764	95	87	81	87	74	83
7156765	90	78	79	80	77	83
7156766	100	83	78	87	73	81
7156767	90	90	86	87	79	85
7156768	114	94	89	95	93	96
Blank	101	86	93	88	80	85
MS	93	93	96	91	76	78
MSD	95	84	81	79	77	82
OPR	105	96	102	110	86	88
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	13C12-2378-TCDF-Conf
7156760	89	95	92	79	102	
7156761	76	89	99	70	95	
7156762	81	85	89	69	91	
7156764	80	89	88	74	94	
7156765	81	80	88	74	89	
7156766	82	91	91	73	97	
7156767	82	83	95		94	93
7156768	91	102	102	75	105	
Blank	84	90	104	71	88	79
MS	76	89	99	70	95	70
MSD	81	85	89	69	91	69
OPR	93	101	108	77	114	77
Limits:	28-130	23-140	17-157	24-169	24-185	24-169

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Gp#1410581 sample#7156752-68

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/9/2013

CarrierName: FedEx

AirbillNo: 796435595690

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20130809-01

Cooler #: 1

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-080913	8/9/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-530-SA8-SB-0.0-0.5	8/9/13 07:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X											X											
SL-530-SA8-SB-0.0-0.5	8/9/13 07:25	SO	None	1 - 4 oz glass	10 day													X																	
SL-530-SA8-SB-4.0-5.0MS	8/9/13 07:45	SO	None	6 - SS-Sleeve	10 day	X	X					X		X X											X											MS/MSD
SL-530-SA8-SB-4.0-5.0MS	8/9/13 07:45	SO	None	1 - 16 oz glass	10 day													X																	MS/MSD
SL-530-SA8-SB-4.0-5.0MS	8/9/13 07:45	SO	None	6 - Encore	10 day																			X											MS/MSD
SL-830-SA8-SB-4.0-5.0	8/9/13 07:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X											X											
SL-830-SA8-SB-4.0-5.0	8/9/13 07:50	SO	None	1 - 4 oz glass	10 day													X																	
SL-830-SA8-SB-4.0-5.0	8/9/13 07:50	SO	None	2 - Encore	10 day																			X											
SL-538-SA8-SB-0.0-0.5	8/9/13 09:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X											X											
SL-538-SA8-SB-0.0-0.5	8/9/13 09:10	SO	None	1 - 4 oz glass	10 day													X																	
SL-538-SA8-SB-4.0-5.0MS	8/9/13 09:20	SO	None	6 - SS-Sleeve	10 day	X	X					X		X X											X											MS/MSD
SL-538-SA8-SB-4.0-5.0MS	8/9/13 09:20	SO	None	1 - 16 oz glass	10 day													X																	MS/MSD
SL-538-SA8-SB-4.0-5.0MS	8/9/13 09:20	SO	None	6 - Encore	10 day																			X											MS/MSD
SL-838-SA8-SB-4.0-5.0	8/9/13 09:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X											X											
SL-838-SA8-SB-4.0-5.0	8/9/13 09:30	SO	None	1 - 4 oz glass	10 day													X																	
SL-838-SA8-SB-4.0-5.0	8/9/13 09:30	SO	None	2 - Encore	10 day																			X											
SL-541-SA8-SB-0.0-0.5	8/9/13 13:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X											X											
SL-541-SA8-SB-0.0-0.5	8/9/13 13:35	SO	None	1 - 4 oz glass	10 day													X																	
SL-541-SA8-SB-4.0-5.0	8/9/13 13:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X											X											
SL-541-SA8-SB-4.0-5.0	8/9/13 13:55	SO	None	1 - 4 oz glass	10 day													X																	
SL-541-SA8-SB-4.0-5.0	8/9/13 13:55	SO	None	2 - Encore	10 day																			X											
SL-607-SA8-SB-0.0-0.5	8/9/13 12:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X							X	X			X											
SL-607-SA8-SB-0.0-0.5	8/9/13 12:15	SO	None	1 - 4 oz glass	10 day													X																	
SL-607-SA8-SB-5.0-6.0	8/9/13 13:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X X							X	X			X											
SL-607-SA8-SB-5.0-6.0	8/9/13 13:00	SO	None	1 - 4 oz glass	10 day													X																	
SL-607-SA8-SB-5.0-6.0	8/9/13 13:00	SO	None	2 - Encore	10 day																			X											

acct#13013 Cp#1410581 sample#7156752-68

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/9/2013
CarrierName: FedEx
AirbillNo: 796435595690

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130809-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	08/09/2013	1600									
										8/10/13	945

COC Rev 2

COC 20130809-01, Page 2 of 2

2 of 2

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C#1410581

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 8/10/13

Time of Receipt: 945

Source Code: SO-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : ~~YES~~ (NO)

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	2.5	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems: (3) wm 8/10/13

4 oz glass jar for SL-530-SA8-SB ~~4.0~~-0.0-0.5 date= 8/8/13

received 2 extra encores labeled SL-607-SA8-SB-4.0-5.0

8/9/13 1235

Unpacker Signature/Emp#: 2308 **Date/Time:** 8/10/13 1024

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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SAMPLE DELIVERY GROUP

PH089

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 26, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/13/2013
Group Number: 1410969
SDG: PH089
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-081213 Water	7158598
SL-590-SA8-SB-0.0-0.5 Soil	7158599
SL-590-SA8-SB-4.0-5.0 Soil	7158600
SL-590-SA8-SB-7.0-8.0 Soil	7158601
SL-591-SA8-SB-0.0-0.5 Soil	7158602
SL-592-SA8-SB-0.0-0.5 Soil	7158603
SL-592-SA8-SB-3.5-4.5 Soil	7158604
SL-593-SA8-SB-0.0-0.5 Soil	7158605
SL-593-SA8-SB-4.0-5.0 Soil	7158606
SL-585-SA8-SB-0.0-0.5 Soil	7158607

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB-081213 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7158598
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:00

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

891TB SDG#: PH089-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13228A94A	08/16/2013 13:45	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13228A94A	08/16/2013 13:45	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158599
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59000 SDG#: PH089-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.40	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.68	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.4	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.9		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.6	J	18	6.1	1
12969	Fluoranthene	206-44-0	1.9		1.7	0.68	1
12969	Fluorene	86-73-7	1.4	J	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.4	J	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.9		1.7	0.68	1
12969	Naphthalene	91-20-3	5.6		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	4.0		1.7	0.68	1
12969	Pyrene	129-00-0	1.6	J	1.7	0.68	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	25	J	37	12	1
10401	Dalapon	75-99-0	91	U	91	57	1
10401	2,4-DB	94-82-6	24	U	24	24	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	24	U	24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.1	1
10401	MCPA	94-74-6	2,500	U	2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	2,500	U	2,500	760	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.83	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.76	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.0	J	1.7	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158599
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59000 SDG#: PH089-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	p,p-DDT	50-29-3	0.67	J	1.7	0.36	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	4.1	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	18		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	43		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	1.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158599
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59000 SDG#: PH089-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.177	J	1.01	0.0841	1
11031	12378-PeCDD	40321-76-4	0.363	JBQ	5.07	0.0737	1
11031	123478-HxCDD	39227-28-6	0.408	JBQ	5.07	0.0755	1
11031	123678-HxCDD	57653-85-7	0.530	JB	5.07	0.0798	1
11031	123789-HxCDD	19408-74-3	0.462	JB	5.07	0.0742	1
11031	1234678-HpCDD	35822-46-9	4.00	JB	5.07	0.0648	1
11031	OCDD	3268-87-9	33.2	B	10.1	0.0366	1
11031	2378-TCDF	51207-31-9	0.275	JQ	1.01	0.106	1
11031	12378-PeCDF	57117-41-6	0.746	JB	5.07	0.0578	1
11031	23478-PeCDF	57117-31-4	0.497	JB	5.07	0.0469	1
11031	123478-HxCDF	70648-26-9	0.363	JBQ	5.07	0.0393	1
11031	123678-HxCDF	57117-44-9	0.426	JB	5.07	0.0414	1
11031	123789-HxCDF	72918-21-9	0.323	JB	5.07	0.0370	1
11031	234678-HxCDF	60851-34-5	0.358	JB	5.07	0.0366	1
11031	1234678-HpCDF	67562-39-4	0.640	JBQ	5.07	0.0395	1
11031	1234789-HpCDF	55673-89-7	0.239	JBQ	5.07	0.0429	1
11031	OCDF	39001-02-0	1.47	JB	10.1	0.0396	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.608				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	94	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	90	28 - 130
13C12-1234678-HpCDD	105	23 - 140
13C12-OCDD	110	17 - 157
13C12-2378-TCDF	84	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	94	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	101	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	96	26 - 138
13C12-OCDF	101	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158599
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59000 SDG#: PH089-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158599
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59000 SDG#: PH089-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/17/2013 03:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 19:52	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 19:41	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132320013A	08/22/2013 22:45	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132320013A	08/20/2013 18:20	Sally L Appleyard	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 05:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/24/2013 00:41	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401A	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158600
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:45 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59040 SDG#: PH089-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.39	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	27.17
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	20	J	38	13	1
10401	Dalapon	75-99-0	94	U	94	46	1
10401	2,4-DB	94-82-6	22		18	6.5	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.4	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.4	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.86	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158600
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:45 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59040 SDG#: PH089-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.36	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.3	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	11		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	29		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,000		40.9	7.37	1
06944	Antimony	7440-36-0	4.09	U	4.09	0.757	1
06935	Arsenic	7440-38-2	5.52		4.09	0.716	1
06946	Barium	7440-39-3	95.9		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.628	J	1.02	0.0685	1
07914	Boron	7440-42-8	3.59	J	10.2	0.859	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0777	1
01650	Calcium	7440-70-2	2,670		20.4	3.41	1
06951	Chromium	7440-47-3	25.0		3.07	0.164	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158600
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:45 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59040 SDG#: PH089-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	5.35		1.02	0.101	1
06953	Copper	7440-50-8	9.19		2.04	0.296	1
01654	Iron	7439-89-6	21,400		40.9	3.70	1
06955	Lead	7439-92-1	7.12		3.07	0.511	1
01656	Lithium	7439-93-2	23.4		4.1	0.35	1
01657	Magnesium	7439-95-4	4,890		10.2	1.71	1
06958	Manganese	7439-96-5	270		1.02	0.0849	1
06960	Molybdenum	7439-98-7	0.488	J	2.04	0.174	1
06961	Nickel	7440-02-0	14.0		2.04	0.133	1
10145	Phosphorus	7723-14-0	365		10.2	2.95	1
01662	Potassium	7440-09-7	3,100		102	8.53	1
01667	Sodium	7440-23-5	102	J	102	17.1	1
06969	Tin	7440-31-5	3.21	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,260		5.11	0.869	5
06971	Vanadium	7440-62-2	37.9		1.02	0.133	1
06972	Zinc	7440-66-6	50.4		4.09	0.204	1
10146	Zirconium	7440-67-7	3.91	J	5.11	0.859	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.165	J	0.409	0.102	2
06142	Silver	7440-22-4	0.0470	J	0.204	0.0266	2
06144	Strontium	7440-24-6	28.8		0.409	0.0695	2
06145	Thallium	7440-28-0	0.338		0.204	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0161	U	0.0161	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.87		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158600
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:45 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59040 SDG#: PH089-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0835	1
11031	12378-PeCDD	40321-76-4	0.276	JBQ	5.12	0.0712	1
11031	123478-HxCDD	39227-28-6	0.0958	JB	5.12	0.0529	1
11031	123678-HxCDD	57653-85-7	0.146	JB	5.12	0.0565	1
11031	123789-HxCDD	19408-74-3	0.157	JBQ	5.12	0.0542	1
11031	1234678-HpCDD	35822-46-9	0.976	JBQ	5.12	0.0606	1
11031	OCDD	3268-87-9	9.36	JB	10.2	0.0433	1
11031	2378-TCDF	51207-31-9	0.109	JQ	1.02	0.0657	1
11031	12378-PeCDF	57117-41-6	0.272	JBQ	5.12	0.0388	1
11031	23478-PeCDF	57117-31-4	0.212	JB	5.12	0.0348	1
11031	123478-HxCDF	70648-26-9	0.111	JBQ	5.12	0.0283	1
11031	123678-HxCDF	57117-44-9	0.0784	JBQ	5.12	0.0274	1
11031	123789-HxCDF	72918-21-9	0.133	JBQ	5.12	0.0267	1
11031	234678-HxCDF	60851-34-5	0.0793	JBQ	5.12	0.0252	1
11031	1234678-HpCDF	67562-39-4	0.225	JBQ	5.12	0.0216	1
11031	1234789-HpCDF	55673-89-7	5.12	U	5.12	0.0351	1
11031	OCDF	39001-02-0	0.389	JB	10.2	0.0626	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0906				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	89	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	90	28 - 130
13C12-1234678-HpCDD	103	23 - 140
13C12-OCDD	99	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	97	29 - 147
13C12-1234678-HpCDF	105	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158600
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:45 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59040 SDG#: PH089-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158600
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:45 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59040 SDG#: PH089-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/17/2013 03:58	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13226A16A	08/14/2013 19:19	Laura M Krieger	27.17
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322532029	08/13/2013 13:31	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322532029	08/13/2013 13:31	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 21:12	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 19:56	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132320013A	08/22/2013 23:41	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132320013A	08/20/2013 18:20	Sally L Appleyard	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 06:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/24/2013 01:38	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158600
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 10:45 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59040 SDG#: PH089-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 12:02	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 05:50	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 12:20	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 12:20	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 12:20	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 12:20	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132250638001	08/15/2013 16:06	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132250638001	08/14/2013 15:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13225039402A	08/13/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401A	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158601
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 11:10 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59070 SDG#: PH089-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.3	U	1.3	0.3	30.79
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	93	U	93	46	1
10401	2,4-DB	94-82-6	18	U	18	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.86	U	0.86	0.18	1
10590	Alpha BHC	319-84-6	0.86	U	0.86	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.86	U	0.86	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158601
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 11:10 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59070 SDG#: PH089-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.36	1
10590	Delta BHC	319-86-8	0.86	U	0.86	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.86	U	0.86	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.86	U	0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.86	U	0.86	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	6.3		5.2	2.1	1
12952	EFH (C21-C30)	n.a.	29		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	34		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,300		40.8	7.36	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.756	1
06935	Arsenic	7440-38-2	5.31		4.08	0.715	1
06946	Barium	7440-39-3	64.4		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.550	J	1.02	0.0684	1
07914	Boron	7440-42-8	1.73	J	10.2	0.858	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0776	1
01650	Calcium	7440-70-2	3,140		20.4	3.41	1
06951	Chromium	7440-47-3	21.8		3.06	0.163	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158601
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 11:10 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59070 SDG#: PH089-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	5.23		1.02	0.101	1
06953	Copper	7440-50-8	9.16		2.04	0.296	1
01654	Iron	7439-89-6	22,500		40.8	3.70	1
06955	Lead	7439-92-1	5.45		3.06	0.511	1
01656	Lithium	7439-93-2	18.6		4.1	0.35	1
01657	Magnesium	7439-95-4	5,430		10.2	1.71	1
06958	Manganese	7439-96-5	228		1.02	0.0848	1
06960	Molybdenum	7439-98-7	0.213	J	2.04	0.174	1
06961	Nickel	7440-02-0	9.60		2.04	0.133	1
10145	Phosphorus	7723-14-0	403		10.2	2.95	1
01662	Potassium	7440-09-7	1,960		102	8.52	1
01667	Sodium	7440-23-5	147		102	17.1	1
06969	Tin	7440-31-5	3.28	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,500		5.11	0.868	5
06971	Vanadium	7440-62-2	41.3		1.02	0.133	1
06972	Zinc	7440-66-6	49.4		4.08	0.204	1
10146	Zirconium	7440-67-7	4.30	J	5.11	0.858	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.116	J	0.408	0.102	2
06142	Silver	7440-22-4	0.204	U	0.204	0.0266	2
06144	Strontium	7440-24-6	25.2		0.408	0.0694	2
06145	Thallium	7440-28-0	0.273		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.05		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158601
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 11:10 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59070 SDG#: PH089-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/17/2013 04:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13226A16A	08/14/2013 19:57	Laura M Krieger	30.79
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322532029	08/13/2013 13:32	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322532029	08/13/2013 13:32	Larry E Bevins	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132250009A	08/16/2013 21:39	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132250011A	08/19/2013 20:11	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132320013A	08/22/2013 23:59	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132320013A	08/20/2013 18:20	Sally L Appleyard	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132250011A	08/14/2013 03:00	Sherry L Morrow	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132250009A	08/14/2013 05:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 09:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 12:06	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 05:54	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 12:22	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 12:22	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-590-SA8-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158601
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 11:10 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59070 SDG#: PH089-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 12:22	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 12:22	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132250638001	08/15/2013 16:12	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132250638001	08/14/2013 15:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13225039402A	08/13/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401A	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-591-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158602
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:50 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59100 SDG#: PH089-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.4	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.3	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.1	J	18	6.1	1
12969	Fluoranthene	206-44-0	1.5	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.98	J	1.7	0.67	1
12969	Pyrene	129-00-0	1.3	J	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	13		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	35		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-591-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158602
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:50 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59100 SDG#: PH089-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,200		40.1	7.23	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.742	1
06935	Arsenic	7440-38-2	4.91		4.01	0.701	1
06946	Barium	7440-39-3	96.9		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.541	J	1.00	0.0671	1
07914	Boron	7440-42-8	3.36	J	10.0	0.842	1
06949	Cadmium	7440-43-9	0.104	J	1.00	0.0762	1
01650	Calcium	7440-70-2	2,890		20.0	3.35	1
06951	Chromium	7440-47-3	18.1		3.01	0.160	1
06952	Cobalt	7440-48-4	4.95		1.00	0.0992	1
06953	Copper	7440-50-8	8.69		2.00	0.291	1
01654	Iron	7439-89-6	19,500		40.1	3.63	1
06955	Lead	7439-92-1	9.74		3.01	0.501	1
01656	Lithium	7439-93-2	23.9		4.0	0.34	1
01657	Magnesium	7439-95-4	4,270		10.0	1.67	1
06958	Manganese	7439-96-5	343		1.00	0.0832	1
06960	Molybdenum	7439-98-7	0.446	J	2.00	0.170	1
06961	Nickel	7440-02-0	10.8		2.00	0.130	1
10145	Phosphorus	7723-14-0	500		10.0	2.90	1
01662	Potassium	7440-09-7	3,430		100	8.36	1
01667	Sodium	7440-23-5	79.3	J	100	16.7	1
06969	Tin	7440-31-5	3.04	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,270		5.01	0.852	5
06971	Vanadium	7440-62-2	32.8		1.00	0.130	1
06972	Zinc	7440-66-6	59.1		4.01	0.200	1
10146	Zirconium	7440-67-7	2.35	J	5.01	0.842	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.142	J	0.401	0.100	2
06142	Silver	7440-22-4	0.0407	J	0.200	0.0261	2
06144	Strontium	7440-24-6	23.4		0.401	0.0681	2
06145	Thallium	7440-28-0	0.241		0.200	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0186		0.0159	0.0095	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.10		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-591-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158602
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:50 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59100 SDG#: PH089-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.982	U	0.982	0.100	1
11031	12378-PeCDD	40321-76-4	0.174	JB	4.91	0.0917	1
11031	123478-HxCDD	39227-28-6	0.114	JBQ	4.91	0.0717	1
11031	123678-HxCDD	57653-85-7	0.243	JBQ	4.91	0.0828	1
11031	123789-HxCDD	19408-74-3	0.173	JBQ	4.91	0.0847	1
11031	1234678-HpCDD	35822-46-9	2.68	JB	4.91	0.0896	1
11031	OCDD	3268-87-9	27.5	B	9.82	0.0460	1
11031	2378-TCDF	51207-31-9	0.143	J	0.982	0.0840	1
11031	12378-PeCDF	57117-41-6	4.91	U	4.91	0.0599	1
11031	23478-PeCDF	57117-31-4	0.186	JBQ	4.91	0.0531	1
11031	123478-HxCDF	70648-26-9	0.0419	JBQ	4.91	0.0385	1
11031	123678-HxCDF	57117-44-9	0.120	JBQ	4.91	0.0366	1
11031	123789-HxCDF	72918-21-9	0.159	JBQ	4.91	0.0422	1
11031	234678-HxCDF	60851-34-5	0.130	JBQ	4.91	0.0351	1
11031	1234678-HpCDF	67562-39-4	0.510	JBQ	4.91	0.0376	1
11031	1234789-HpCDF	55673-89-7	4.91	U	4.91	0.0580	1
11031	OCDF	39001-02-0	1.07	JB	9.82	0.0664	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.224				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-591-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158602
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:50 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59100 SDG#: PH089-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-591-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158602
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:50 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59100 SDG#: PH089-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/17/2013 05:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132320013A	08/23/2013 00:18	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132320013A	08/20/2013 18:20	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 06:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/24/2013 02:35	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 12:10	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:05	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 11:46	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 11:46	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 11:46	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-591-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158602
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:50 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59100 SDG#: PH089-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 11:46	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132250638001	08/15/2013 16:23	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132250638001	08/14/2013 15:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13225039402A	08/13/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401A	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158603
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:00 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59200 SDG#: PH089-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	0.83	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.79	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	18	6.1	1
12969	Fluoranthene	206-44-0	0.85	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	0.74	J	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	18	J	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	8.8	J	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	6.8		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	24		10	4.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158603
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:00 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59200 SDG#: PH089-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,200		40.1	7.23	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.742	1
06935	Arsenic	7440-38-2	5.16		4.01	0.702	1
06946	Barium	7440-39-3	103		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.646	J	1.00	0.0672	1
07914	Boron	7440-42-8	3.08	J	10.0	0.843	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0762	1
01650	Calcium	7440-70-2	2,730		20.1	3.35	1
06951	Chromium	7440-47-3	20.2		3.01	0.161	1
06952	Cobalt	7440-48-4	5.71		1.00	0.0993	1
06953	Copper	7440-50-8	9.63		2.01	0.291	1
01654	Iron	7439-89-6	22,000		40.1	3.63	1
06955	Lead	7439-92-1	9.10		3.01	0.502	1
01656	Lithium	7439-93-2	24.1		4.0	0.34	1
01657	Magnesium	7439-95-4	4,360		10.0	1.68	1
06958	Manganese	7439-96-5	367		1.00	0.0833	1
06960	Molybdenum	7439-98-7	0.481	J	2.01	0.171	1
06961	Nickel	7440-02-0	12.6		2.01	0.130	1
10145	Phosphorus	7723-14-0	407		10.0	2.90	1
01662	Potassium	7440-09-7	3,820		100	8.37	1
01667	Sodium	7440-23-5	75.1	J	100	16.8	1
06969	Tin	7440-31-5	3.34	J	10.0	0.221	1
06970	Titanium	7440-32-6	1,360		5.02	0.853	5
06971	Vanadium	7440-62-2	37.4		1.00	0.130	1
06972	Zinc	7440-66-6	55.5		4.01	0.201	1
10146	Zirconium	7440-67-7	2.56	J	5.02	0.843	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.172	J	0.401	0.100	2
06142	Silver	7440-22-4	0.0479	J	0.201	0.0261	2
06144	Strontium	7440-24-6	29.5		0.401	0.0682	2
06145	Thallium	7440-28-0	0.318		0.201	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173		0.0157	0.0094	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.01		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158603
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:00 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59200 SDG#: PH089-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158603
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:00 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59200 SDG#: PH089-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.984	U	0.984	0.0729	1
11031	12378-PeCDD	40321-76-4	0.134	JBQ	4.92	0.0745	1
11031	123478-HxCDD	39227-28-6	4.92	U	4.92	0.0648	1
11031	123678-HxCDD	57653-85-7	0.158	JBQ	4.92	0.0734	1
11031	123789-HxCDD	19408-74-3	0.261	JBQ	4.92	0.0735	1
11031	1234678-HpCDD	35822-46-9	2.40	JB	4.92	0.0644	1
11031	OCDD	3268-87-9	28.9	B	9.84	0.0394	1
11031	2378-TCDF	51207-31-9	0.0976	J	0.984	0.0736	1
11031	12378-PeCDF	57117-41-6	0.142	JBQ	4.92	0.0390	1
11031	23478-PeCDF	57117-31-4	0.0817	JB	4.92	0.0381	1
11031	123478-HxCDF	70648-26-9	0.0494	JB	4.92	0.0312	1
11031	123678-HxCDF	57117-44-9	0.121	JBQ	4.92	0.0295	1
11031	123789-HxCDF	72918-21-9	0.0951	JB	4.92	0.0299	1
11031	234678-HxCDF	60851-34-5	0.0888	JB	4.92	0.0276	1
11031	1234678-HpCDF	67562-39-4	0.477	JB	4.92	0.0327	1
11031	1234789-HpCDF	55673-89-7	4.92	U	4.92	0.0509	1
11031	OCDF	39001-02-0	0.770	JBQ	9.84	0.0574	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0951				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158603
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:00 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59200 SDG#: PH089-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158603
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:00 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59200 SDG#: PH089-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/17/2013 05:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132320013A	08/23/2013 00:36	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132320013A	08/20/2013 18:20	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 06:54	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/24/2013 03:31	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 12:13	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:09	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 11:48	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 11:48	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 11:48	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158603
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:00 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59200 SDG#: PH089-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 11:48	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132250638001	08/15/2013 16:25	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132250638001	08/14/2013 15:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13225039402A	08/13/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401A	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158604
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59235 SDG#: PH089-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.04
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158604
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59235 SDG#: PH089-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	4.6	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	16		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,200		40.0	7.21	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.740	1
06935	Arsenic	7440-38-2	4.98		4.00	0.700	1
06946	Barium	7440-39-3	63.3		1.00	0.0330	1
06947	Beryllium	7440-41-7	0.630	J	1.00	0.0670	1
07914	Boron	7440-42-8	1.66	J	10.0	0.840	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0760	1
01650	Calcium	7440-70-2	2,290		20.0	3.34	1
06951	Chromium	7440-47-3	21.1		3.00	0.160	1
06952	Cobalt	7440-48-4	5.99		1.00	0.0991	1
06953	Copper	7440-50-8	7.22		2.00	0.290	1
01654	Iron	7439-89-6	22,900		40.0	3.62	1
06955	Lead	7439-92-1	6.02		3.00	0.500	1
01656	Lithium	7439-93-2	21.0		4.0	0.34	1
01657	Magnesium	7439-95-4	4,670		10.0	1.67	1
06958	Manganese	7439-96-5	356		1.00	0.0830	1
06960	Molybdenum	7439-98-7	0.446	J	2.00	0.170	1
06961	Nickel	7440-02-0	9.42		2.00	0.130	1
10145	Phosphorus	7723-14-0	258		10.0	2.89	1
01662	Potassium	7440-09-7	2,590		100	8.34	1
01667	Sodium	7440-23-5	173		100	16.7	1
06969	Tin	7440-31-5	3.24	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,240		5.00	0.850	5
06971	Vanadium	7440-62-2	38.3		1.00	0.130	1
06972	Zinc	7440-66-6	47.0		4.00	0.200	1
10146	Zirconium	7440-67-7	2.77	J	5.00	0.840	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.364	J	0.400	0.100	2
06142	Silver	7440-22-4	0.0378	J	0.200	0.0260	2
06144	Strontium	7440-24-6	19.0		0.400	0.0680	2
06145	Thallium	7440-28-0	0.341		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0214		0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 21.9 C.	n.a.	6.96		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158604
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59235 SDG#: PH089-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158604
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59235 SDG#: PH089-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.135	1
11031	12378-PeCDD	40321-76-4	5.17	U	5.17	0.131	1
11031	123478-HxCDD	39227-28-6	5.17	U	5.17	0.0800	1
11031	123678-HxCDD	57653-85-7	5.17	U	5.17	0.0895	1
11031	123789-HxCDD	19408-74-3	5.17	U	5.17	0.0888	1
11031	1234678-HpCDD	35822-46-9	0.773	JB	5.17	0.0916	1
11031	OCDD	3268-87-9	7.93	JB	10.3	0.0632	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0977	1
11031	12378-PeCDF	57117-41-6	5.17	U	5.17	0.0604	1
11031	23478-PeCDF	57117-31-4	0.0665	JBQ	5.17	0.0557	1
11031	123478-HxCDF	70648-26-9	5.17	U	5.17	0.0345	1
11031	123678-HxCDF	57117-44-9	5.17	U	5.17	0.0352	1
11031	123789-HxCDF	72918-21-9	0.0474	JBQ	5.17	0.0435	1
11031	234678-HxCDF	60851-34-5	5.17	U	5.17	0.0343	1
11031	1234678-HpCDF	67562-39-4	0.190	JB	5.17	0.0378	1
11031	1234789-HpCDF	55673-89-7	0.0871	JBQ	5.17	0.0570	1
11031	OCDF	39001-02-0	0.808	JBQ	10.3	0.0860	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0120				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	42	25 - 164
13C12-12378-PeCDD	48	25 - 181
13C12-123478-HxCDD	48	32 - 141
13C12-123678-HxCDD	52	28 - 130
13C12-123789-HxCDD	50	28 - 130
13C12-1234678-HpCDD	56	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	41	24 - 169
13C12-12378-PeCDF	45	24 - 185
13C12-23478-PeCDF	47	21 - 178
13C12-123478-HxCDF	44	26 - 152
13C12-123678-HxCDF	48	26 - 123
13C12-234678-HxCDF	46	28 - 136
13C12-123789-HxCDF	47	29 - 147
13C12-1234678-HpCDF	51	28 - 143
13C12-1234789-HpCDF	46	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158604
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59235 SDG#: PH089-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158604
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59235 SDG#: PH089-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/17/2013 06:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13226A16A	08/14/2013 20:35	Laura M Krieger	26.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322532029	08/13/2013 13:34	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322532029	08/13/2013 13:33	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132320013A	08/23/2013 00:55	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132320013A	08/20/2013 18:20	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 07:14	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/24/2013 04:28	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 12:17	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-592-SA8-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158604
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 09:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59235 SDG#: PH089-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:13	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 11:51	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 11:51	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 11:51	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 11:51	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132250638001	08/15/2013 16:27	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132250638001	08/14/2013 15:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13225039402A	08/13/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401A	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158605
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:05 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59300 SDG#: PH089-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.9		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	3.7		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.1	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.6	J	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	4.0		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	16	J	18	6.1	1
12969	Fluoranthene	206-44-0	4.4		1.7	0.68	1
12969	Fluorene	86-73-7	0.99	J	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.98	J	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	2.1		1.7	0.68	1
12969	Pyrene	129-00-0	3.8		1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	20	J	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	9.4	J	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	4.3	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	14		10	4.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158605
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:05 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59300 SDG#: PH089-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,700		40.2	7.24	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.743	1
06935	Arsenic	7440-38-2	5.02		4.02	0.703	1
06946	Barium	7440-39-3	92.8		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.539	J	1.00	0.0673	1
07914	Boron	7440-42-8	3.24	J	10.0	0.843	1
06949	Cadmium	7440-43-9	0.119	J	1.00	0.0763	1
01650	Calcium	7440-70-2	2,760		20.1	3.35	1
06951	Chromium	7440-47-3	18.0		3.01	0.161	1
06952	Cobalt	7440-48-4	4.96		1.00	0.0994	1
06953	Copper	7440-50-8	9.67		2.01	0.291	1
01654	Iron	7439-89-6	20,100		40.2	3.64	1
06955	Lead	7439-92-1	15.3		3.01	0.502	1
01656	Lithium	7439-93-2	22.4		4.0	0.34	1
01657	Magnesium	7439-95-4	4,080		10.0	1.68	1
06958	Manganese	7439-96-5	323		1.00	0.0833	1
06960	Molybdenum	7439-98-7	0.355	J	2.01	0.171	1
06961	Nickel	7440-02-0	11.3		2.01	0.131	1
10145	Phosphorus	7723-14-0	477		10.0	2.90	1
01662	Potassium	7440-09-7	3,550		100	8.37	1
01667	Sodium	7440-23-5	74.5	J	100	16.8	1
06969	Tin	7440-31-5	3.28	J	10.0	0.221	1
06970	Titanium	7440-32-6	1,170		5.02	0.854	5
06971	Vanadium	7440-62-2	33.0		1.00	0.131	1
06972	Zinc	7440-66-6	75.6		4.02	0.201	1
10146	Zirconium	7440-67-7	2.35	J	5.02	0.843	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.166	J	0.402	0.100	2
06142	Silver	7440-22-4	0.0479	J	0.201	0.0261	2
06144	Strontium	7440-24-6	22.4		0.402	0.0683	2
06145	Thallium	7440-28-0	0.264		0.201	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0261		0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.78		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.4		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158605
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:05 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59300 SDG#: PH089-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158605
LL Group # 1410969
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Project Name: SSFL Phase 3 Sampling

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Fairfax VA 22030

59300 SDG#: PH089-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.981	U	0.981	0.0851	1
11031	12378-PeCDD	40321-76-4	0.133	JBQ	4.90	0.0971	1
11031	123478-HxCDD	39227-28-6	0.208	JB	4.90	0.107	1
11031	123678-HxCDD	57653-85-7	0.828	JBQ	4.90	0.116	1
11031	123789-HxCDD	19408-74-3	0.663	JBQ	4.90	0.107	1
11031	1234678-HpCDD	35822-46-9	13.9	B	4.90	0.114	1
11031	OCDD	3268-87-9	128	B	9.81	0.0719	1
11031	2378-TCDF	51207-31-9	0.532	JQ	0.981	0.199	1
11031	12378-PeCDF	57117-41-6	1.21	JB	4.90	0.116	1
11031	23478-PeCDF	57117-31-4	0.178	JBQ	4.90	0.105	1
11031	123478-HxCDF	70648-26-9	0.354	JBQ	4.90	0.0685	1
11031	123678-HxCDF	57117-44-9	0.341	JBQ	4.90	0.0678	1
11031	123789-HxCDF	72918-21-9	0.152	JB	4.90	0.0666	1
11031	234678-HxCDF	60851-34-5	0.283	JB	4.90	0.0623	1
11031	1234678-HpCDF	67562-39-4	1.69	JB	4.90	0.0521	1
11031	1234789-HpCDF	55673-89-7	0.139	JB	4.90	0.0728	1
11031	OCDF	39001-02-0	3.36	JB	9.81	0.0734	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.298				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158605
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Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59300 SDG#: PH089-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158605
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:05 by SM

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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

59300 SDG#: PH089-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/17/2013 06:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132320013A	08/23/2013 01:13	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132320013A	08/20/2013 18:20	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 07:35	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/24/2013 10:16	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 12:21	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:17	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 11:54	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 11:54	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 11:54	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158605
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:05 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59300 SDG#: PH089-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 11:54	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132250638001	08/15/2013 16:29	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132250638001	08/14/2013 15:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13225039402A	08/13/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401A	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158606
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59340 SDG#: PH089-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.37
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158606
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59340 SDG#: PH089-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	7.4		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	20		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,500		41.3	7.44	1
06944	Antimony	7440-36-0	4.13	U	4.13	0.764	1
06935	Arsenic	7440-38-2	5.44		4.13	0.723	1
06946	Barium	7440-39-3	86.8		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.642	J	1.03	0.0692	1
07914	Boron	7440-42-8	2.69	J	10.3	0.867	1
06949	Cadmium	7440-43-9	1.03	U	1.03	0.0785	1
01650	Calcium	7440-70-2	2,440		20.6	3.45	1
06951	Chromium	7440-47-3	19.8		3.10	0.165	1
06952	Cobalt	7440-48-4	5.54		1.03	0.102	1
06953	Copper	7440-50-8	8.68		2.06	0.299	1
01654	Iron	7439-89-6	22,400		41.3	3.74	1
06955	Lead	7439-92-1	7.45		3.10	0.516	1
01656	Lithium	7439-93-2	25.9		4.1	0.35	1
01657	Magnesium	7439-95-4	4,580		10.3	1.72	1
06958	Manganese	7439-96-5	319		1.03	0.0857	1
06960	Molybdenum	7439-98-7	0.498	J	2.06	0.176	1
06961	Nickel	7440-02-0	11.6		2.06	0.134	1
10145	Phosphorus	7723-14-0	558		10.3	2.98	1
01662	Potassium	7440-09-7	3,200		103	8.61	1
01667	Sodium	7440-23-5	86.3	J	103	17.2	1
06969	Tin	7440-31-5	3.32	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,260		5.16	0.878	5
06971	Vanadium	7440-62-2	38.3		1.03	0.134	1
06972	Zinc	7440-66-6	58.0		4.13	0.206	1
10146	Zirconium	7440-67-7	2.77	J	5.16	0.867	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.212	J	0.413	0.103	2
06142	Silver	7440-22-4	0.0448	J	0.206	0.0268	2
06144	Strontium	7440-24-6	20.5		0.413	0.0702	2
06145	Thallium	7440-28-0	0.277		0.206	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0152	J	0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.82		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158606
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59340 SDG#: PH089-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158606
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59340 SDG#: PH089-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0851	1
11031	12378-PeCDD	40321-76-4	5.10	U	5.10	0.0797	1
11031	123478-HxCDD	39227-28-6	5.10	U	5.10	0.0842	1
11031	123678-HxCDD	57653-85-7	0.249	JBQ	5.10	0.0775	1
11031	123789-HxCDD	19408-74-3	0.135	JBQ	5.10	0.0761	1
11031	1234678-HpCDD	35822-46-9	4.32	JB	5.10	0.0828	1
11031	OCDD	3268-87-9	55.2	B	10.2	0.0514	1
11031	2378-TCDF	51207-31-9	0.114	J	1.02	0.0993	1
11031	12378-PeCDF	57117-41-6	0.0930	JBQ	5.10	0.0693	1
11031	23478-PeCDF	57117-31-4	5.10	U	5.10	0.0502	1
11031	123478-HxCDF	70648-26-9	0.0752	JBQ	5.10	0.0319	1
11031	123678-HxCDF	57117-44-9	5.10	U	5.10	0.0334	1
11031	123789-HxCDF	72918-21-9	0.0956	JB	5.10	0.0417	1
11031	234678-HxCDF	60851-34-5	0.0709	JB	5.10	0.0330	1
11031	1234678-HpCDF	67562-39-4	0.599	JBQ	5.10	0.124	1
11031	1234789-HpCDF	55673-89-7	0.239	JBQ	5.10	0.157	1
11031	OCDF	39001-02-0	1.25	JB	10.2	0.0740	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0883				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	86	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	107	23 - 140
13C12-OCDD	97	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	85	26 - 138
13C12-OCDF	82	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158606
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59340 SDG#: PH089-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158606
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59340 SDG#: PH089-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/17/2013 07:14	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13226A16A	08/14/2013 21:13	Laura M Krieger	26.37
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322532029	08/13/2013 13:35	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322532029	08/13/2013 13:34	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132320013A	08/23/2013 01:32	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132320013A	08/20/2013 18:20	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 07:56	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/24/2013 11:13	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 12:25	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-593-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158606
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 08:20 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59340 SDG#: PH089-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:20	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 11:56	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 11:56	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 11:56	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 11:56	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132250638001	08/15/2013 16:31	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132250638001	08/14/2013 15:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13225039402A	08/13/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401A	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-585-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158607
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 13:35 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58500 SDG#: PH089-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	0.87	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	0.87	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.2	J	18	6.0	1
12969	Fluoranthene	206-44-0	0.90	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	0.77	J	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	2.3	J	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	23		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	49		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-585-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158607
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 13:35 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58500 SDG#: PH089-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,800		39.9	7.19	1
06944	Antimony	7440-36-0	3.99	U	3.99	0.738	1
06935	Arsenic	7440-38-2	4.73		3.99	0.698	1
06946	Barium	7440-39-3	115		0.997	0.0329	1
06947	Beryllium	7440-41-7	0.598	J	0.997	0.0668	1
07914	Boron	7440-42-8	3.31	J	9.97	0.837	1
06949	Cadmium	7440-43-9	0.0927	J	0.997	0.0758	1
01650	Calcium	7440-70-2	2,390		19.9	3.33	1
06951	Chromium	7440-47-3	14.7		2.99	0.159	1
06952	Cobalt	7440-48-4	4.74		0.997	0.0987	1
06953	Copper	7440-50-8	9.31		1.99	0.289	1
01654	Iron	7439-89-6	19,500		39.9	3.61	1
06955	Lead	7439-92-1	9.57		2.99	0.498	1
01656	Lithium	7439-93-2	20.1		4.0	0.34	1
01657	Magnesium	7439-95-4	3,380		9.97	1.66	1
06958	Manganese	7439-96-5	330		0.997	0.0827	1
06960	Molybdenum	7439-98-7	0.416	J	1.99	0.169	1
06961	Nickel	7440-02-0	9.79		1.99	0.130	1
10145	Phosphorus	7723-14-0	503		9.97	2.88	1
01662	Potassium	7440-09-7	4,170		99.7	8.31	1
01667	Sodium	7440-23-5	71.9	J	99.7	16.6	1
06969	Tin	7440-31-5	3.26	J	9.97	0.219	1
06970	Titanium	7440-32-6	1,130		4.98	0.847	5
06971	Vanadium	7440-62-2	27.5		0.997	0.130	1
06972	Zinc	7440-66-6	67.9		3.99	0.199	1
10146	Zirconium	7440-67-7	2.73	J	4.98	0.837	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.191	J	0.399	0.0997	2
06142	Silver	7440-22-4	0.0440	J	0.199	0.0259	2
06144	Strontium	7440-24-6	30.2		0.399	0.0678	2
06145	Thallium	7440-28-0	0.321		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0152	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	9.32		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.67		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-585-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158607
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 13:35 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58500 SDG#: PH089-10*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.996	U	0.996	0.0638	1
11031	12378-PeCDD	40321-76-4	0.102	JBQ	4.98	0.0819	1
11031	123478-HxCDD	39227-28-6	4.98	U	4.98	0.0720	1
11031	123678-HxCDD	57653-85-7	0.233	JBQ	4.98	0.0680	1
11031	123789-HxCDD	19408-74-3	0.252	JBQ	4.98	0.0666	1
11031	1234678-HpCDD	35822-46-9	3.49	JB	4.98	0.0830	1
11031	OCDD	3268-87-9	32.3	B	9.96	0.0532	1
11031	2378-TCDF	51207-31-9	0.161	J	0.996	0.0836	1
11031	12378-PeCDF	57117-41-6	0.302	JBQ	4.98	0.0546	1
11031	23478-PeCDF	57117-31-4	0.0675	JBQ	4.98	0.0418	1
11031	123478-HxCDF	70648-26-9	0.0883	JBQ	4.98	0.0318	1
11031	123678-HxCDF	57117-44-9	0.124	JBQ	4.98	0.0308	1
11031	123789-HxCDF	72918-21-9	0.243	JB	4.98	0.0422	1
11031	234678-HxCDF	60851-34-5	0.118	JBQ	4.98	0.0289	1
11031	1234678-HpCDF	67562-39-4	0.601	JB	4.98	0.0848	1
11031	1234789-HpCDF	55673-89-7	4.98	U	4.98	0.119	1
11031	OCDF	39001-02-0	1.10	JB	9.96	0.0670	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0914				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	100	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-585-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158607
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 13:35 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58500 SDG#: PH089-10*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-585-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158607
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 13:35 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58500 SDG#: PH089-10*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13226SLB026	08/17/2013 07:47	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13226SLB026	08/14/2013 18:30	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132320013A	08/23/2013 01:50	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132320013A	08/20/2013 18:20	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132280016A	08/21/2013 08:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132280016A	08/17/2013 12:15	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232002	08/24/2013 12:10	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13232002	08/20/2013 15:00	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 12:28	Katlin N Cataldi	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:24	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 11:59	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 11:59	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 11:59	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-585-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7158607
LL Group # 1410969
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/12/2013 13:35 by SM

Submitted: 08/13/2013 09:30
Reported: 08/26/2013 19:26

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58500 SDG#: PH089-10*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 11:59	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132250638001	08/15/2013 16:37	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132250638001	08/14/2013 15:15	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13225039402A	08/13/2013 21:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401A	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410969
Reported: 08/26/13 at 07:26 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13226SLB026	Sample number(s): 7158599-7158607									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	106		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	104		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	106		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	104		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	108		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	115		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	115		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	103		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	108		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	110		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	108		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	111		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	104		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	107		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	111		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	109		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	105		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	98		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	113		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	100		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	102		79-112		
Batch number: 13226A16A	Sample number(s): 7158600-7158601,7158604,7158606									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	90		67-119		
Batch number: 13228A94A	Sample number(s): 7158598									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	118	119	75-135	1	30
Batch number: 132250009A	Sample number(s): 7158599-7158601									
2,4-D	36	U	36.	12	ug/kg	103		59-122		
Dalapon	90	U	90.	44	ug/kg	45		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	108		54-131		
Dicamba	12	U	12.	4.0	ug/kg	83		60-123		
Dinoseb	24	U	24.	9.0	ug/kg	12		10-36		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	132		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	85		60-127		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	93		54-134		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410969
Reported: 08/26/13 at 07:26 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	105		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	111		63-130		
Batch number: 132250011A	Sample number(s): 7158599-7158601									
Aldrin	0.83	U	0.83	0.17	ug/kg	107		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	110		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	116		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	111		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	119		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	121		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	118		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	117		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	115		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	109		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	118		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	126		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	108		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	112		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	121		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	107		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	114		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	117		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132320013A	Sample number(s): 7158599-7158607									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	86	82	36-106	5	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	100		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	121*		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132280016A	Sample number(s): 7158599-7158607									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	92		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	99		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	97		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	91		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	75		49-107		
Batch number: 132250637002	Sample number(s): 7158600-7158607									
Aluminum	40.0	U	40.0	7.21	mg/kg	103		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	107		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	100		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	101		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410969
Reported: 08/26/13 at 07:26 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Calcium	20.0	U	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	102		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	100		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	101		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	103		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	100		80-120		
Sodium	100 U		100.	16.7	mg/kg	99		80-120		
Tin	1.83	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	101		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	101		80-120		
Zinc	0.316	J	4.00	0.200	mg/kg	104		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	100		80-120		
Batch number: 132250637002A	Sample number(s): 7158600-7158607									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	106		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	97		80-120		
Batch number: 132250637002B	Sample number(s): 7158600-7158607									
Selenium	0.400	U	0.400	0.100	mg/kg	119		80-120		
Batch number: 132250638001	Sample number(s): 7158600-7158607									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	109		85-120		
Batch number: 13225039402A	Sample number(s): 7158600-7158607									
15a pH by 9045D						99		95-105		
Batch number: 13231162401A	Sample number(s): 7158599-7158607									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13232002	Sample number(s): 7158599-7158600,7158602-7158607									
2378-TCDD	1.00	U	1.00	0.0621	ng/kg	115		67-158		
12378-PeCDD	0.117	J	5.00	0.0628	ng/kg	111		70-142		
123478-HxCDD	0.0685	J	5.00	0.0320	ng/kg	107		70-164		
123678-HxCDD	0.106	J	5.00	0.0358	ng/kg	108		76-134		
123789-HxCDD	0.0775	J	5.00	0.0369	ng/kg	103		64-162		
1234678-HpCDD	0.110	J	5.00	0.0348	ng/kg	103		70-140		
OCDD	0.396	J	10.0	0.0324	ng/kg	100		78-144		
2378-TCDF	1.00	U	1.00	0.0501	ng/kg	110		75-158		
12378-PeCDF	0.0798	J	5.00	0.0292	ng/kg	109		80-134		
23478-PeCDF	0.0923	J	5.00	0.0253	ng/kg	112		68-160		
123478-HxCDF	0.101	J	5.00	0.0183	ng/kg	101		72-134		
123678-HxCDF	0.0806	J	5.00	0.0182	ng/kg	100		84-130		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410969
Reported: 08/26/13 at 07:26 PM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123789-HxCDF	0.0474 J	5.00	0.0242	ng/kg	98		78-130		
234678-HxCDF	0.0879 J	5.00	0.0169	ng/kg	99		70-156		
1234678-HpCDF	0.0933 J	5.00	0.0134	ng/kg	100		82-122		
1234789-HpCDF	0.0762 J	5.00	0.0210	ng/kg	100		78-138		
OCDF	0.201 J	10.0	0.0313	ng/kg	96		63-170		
TEQ WHO 2005 - EDLx0.0	0.190			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13226SLB026	Sample number(s): 7158599-7158607 UNSPK: P156760								
Acenaphthene	97	99	48-127	2	30				
Acenaphthylene	103	104	49-121	1	30				
Anthracene	101	103	52-126	2	30				
Benzo(a)anthracene	98	100	44-143	2	30				
Benzo(a)pyrene	99	102	44-140	3	30				
Benzo(b)fluoranthene	101	105	26-142	4	30				
Benzo(e)pyrene	90	91	70-130	1	30				
Benzo(g,h,i)perylene	86	88	33-141	2	30				
Benzo(k)fluoranthene	102	103	54-142	1	30				
Butylbenzylphthalate	117	121	49-151	3	30				
Di-n-butylphthalate	116	117	52-147	0	30				
Chrysene	100	102	29-148	3	30				
Dibenz(a,h)anthracene	97	99	20-137	2	30				
Diethylphthalate	107	110	43-145	3	30				
Dimethylphthalate	103	104	58-129	1	30				
Bis(2-Ethylhexyl)phthalate	112	142	39-167	21	30				
Fluoranthene	98	101	40-148	3	30				
Fluorene	100	100	51-137	1	30				
Indeno(1,2,3-cd)pyrene	97	99	17-136	2	30				
1-Methylnaphthalene	105	109	50-131	4	30				
2-Methylnaphthalene	105	107	35-152	2	30				
Naphthalene	99	101	31-148	1	30				
N-Nitrosodimethylamine	89	85	48-113	4	30				
Di-n-octylphthalate	113	116	52-162	3	30				
Phenanthrene	99	100	29-142	1	30				
Pyrene	95	96	26-143	1	30				
Batch number: 13226A16A	Sample number(s): 7158600-7158601,7158604,7158606 UNSPK: P156760								
11a TPH by EPA 8015B GRO	64	64	39-118	8	30				
Batch number: 132250009A	Sample number(s): 7158599-7158601 UNSPK: P152828								
2,4-D	79	79	42-143	0	35				
Dalapon	29	0*	19-109	200*	50				
2,4-DB	121	116	10-179	4	50				

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Quality Control Summary

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Dicamba	98	92	45-147	6	50						
Dinoseb	26	26	10-52	1	35						
2,4-DP (Dichlorprop)	133	130	32-171	2	50						
MCPA	94	89	23-169	5	50						
MCPP (Mecoprop)	82	82	24-164	1	50						
2,4,5-T	91	87	12-172	4	35						
2,4,5-TP	112	106	10-142	6	35						
Batch number: 132250011A	Sample number(s): 7158599-7158601 UNSPK: P152828										
Aldrin	109	97	16-126	11	50						
Alpha BHC	102	95	14-140	7	50						
Beta BHC	107	100	10-173	6	50						
Gamma BHC - Lindane	112	96	30-137	15	50						
p,p-DDD	114	105	43-149	8	50						
p,p-DDE	136	119	18-161	13	50						
p,p-DDT	188	147	12-193	25	50						
Delta BHC	112	115	13-153	2	50						
Dieldrin	116	105	19-154	10	50						
Endosulfan I	106	96	16-137	10	50						
Endosulfan II	135	117	10-156	14	50						
Endosulfan Sulfate	117	107	10-181	9	50						
Endrin	112	101	30-152	11	50						
Endrin Aldehyde	106	95	10-152	11	35						
Endrin Ketone	107	100	10-160	7	50						
Heptachlor	118	97	16-152	20	50						
Heptachlor Epoxide	138	113	17-167	20	50						
Methoxychlor	111	104	34-168	7	50						
Batch number: 132320013A	Sample number(s): 7158599-7158607 UNSPK: 7158599										
PCB-1016	101	95	16-146	7	50						
PCB-1260	107	102	40-134	5	50						
Batch number: 132280016A	Sample number(s): 7158599-7158607 UNSPK: P156760										
EFH (C12-C14)	86	96	49-123	10	20						
EFH (C15-C20)	101	116	49-123	14	20						
EFH (C21-C30)	110	142*	49-123	26*	20						
EFH (C30-C40)	108	197*	49-123	58*	20						
EFH (C8-C11)	78	77	49-123	1	20						
Batch number: 132250637002	Sample number(s): 7158600-7158607 UNSPK: P160448 BKG: P160448										
Aluminum	1975 (2)	2935 (2)	75-125	5	20	32,600		31,200		4	20
Antimony	51*	52*	75-125	3	20	3.96	U	3.96	U	0 (1)	20
Arsenic	95	91	75-125	3	20	2.33	J	2.39	J	3 (1)	20
Barium	101	104	75-125	2	20	143		140		2	20
Beryllium	98	99	75-125	0	20	0.967	J	0.961	J	1 (1)	20
Boron	97	97	75-125	0	20	6.79	J	6.92	J	2 (1)	20
Cadmium	92	90	75-125	2	20	0.990	U	0.990	U	0 (1)	20
Calcium	176 (2)	91 (2)	75-125	4	20	7,190		7,670		7	20
Chromium	101	107	75-125	2	20	36.8		36.0		2	20
Cobalt	95	95	75-125	0	20	9.03		9.56		6	20
Copper	106	106	75-125	0	20	16.9		17.4		3	20

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Quality Control Summary

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Iron	854 (2)	40 (2)	75-125	2	20	32,600	33,000	1	20
Lead	96	93	75-125	2	20	10.3	11.2	8 (1)	20
Lithium	100	102	75-125	1	20	25.0	24.4	2	20
Magnesium	198 (2)	278 (2)	75-125	2	20	7,050	7,070	0	20
Manganese	132 (2)	129 (2)	75-125	0	20	398	414	4	20
Molybdenum	93	92	75-125	1	20	0.224 J	1.98 U	200* (1)	20
Nickel	95	96	75-125	1	20	19.6	19.8	1	20
Phosphorus	161*	90	75-125	20	20	233	282	19	20
Potassium	190 (2)	152 (2)	75-125	6	20	4,390	4,620	5	20
Sodium	93	98	75-125	4	20	286	276	4 (1)	20
Tin	92	91	75-125	0	20	3.63 J	3.60 J	1 (1)	20
Titanium	225 (2)	242 (2)	75-125	1	20	1,690	1,600	5	20
Vanadium	105	111	75-125	2	20	68.8	67.7	2	20
Zinc	101	98	75-125	1	20	66.7	69.0	3	20
Zirconium	90	93	75-125	3	20	7.42	7.31	2 (1)	20
Batch number: 132250637002A	Sample number(s): 7158600-7158607 UNSPK: P160448 BKG: P160448								
Silver	121	124	75-125	2	20	0.0453 J	0.0537 J	17 (1)	20
Strontium	221 (2)	266 (2)	75-125	6	20	43.9	55.3	23*	20
Thallium	111	134*	75-125	11	20	0.359	0.430	18 (1)	20
Batch number: 132250637002B	Sample number(s): 7158600-7158607 UNSPK: P160448 BKG: P160448								
Selenium	103	102	75-125	0	20	0.177 J	0.274 J	43* (1)	20
Batch number: 132250638001	Sample number(s): 7158600-7158607 UNSPK: 7158601 BKG: 7158601								
3a Mercury 7471A	122	119	65-135	2	20	0.0164 U	0.0158 U	0 (1)	20
Batch number: 13225039402A	Sample number(s): 7158600-7158607 BKG: 7158605								
15a pH by 9045D						6.78	6.76	0	3
Batch number: 13231162401A	Sample number(s): 7158599-7158607 BKG: 7158606								
14a Moisture Content by 160.3						4.1	4.0	2	20
Batch number: 13232002	Sample number(s): 7158599-7158600,7158602-7158607 UNSPK: P156760								
2378-TCDD	115	115	40-135	0	20				
12378-PeCDD	113	116	40-135	3	20				
123478-HxCDD	108	110	40-135	3	20				
123678-HxCDD	110	109	40-135	0	20				
123789-HxCDD	109	109	40-135	1	20				
1234678-HpCDD	103	106	40-135	3	20				
OCDD	95	113	40-135	14	20				
2378-TCDF	115	117	40-135	2	20				
12378-PeCDF	113	109	40-135	3	20				
23478-PeCDF	112	110	40-135	1	20				
123478-HxCDF	105	103	40-135	1	20				
123678-HxCDF	104	103	40-135	0	20				
123789-HxCDF	99	102	40-135	3	20				
234678-HxCDF	103	101	40-135	1	20				
1234678-HpCDF	102	99	40-135	3	20				
1234789-HpCDF	99	97	40-135	2	20				
OCDF	98	95	40-135	2	20				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410969
Reported: 08/26/13 at 07:26 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13226SLB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7158599	83	69	99
7158600	87	93	97
7158601	85	94	95
7158602	91	94	104
7158603	92	97	103
7158604	88	91	95
7158605	82	83	91
7158606	89	95	96
7158607	88	93	98
Blank	92	103	113
LCS	92	104	113
MS	89	99	109
MSD	93	102	111
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13226A16A

	Trifluorotoluene-F
7158600	80
7158601	79
7158604	80
7158606	78
Blank	82
LCS	88
MS	74
MSD	74
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13228A94A

	Trifluorotoluene-F
7158598	84
Blank	83
LCS	80
LCSD	77
Limits:	63-135

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132250009A

	2,4-Dichlorophenylacetic

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410969
Reported: 08/26/13 at 07:26 PM

Surrogate Quality Control

	acid
7158599	70
7158600	61
7158601	61
Blank	61
LCS	71
MS	66
MSD	64
Limits:	50-150

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132250011A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7158599	91	106
7158600	99	117
7158601	100	117
Blank	109	130*
LCS	110	133*
MS	103	114
MSD	95	107
Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132320013A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7158599	100	92
7158600	116	108
7158601	118	111
7158602	119	104
7158603	115	108
7158604	111	104
7158605	112	108
7158606	114	102
7158607	111	102
Blank	115	107
LCS	111	102
LCSD	116	115
MS	108	103
MSD	105	108
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132280016A

	Chlorobenzene	Orthoterphenyl
7158599	86	74
7158600	84	77
7158601	87	76
7158602	85	86
7158603	93	99

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410969
Reported: 08/26/13 at 07:26 PM

Surrogate Quality Control

7158604	88	94
7158605	91	98
7158606	92	100
7158607	92	87
Blank	88	97
LCS	87	92
MS	87	80
MSD	87	81
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13232002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7158599	82	94	74	78	83	101
7158600	69	85	67	75	77	97
7158602	62	69	62	67	66	73
7158603	65	75	63	69	70	80
7158604	42	47	44	48	46	47
7158605	77	79	62	69	71	74
7158606	72	84	69	74	70	73
7158607	73	78	66	73	75	78
Blank	68	93	79	89	86	84
MS	66	102	78	83	82	82
MSD	63	90	78	85	86	79
OPR	74	116	82	87	88	94
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7158599	87	96	101	94	84	90
7158600	105	84	76	89	82	90
7158602	79	67	71	74	73	74
7158603	93	76	66	76	74	77
7158604	51	46	49	48	48	52
7158605	78	73	72	82	74	79
7158606	82	85	82	86	78	83
7158607	83	77	71	81	78	84
Blank	101	86	93	88	80	85
MS	93	93	96	91	76	78
MSD	95	84	81	79	77	82
OPR	105	96	102	110	86	88
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7158599	90	105	110	84	88
7158600	90	103	99	65	88
7158602	74	85	90	65	68
7158603	78	96	86	64	81
7158604	50	56	58	41	45
7158605	81	85	82	68	80
7158606	82	107	97	70	81

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1410969
Reported: 08/26/13 at 07:26 PM

Surrogate Quality Control

7158607	83	100	85	65	80
Blank	84	90	104	71	88
MS	76	89	99	70	95
MSD	81	85	89	69	91
OPR	93	101	108	77	114
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
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SSFL Phase 3 Chain of Custody

13013 1410969 7158598-607

CDM Smith

DateShipped: 8/12/2013
CarrierName: FedEx
AirbillNo: 796446899679

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130812-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-081213	8/12/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-590-SA8-SB-0.0-0.5	8/12/13 10:20	SO	None	2 - SS-Sleeve	10 day							X		X	X					X	X	X			X											
SL-590-SA8-SB-4.0-5.0	8/12/13 10:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X					X	X	X			X											
SL-590-SA8-SB-4.0-5.0	8/12/13 10:45	SO	None	1 - 40 mL Vial	10 day													X																		
SL-590-SA8-SB-4.0-5.0	8/12/13 10:45	SO	None	2 - Encore	10 day																			X												
SL-590-SA8-SB-7.0-8.0	8/12/13 11:10	SO	None	2 - 16 oz glass	10 day	X	X					X			X						X	X				X										
SL-590-SA8-SB-7.0-8.0	8/12/13 11:10	SO	None	1 - 40 mL Vial	10 day													X																		
SL-590-SA8-SB-7.0-8.0	8/12/13 11:10	SO	None	2 - Encore	10 day																			X												
SL-591-SA8-SB-0.0-0.5	8/12/13 09:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-591-SA8-SB-0.0-0.5	8/12/13 09:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-592-SA8-SB-0.0-0.5	8/12/13 09:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-592-SA8-SB-0.0-0.5	8/12/13 09:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-592-SA8-SB-3.5-4.5	8/12/13 09:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X											X										
SL-592-SA8-SB-3.5-4.5	8/12/13 09:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-592-SA8-SB-3.5-4.5	8/12/13 09:20	SO	None	2 - Encore	10 day																			X												
SL-593-SA8-SB-0.0-0.5	8/12/13 08:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-593-SA8-SB-0.0-0.5	8/12/13 08:05	SO	None	1 - 4 oz glass	10 day													X																		
SL-593-SA8-SB-4.0-5.0	8/12/13 08:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-593-SA8-SB-4.0-5.0	8/12/13 08:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-593-SA8-SB-4.0-5.0	8/12/13 08:20	SO	None	2 - Encore	10 day																			X												
SL-585-SA8-SB-0.0-0.5	8/12/13 13:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-585-SA8-SB-0.0-0.5	8/12/13 13:35	SO	None	1 - 4 oz glass	10 day													X																		

13013 1410969 7158598-607

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/12/2013
CarrierName: FedEx
AirbillNo: 796446899679

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130812-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: Steve Mercer

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Mercer	8/12/2013	1600									
			8-13-13	0930							

COC Rev 2

COC: 20130812-01, Page 2 of 2

13013/14109G9/7158598-6607

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/12/2013
CarrierName: FedEx
AirbillNo: 796446899679

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130812-01
Cooler #: 1
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Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EPH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-081213	8/12/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-590-SA8-SB-0.0-0.5	8/12/13 10:20	SO	None	2 - SS-Sleeve	10 day							X		X X						X	X	X			X											
SL-590-SA8-SB-4.0-5.0	8/12/13 10:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X						X	X	X			X											
SL-590-SA8-SB-4.0-5.0	8/12/13 10:45	SO	None	1 - 40 mL Vial	10 day												X																			
SL-590-SA8-SB-4.0-5.0	8/12/13 10:45	SO	None	2 - Encore	10 day																			X												
SL-590-SA8-SB-7.0-8.0	8/12/13 11:10	SO	None	2 - 16 oz glass	10 day	X	X					X		X						X	X	X			X											
SL-590-SA8-SB-7.0-8.0	8/12/13 11:10	SO	None	1 - 40 mL Vial	10 day												X																			
SL-590-SA8-SB-7.0-8.0	8/12/13 11:10	SO	None	2 - Encore	10 day																			X												
SL-591-SA8-SB-0.0-0.5	8/12/13 09:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X											X											
SL-591-SA8-SB-0.0-0.5	8/12/13 09:50	SO	None	1 - 4 oz glass	10 day												X																			
SL-592-SA8-SB-0.0-0.5	8/12/13 09:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X											X											
SL-592-SA8-SB-0.0-0.5	8/12/13 09:00	SO	None	1 - 4 oz glass	10 day												X																			
SL-592-SA8-SB-3.5-4.5	8/12/13 09:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X X											X											
SL-592-SA8-SB-3.5-4.5	8/12/13 09:20	SO	None	1 - 4 oz glass	10 day												X																			
SL-592-SA8-SB-3.5-4.5	8/12/13 09:20	SO	None	2 - Encore	10 day																			X												
SL-593-SA8-SB-0.0-0.5	8/12/13 08:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X											X											
SL-593-SA8-SB-0.0-0.5	8/12/13 08:05	SO	None	1 - 4 oz glass	10 day												X																			
SL-593-SA8-SB-4.0-5.0	8/12/13 08:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X											X											
SL-593-SA8-SB-4.0-5.0	8/12/13 08:20	SO	None	1 - 4 oz glass	10 day												X																			
SL-593-SA8-SB-4.0-5.0	8/12/13 08:20	SO	None	2 - Encore	10 day																			X												
SL-585-SA8-SB-0.0-0.5	8/12/13 13:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X X											X											
SL-585-SA8-SB-0.0-0.5	8/12/13 13:35	SO	None	1 - 4 oz glass	10 day												X																			

~~Amended~~ Amended COC received 8/13/13
MK2 8/13/13 MK2 8/13/13

COC SA8 2

13013/1410969/7158598-607

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/12/2013
CarrierName: FedEx
AirbillNo: 796446899679

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130812-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: Steve Mercer

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Mercer	08/12/2013	1600									

Amended COC received 8/13/13 MK 8/13/13

COC Rev 2

COC: 20130812-01, Page 2 of 2

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Environmental Sample Administration Receipt Documentation Log

1410969

(3) JG 8-13-13

Client/Project: Encore CDM Smith

Date of Receipt: 8-13-13

Time of Receipt: 0930

Source Code: So

Shipping Container Sealed: (YES) NO

Custody Seal Present * : YES (NO)

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.0	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 9200 **Date/Time:** 8-13-13 1030

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH090

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 30, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/14/2013
Group Number: 1411330
SDG: PH090
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-081313 Water	7160446
SL-543-SA8-SB-0.0-0.5 Soil	7160447
SL-543-SA8-SB-4.0-5.0 Soil	7160448
SL-543-SA8-SB-4.0-5.0MS Soil	7160449
SL-543-SA8-SB-4.0-5.0MSD Soil	7160450
SL-543-SA8-SB-4.0-5.0DUP Soil	7160451
SL-843-SA8-SB-4.0-5.0 Soil	7160452
SL-609-SA8-SB-0.0-0.5 Soil	7160453
SL-609-SA8-SB-4.0-5.0 Soil	7160454
SL-614-SA8-SB-0.0-0.5 Soil	7160455
SL-614-SA8-SB-4.0-5.0 Soil	7160456

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB-081313 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7160446
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:00

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543TB SDG#: PH090-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13228A94A	08/16/2013 15:01	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13228A94A	08/16/2013 15:01	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160447
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 07:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-0 SDG#: PH090-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.0	J	1.7	0.35	1
12969	Anthracene	120-12-7	2.9		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	71		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	70		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	120		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	46		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	19		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	48		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	89		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	8.7		1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	57		1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	24		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	0.76	J	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.5	J	1.7	0.70	1
12969	Naphthalene	91-20-3	2.3		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	2.7		1.7	0.70	1
12969	Pyrene	129-00-0	70		1.7	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	17	J	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	8.1		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	23		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160447
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 07:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-0 SDG#: PH090-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,500		40.7	7.34	1
06944	Antimony	7440-36-0	4.07	U	4.07	0.753	1
06935	Arsenic	7440-38-2	3.35	J	4.07	0.712	1
06946	Barium	7440-39-3	120		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.906	J	1.02	0.0682	1
07914	Boron	7440-42-8	9.80	J	10.2	0.855	1
06949	Cadmium	7440-43-9	0.123	J	1.02	0.0773	1
01650	Calcium	7440-70-2	13,600		20.4	3.40	1
06951	Chromium	7440-47-3	34.7		3.05	0.163	1
06952	Cobalt	7440-48-4	10.2		1.02	0.101	1
06953	Copper	7440-50-8	20.0		2.04	0.295	1
01654	Iron	7439-89-6	31,700		204	18.4	5
06955	Lead	7439-92-1	14.1		3.05	0.509	1
01656	Lithium	7439-93-2	24.2		4.1	0.35	1
01657	Magnesium	7439-95-4	7,350		10.2	1.70	1
06958	Manganese	7439-96-5	468		1.02	0.0845	1
06960	Molybdenum	7439-98-7	0.294	J	2.04	0.173	1
06961	Nickel	7440-02-0	20.0		2.04	0.132	1
10145	Phosphorus	7723-14-0	591		10.2	2.94	1
01662	Potassium	7440-09-7	6,700		102	8.49	1
01667	Sodium	7440-23-5	97.6	J	102	17.0	1
06969	Tin	7440-31-5	3.52	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,570		5.09	0.865	5
06971	Vanadium	7440-62-2	65.0		1.02	0.132	1
06972	Zinc	7440-66-6	81.7		4.07	0.204	1
10146	Zirconium	7440-67-7	5.95		5.09	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.345	J	0.407	0.102	2
06142	Silver	7440-22-4	0.0469	J	0.204	0.0265	2
06144	Strontium	7440-24-6	57.0		0.407	0.0692	2
06145	Thallium	7440-28-0	0.463		0.204	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0108	J	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.25		0.0100	0.0100	1
	The pH was measured in water at 20.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160447
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 07:45 by SM

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Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
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543-0 SDG#: PH090-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0998	1
11031	12378-PeCDD	40321-76-4	0.195	JBQ	5.17	0.150	1
11031	123478-HxCDD	39227-28-6	0.0961	JQ	5.17	0.0747	1
11031	123678-HxCDD	57653-85-7	0.532	JQ	5.17	0.0854	1
11031	123789-HxCDD	19408-74-3	0.532	JQ	5.17	0.0903	1
11031	1234678-HpCDD	35822-46-9	3.71	JBQ	5.17	0.140	1
11031	OCDD	3268-87-9	41.0	B	10.3	0.0632	1
11031	2378-TCDF	51207-31-9	0.355	JQ	1.03	0.158	1
11031	12378-PeCDF	57117-41-6	1.48	J	5.17	0.0835	1
11031	23478-PeCDF	57117-31-4	0.103	JBQ	5.17	0.0786	1
11031	123478-HxCDF	70648-26-9	0.149	JBQ	5.17	0.0612	1
11031	123678-HxCDF	57117-44-9	5.17	U	5.17	0.0551	1
11031	123789-HxCDF	72918-21-9	0.266	JQ	5.17	0.0755	1
11031	234678-HxCDF	60851-34-5	0.164	JQ	5.17	0.0611	1
11031	1234678-HpCDF	67562-39-4	1.05	JB	5.17	0.0388	1
11031	1234789-HpCDF	55673-89-7	0.0945	JB	5.17	0.0783	1
11031	OCDF	39001-02-0	2.33	JB	10.3	0.105	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0689				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	101	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	92	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	116	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160447
LL Group # 1411330
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Project Name: SSFL Phase 3 Sampling

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543-0 SDG#: PH090-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

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543-0 SDG#: PH090-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 05:13	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 11:42	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/22/2013 01:28	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/26/2013 14:25	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 07:21	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 07:21	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:28	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 12:02	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 12:02	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 12:02	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 12:02	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160447
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 07:45 by SM

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CDM Federal Programs Corp.
3201 Jermantown Road
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543-0 SDG#: PH090-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 09:37	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13226039404A	08/14/2013 22:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401B	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160448
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.1	J	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.18
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160448
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	36,500		44.3	7.99	1
06944	Antimony	7440-36-0	4.43	U	4.43	0.820	1
06935	Arsenic	7440-38-2	2.60	J	4.43	0.775	1
06946	Barium	7440-39-3	160		1.11	0.0365	1
06947	Beryllium	7440-41-7	1.08	J	1.11	0.0742	1
07914	Boron	7440-42-8	7.60	J	11.1	0.930	1
06949	Cadmium	7440-43-9	1.11	U	1.11	0.0842	1
01650	Calcium	7440-70-2	8,040		22.1	3.70	1
06951	Chromium	7440-47-3	41.1		3.32	0.177	1
06952	Cobalt	7440-48-4	10.1		1.11	0.110	1
06953	Copper	7440-50-8	18.9		2.21	0.321	1
01654	Iron	7439-89-6	36,500		221	20.0	5
06955	Lead	7439-92-1	11.6		3.32	0.554	1
01656	Lithium	7439-93-2	27.9		4.4	0.38	1
01657	Magnesium	7439-95-4	7,890		11.1	1.85	1
06958	Manganese	7439-96-5	445		1.11	0.0919	1
06960	Molybdenum	7439-98-7	0.250	J	2.21	0.188	1
06961	Nickel	7440-02-0	21.9		2.21	0.144	1
10145	Phosphorus	7723-14-0	261		11.1	3.20	1
01662	Potassium	7440-09-7	4,910		111	9.24	1
01667	Sodium	7440-23-5	320		111	18.5	1
06969	Tin	7440-31-5	4.06	J	11.1	0.244	1
06970	Titanium	7440-32-6	1,890		5.54	0.941	5
06971	Vanadium	7440-62-2	76.9		1.11	0.144	1
06972	Zinc	7440-66-6	74.6		4.43	0.221	1
10146	Zirconium	7440-67-7	8.30		5.54	0.930	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.198	J	0.443	0.111	2
06142	Silver	7440-22-4	0.0507	J	0.221	0.0288	2
06144	Strontium	7440-24-6	49.2		0.443	0.0753	2
06145	Thallium	7440-28-0	0.401		0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0176	U	0.0176	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.63		0.0100	0.0100	1
	The pH was measured in water at 20.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160448
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160448
LL Group # 1411330
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.11	U	1.11	0.0727	1
11031	12378-PeCDD	40321-76-4	5.54	U	5.54	0.0849	1
11031	123478-HxCDD	39227-28-6	5.54	U	5.54	0.0559	1
11031	123678-HxCDD	57653-85-7	0.245	JQ	5.54	0.0607	1
11031	123789-HxCDD	19408-74-3	0.380	JQ	5.54	0.0604	1
11031	1234678-HpCDD	35822-46-9	0.436	JBQ	5.54	0.0559	1
11031	OCDD	3268-87-9	2.26	JB	11.1	0.0431	1
11031	2378-TCDF	51207-31-9	1.11	U	1.11	0.0864	1
11031	12378-PeCDF	57117-41-6	0.181	JQ	5.54	0.0359	1
11031	23478-PeCDF	57117-31-4	5.54	U	5.54	0.0418	1
11031	123478-HxCDF	70648-26-9	0.0429	JBQ	5.54	0.0368	1
11031	123678-HxCDF	57117-44-9	0.0787	JB	5.54	0.0321	1
11031	123789-HxCDF	72918-21-9	0.359	J	5.54	0.0457	1
11031	234678-HxCDF	60851-34-5	5.54	U	5.54	0.0349	1
11031	1234678-HpCDF	67562-39-4	0.0899	JBQ	5.54	0.0168	1
11031	1234789-HpCDF	55673-89-7	5.54	U	5.54	0.0426	1
11031	OCDF	39001-02-0	0.265	JBQ	11.1	0.0953	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0444				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	93	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	101	24 - 185
13C12-23478-PeCDF	88	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	121	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160448
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160448
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 03:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13227A16A	08/16/2013 21:47	Laura M Krieger	24.18
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322632040	08/14/2013 16:09	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322632040	08/14/2013 16:09	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 12:00	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/22/2013 00:04	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/26/2013 16:18	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 06:59	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 06:59	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 05:27	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160448
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 11:26	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 11:26	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 11:26	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 11:26	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 09:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13226039404A	08/14/2013 22:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401B	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160449
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	36		1.9	0.75	1
12969	Acenaphthylene	208-96-8	38		1.9	0.37	1
12969	Anthracene	120-12-7	37		1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	35		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	37		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	42		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	33		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	37		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	34		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	43		20	6.7	1
12969	Di-n-butylphthalate	84-74-2	42		20	6.7	1
12969	Chrysene	218-01-9	36		1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	39		1.9	0.75	1
12969	Diethylphthalate	84-66-2	39		20	6.7	1
12969	Dimethylphthalate	131-11-3	38		20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	41		20	6.7	1
12969	Fluoranthene	206-44-0	36		1.9	0.75	1
12969	Fluorene	86-73-7	36		1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	39		1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	38		1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	36		1.9	0.75	1
12969	Naphthalene	91-20-3	36		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	42		1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	42		20	6.7	1
12969	Phenanthrene	85-01-8	36		1.9	0.75	1
12969	Pyrene	129-00-0	36		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	10		1.3	0.3	29.21
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	170		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	200		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	2.4	J	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160449
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	4.3	J	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	6.1	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	40,900		44.3	7.99	1
06944	Antimony	7440-36-0	28.0		4.43	0.820	1
06935	Arsenic	7440-38-2	18.3		4.43	0.775	1
06946	Barium	7440-39-3	383		1.11	0.0365	1
06947	Beryllium	7440-41-7	6.53		1.11	0.0742	1
07914	Boron	7440-42-8	223		11.1	0.930	1
06949	Cadmium	7440-43-9	5.10		1.11	0.0842	1
01650	Calcium	7440-70-2	8,820		22.1	3.70	1
06951	Chromium	7440-47-3	63.5		3.32	0.177	1
06952	Cobalt	7440-48-4	62.7		1.11	0.110	1
06953	Copper	7440-50-8	48.2		2.21	0.321	1
01654	Iron	7439-89-6	37,400		221	20.0	5
06955	Lead	7439-92-1	27.4		3.32	0.554	1
01656	Lithium	7439-93-2	139		4.4	0.38	1
01657	Magnesium	7439-95-4	8,330		11.1	1.85	1
06958	Manganese	7439-96-5	518		1.11	0.0919	1
06960	Molybdenum	7439-98-7	206		2.21	0.188	1
06961	Nickel	7440-02-0	74.6		2.21	0.144	1
10145	Phosphorus	7723-14-0	439		11.1	3.20	1
01662	Potassium	7440-09-7	7,020		111	9.24	1
01667	Sodium	7440-23-5	1,350		111	18.5	1
06969	Tin	7440-31-5	410		11.1	0.244	1
06970	Titanium	7440-32-6	2,140		5.54	0.941	5
06971	Vanadium	7440-62-2	135		1.11	0.144	1
06972	Zinc	7440-66-6	130		4.43	0.221	1
10146	Zirconium	7440-67-7	108		5.54	0.930	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.47		0.443	0.111	2
06142	Silver	7440-22-4	13.5		0.221	0.0288	2
06144	Strontium	7440-24-6	68.7		0.443	0.0753	2
06145	Thallium	7440-28-0	0.892		0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.212		0.0179	0.0107	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	10.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160449
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.6		1.09	0.174	1
11031	12378-PeCDD	40321-76-4	126	B	5.47	0.274	1
11031	123478-HxCDD	39227-28-6	128		5.47	0.182	1
11031	123678-HxCDD	57653-85-7	126		5.47	0.189	1
11031	123789-HxCDD	19408-74-3	124		5.47	0.192	1
11031	1234678-HpCDD	35822-46-9	120	B	5.47	0.162	1
11031	OCDD	3268-87-9	237	B	10.9	0.102	1
11031	2378-TCDF	51207-31-9	26.9		1.09	0.215	1
11031	12378-PeCDF	57117-41-6	130		5.47	0.149	1
11031	23478-PeCDF	57117-31-4	122	B	5.47	0.145	1
11031	123478-HxCDF	70648-26-9	117	B	5.47	0.181	1
11031	123678-HxCDF	57117-44-9	119	B	5.47	0.160	1
11031	123789-HxCDF	72918-21-9	112		5.47	0.281	1
11031	234678-HxCDF	60851-34-5	118		5.47	0.169	1
11031	1234678-HpCDF	67562-39-4	112	B	5.47	0.102	1
11031	1234789-HpCDF	55673-89-7	112	B	5.47	0.217	1
11031	OCDF	39001-02-0	218	B	10.9	0.167	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	95	23 - 140
13C12-OCDD	96	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	88	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	94	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	123	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160449
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 04:06	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13227A16A	08/16/2013 22:25	Laura M Krieger	29.21
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322632040	08/14/2013 16:09	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322632040	08/14/2013 16:10	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 12:19	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/22/2013 00:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/26/2013 17:15	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 07:10	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 07:10	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 05:38	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160449
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 11:33	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 11:33	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 11:33	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 11:33	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 09:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401B	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160450
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	36		1.9	0.75	1
12969	Acenaphthylene	208-96-8	38		1.9	0.37	1
12969	Anthracene	120-12-7	37		1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	36		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	37		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	38		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	33		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	35		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	38		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	44		20	6.7	1
12969	Di-n-butylphthalate	84-74-2	44		20	6.7	1
12969	Chrysene	218-01-9	36		1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	38		1.9	0.75	1
12969	Diethylphthalate	84-66-2	42		20	6.7	1
12969	Dimethylphthalate	131-11-3	38		20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	51		20	6.7	1
12969	Fluoranthene	206-44-0	37		1.9	0.75	1
12969	Fluorene	86-73-7	37		1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	38		1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	38		1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	38		1.9	0.75	1
12969	Naphthalene	91-20-3	37		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	43		1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	44		20	6.7	1
12969	Phenanthrene	85-01-8	36		1.9	0.75	1
12969	Pyrene	129-00-0	36		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	11		1.3	0.3	28.74
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	170		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	200		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	2.7	J	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160450
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	4.9	J	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	9.2	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	43,000		44.3	7.99	1
06944	Antimony	7440-36-0	28.9		4.43	0.820	1
06935	Arsenic	7440-38-2	17.8		4.43	0.775	1
06946	Barium	7440-39-3	389		1.11	0.0365	1
06947	Beryllium	7440-41-7	6.55		1.11	0.0742	1
07914	Boron	7440-42-8	223		11.1	0.930	1
06949	Cadmium	7440-43-9	4.99		1.11	0.0842	1
01650	Calcium	7440-70-2	8,440		22.1	3.70	1
06951	Chromium	7440-47-3	64.8		3.32	0.177	1
06952	Cobalt	7440-48-4	62.9		1.11	0.110	1
06953	Copper	7440-50-8	48.2		2.21	0.321	1
01654	Iron	7439-89-6	36,500		221	20.0	5
06955	Lead	7439-92-1	27.0		3.32	0.554	1
01656	Lithium	7439-93-2	140		4.4	0.38	1
01657	Magnesium	7439-95-4	8,500		11.1	1.85	1
06958	Manganese	7439-96-5	516		1.11	0.0919	1
06960	Molybdenum	7439-98-7	205		2.21	0.188	1
06961	Nickel	7440-02-0	75.3		2.21	0.144	1
10145	Phosphorus	7723-14-0	361		11.1	3.20	1
01662	Potassium	7440-09-7	6,590		111	9.24	1
01667	Sodium	7440-23-5	1,400		111	18.5	1
06969	Tin	7440-31-5	408		11.1	0.244	1
06970	Titanium	7440-32-6	2,150		5.54	0.941	5
06971	Vanadium	7440-62-2	138		1.11	0.144	1
06972	Zinc	7440-66-6	129		4.43	0.221	1
10146	Zirconium	7440-67-7	111		5.54	0.930	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.46		0.443	0.111	2
06142	Silver	7440-22-4	13.8		0.221	0.0288	2
06144	Strontium	7440-24-6	72.7		0.443	0.0753	2
06145	Thallium	7440-28-0	0.996		0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.215		0.0178	0.0107	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	10.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160450
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.1		1.11	0.184	1
11031	12378-PeCDD	40321-76-4	130	B	5.57	0.278	1
11031	123478-HxCDD	39227-28-6	129		5.57	0.174	1
11031	123678-HxCDD	57653-85-7	124		5.57	0.197	1
11031	123789-HxCDD	19408-74-3	124		5.57	0.210	1
11031	1234678-HpCDD	35822-46-9	120	B	5.57	0.150	1
11031	OCDD	3268-87-9	249	B	11.1	0.101	1
11031	2378-TCDF	51207-31-9	28.9		1.11	0.202	1
11031	12378-PeCDF	57117-41-6	128		5.57	0.141	1
11031	23478-PeCDF	57117-31-4	130	B	5.57	0.152	1
11031	123478-HxCDF	70648-26-9	119	B	5.57	0.191	1
11031	123678-HxCDF	57117-44-9	122	B	5.57	0.165	1
11031	123789-HxCDF	72918-21-9	118		5.57	0.257	1
11031	234678-HxCDF	60851-34-5	122		5.57	0.186	1
11031	1234678-HpCDF	67562-39-4	113	B	5.57	0.0904	1
11031	1234789-HpCDF	55673-89-7	114	B	5.57	0.199	1
11031	OCDF	39001-02-0	228	B	11.1	0.143	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	92	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	121	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160450
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 04:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13227A16A	08/16/2013 23:03	Laura M Krieger	28.74
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322632040	08/14/2013 16:10	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322632040	08/14/2013 16:10	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 12:37	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/22/2013 00:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/26/2013 18:12	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 07:14	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 07:14	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 05:42	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160450
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 11:35	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 11:35	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 11:35	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 11:35	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 09:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401B	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160451
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,900		44.3	7.99	1
06944	Antimony	7440-36-0	4.43	U	4.43	0.820	1
06935	Arsenic	7440-38-2	2.67	J	4.43	0.775	1
06946	Barium	7440-39-3	157		1.11	0.0365	1
06947	Beryllium	7440-41-7	1.08	J	1.11	0.0742	1
07914	Boron	7440-42-8	7.74	J	11.1	0.930	1
06949	Cadmium	7440-43-9	1.11	U	1.11	0.0842	1
01650	Calcium	7440-70-2	8,580		22.1	3.70	1
06951	Chromium	7440-47-3	40.2		3.32	0.177	1
06952	Cobalt	7440-48-4	10.7		1.11	0.110	1
06953	Copper	7440-50-8	19.4		2.21	0.321	1
01654	Iron	7439-89-6	36,900		221	20.0	5
06955	Lead	7439-92-1	12.5		3.32	0.554	1
01656	Lithium	7439-93-2	27.3		4.4	0.38	1
01657	Magnesium	7439-95-4	7,910		11.1	1.85	1
06958	Manganese	7439-96-5	463		1.11	0.0919	1
06960	Molybdenum	7439-98-7	2.21	U	2.21	0.188	1
06961	Nickel	7440-02-0	22.2		2.21	0.144	1
10145	Phosphorus	7723-14-0	315		11.1	3.20	1
01662	Potassium	7440-09-7	5,170		111	9.24	1
01667	Sodium	7440-23-5	308		111	18.5	1
06969	Tin	7440-31-5	4.03	J	11.1	0.244	1
06970	Titanium	7440-32-6	1,790		5.54	0.941	5
06971	Vanadium	7440-62-2	75.7		1.11	0.144	1
06972	Zinc	7440-66-6	77.2		4.43	0.221	1
10146	Zirconium	7440-67-7	8.18		5.54	0.930	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.307	J	0.443	0.111	2
06142	Silver	7440-22-4	0.0601	J	0.221	0.0288	2
06144	Strontium	7440-24-6	61.9		0.443	0.0753	2
06145	Thallium	7440-28-0	0.481		0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0180	U	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.84		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	10.6		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	10.9		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-543-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160451
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

543-4 SDG#: PH090-03DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 07:07	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 07:07	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 05:35	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 11:30	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 11:30	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 11:30	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 11:30	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 09:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13226039404A	08/14/2013 22:50	Clayton C Litchmore	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401B	08/20/2013 00:41	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401B	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-843-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160452
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:30 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

843-4 SDG#: PH090-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	0.48	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.5	J	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	0.94	J	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.1	J	1.9	0.75	1
12969	Naphthalene	91-20-3	1.6	J	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.9
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-843-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160452
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:30 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

843-4 SDG#: PH090-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	35,700		45.0	8.11	1
06944	Antimony	7440-36-0	4.50	U	4.50	0.832	1
06935	Arsenic	7440-38-2	3.25	J	4.50	0.787	1
06946	Barium	7440-39-3	159		1.12	0.0371	1
06947	Beryllium	7440-41-7	1.07	J	1.12	0.0754	1
07914	Boron	7440-42-8	7.10	J	11.2	0.945	1
06949	Cadmium	7440-43-9	1.12	U	1.12	0.0855	1
01650	Calcium	7440-70-2	10,700		22.5	3.76	1
06951	Chromium	7440-47-3	41.1		3.37	0.180	1
06952	Cobalt	7440-48-4	10.8		1.12	0.111	1
06953	Copper	7440-50-8	19.1		2.25	0.326	1
01654	Iron	7439-89-6	36,100		225	20.4	5
06955	Lead	7439-92-1	11.7		3.37	0.562	1
01656	Lithium	7439-93-2	27.8		4.5	0.38	1
01657	Magnesium	7439-95-4	7,810		11.2	1.88	1
06958	Manganese	7439-96-5	498		1.12	0.0934	1
06960	Molybdenum	7439-98-7	0.297	J	2.25	0.191	1
06961	Nickel	7440-02-0	23.1		2.25	0.146	1
10145	Phosphorus	7723-14-0	287		11.2	3.25	1
01662	Potassium	7440-09-7	5,050		112	9.38	1
01667	Sodium	7440-23-5	257		112	18.8	1
06969	Tin	7440-31-5	3.90	J	11.2	0.247	1
06970	Titanium	7440-32-6	1,830		5.62	0.956	5
06971	Vanadium	7440-62-2	75.9		1.12	0.146	1
06972	Zinc	7440-66-6	75.2		4.50	0.225	1
10146	Zirconium	7440-67-7	8.28		5.62	0.945	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.262	J	0.450	0.112	2
06142	Silver	7440-22-4	0.0616	J	0.225	0.0292	2
06144	Strontium	7440-24-6	59.0		0.450	0.0765	2
06145	Thallium	7440-28-0	0.445		0.225	0.0337	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.09		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-843-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160452
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:30 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

843-4 SDG#: PH090-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-843-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160452
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:30 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

843-4 SDG#: PH090-04

CAT No.	Analysis Name		CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans		**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD		1746-01-6	1.07	U	1.07	0.0543	1
11031	12378-PeCDD		40321-76-4	0.194	JB	5.37	0.0816	1
11031	123478-HxCDD		39227-28-6	0.0875	J	5.37	0.0444	1
11031	123678-HxCDD		57653-85-7	0.220	JQ	5.37	0.0494	1
11031	123789-HxCDD		19408-74-3	0.386	JQ	5.37	0.0497	1
11031	1234678-HpCDD		35822-46-9	0.690	JB	5.37	0.0634	1
11031	OCDD		3268-87-9	5.06	JB	10.7	0.0402	1
11031	2378-TCDF		51207-31-9	1.07	U	1.07	0.0848	1
11031	12378-PeCDF		57117-41-6	0.219	J	5.37	0.0369	1
11031	23478-PeCDF		57117-31-4	0.0563	JB	5.37	0.0415	1
11031	123478-HxCDF		70648-26-9	0.105	JBQ	5.37	0.0357	1
11031	123678-HxCDF		57117-44-9	0.126	JB	5.37	0.0298	1
11031	123789-HxCDF		72918-21-9	0.607	JQ	5.37	0.0443	1
11031	234678-HxCDF		60851-34-5	0.112	JQ	5.37	0.0322	1
11031	1234678-HpCDF		67562-39-4	0.195	JBQ	5.37	0.0165	1
11031	1234789-HpCDF		55673-89-7	0.0842	JBQ	5.37	0.0372	1
11031	OCDF		39001-02-0	0.422	JB	10.7	0.0777	1
Toxic Equivalents		**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0		n.a.	0.247				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	53	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	106	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-843-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160452
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:30 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

843-4 SDG#: PH090-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-843-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160452
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:30 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

843-4 SDG#: PH090-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 05:46	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13227A16A	08/16/2013 16:05	Laura M Krieger	24.9
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322632040	08/14/2013 15:44	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322632040	08/14/2013 15:45	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 12:55	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/21/2013 23:43	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/26/2013 19:09	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 07:25	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 07:25	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:32	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-843-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160452
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 08:30 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

843-4 SDG#: PH090-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 12:04	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 12:04	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 12:04	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 12:04	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 09:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13226039404A	08/14/2013 22:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401B	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160453
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-0 SDG#: PH090-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	6.9	J	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.97	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	0.73	J	1.7	0.69	1
12969	Naphthalene	91-20-3	1.5	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.6		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	19		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160453
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-0 SDG#: PH090-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,700		41.7	7.51	1
06944	Antimony	7440-36-0	4.17	U	4.17	0.771	1
06935	Arsenic	7440-38-2	2.82	J	4.17	0.729	1
06946	Barium	7440-39-3	124		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.923	J	1.04	0.0698	1
07914	Boron	7440-42-8	18.6		10.4	0.875	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0792	1
01650	Calcium	7440-70-2	39,400		20.8	3.48	1
06951	Chromium	7440-47-3	36.6		3.13	0.167	1
06952	Cobalt	7440-48-4	10.7		1.04	0.103	1
06953	Copper	7440-50-8	21.3		2.08	0.302	1
01654	Iron	7439-89-6	35,400		208	18.9	5
06955	Lead	7439-92-1	15.8		3.13	0.521	1
01656	Lithium	7439-93-2	28.5		4.2	0.35	1
01657	Magnesium	7439-95-4	9,350		10.4	1.74	1
06958	Manganese	7439-96-5	369		1.04	0.0865	1
06960	Molybdenum	7439-98-7	0.189	J	2.08	0.177	1
06961	Nickel	7440-02-0	21.3		2.08	0.135	1
10145	Phosphorus	7723-14-0	766		10.4	3.01	1
01662	Potassium	7440-09-7	7,800		104	8.69	1
01667	Sodium	7440-23-5	119		104	17.4	1
06969	Tin	7440-31-5	3.63	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,570		5.21	0.885	5
06971	Vanadium	7440-62-2	72.2		1.04	0.135	1
06972	Zinc	7440-66-6	89.9		4.17	0.208	1
10146	Zirconium	7440-67-7	5.75		5.21	0.875	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.434		0.417	0.104	2
06142	Silver	7440-22-4	0.0368	J	0.208	0.0271	2
06144	Strontium	7440-24-6	109		1.04	0.177	5
06145	Thallium	7440-28-0	0.391		0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0156	J	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.99		0.0100	0.0100	1
	The pH was measured in water at 20.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160453
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-0 SDG#: PH090-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0655	1
11031	12378-PeCDD	40321-76-4	5.16	U	5.16	0.0771	1
11031	123478-HxCDD	39227-28-6	5.16	U	5.16	0.0479	1
11031	123678-HxCDD	57653-85-7	0.109	JQ	5.16	0.0535	1
11031	123789-HxCDD	19408-74-3	0.107	JQ	5.16	0.0526	1
11031	1234678-HpCDD	35822-46-9	1.08	JB	5.16	0.0658	1
11031	OCDD	3268-87-9	6.00	JB	10.3	0.0440	1
11031	2378-TCDF	51207-31-9	0.148	J	1.03	0.0951	1
11031	12378-PeCDF	57117-41-6	0.114	JQ	5.16	0.0413	1
11031	23478-PeCDF	57117-31-4	0.0766	JBQ	5.16	0.0469	1
11031	123478-HxCDF	70648-26-9	0.0781	JBQ	5.16	0.0339	1
11031	123678-HxCDF	57117-44-9	0.0890	JBQ	5.16	0.0290	1
11031	123789-HxCDF	72918-21-9	5.16	U	5.16	0.0547	1
11031	234678-HxCDF	60851-34-5	0.0676	JQ	5.16	0.0326	1
11031	1234678-HpCDF	67562-39-4	0.172	JBQ	5.16	0.0168	1
11031	1234789-HpCDF	55673-89-7	0.0507	JBQ	5.16	0.0421	1
11031	OCDF	39001-02-0	0.281	JB	10.3	0.0823	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0275				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	93	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	54	29 - 147
13C12-1234678-HpCDF	113	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160453
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-0 SDG#: PH090-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160453
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-0 SDG#: PH090-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 06:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 13:14	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/22/2013 01:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/26/2013 20:05	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 07:36	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 07:36	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:36	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 12:07	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 12:07	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 12:30	Choon Y Tian	5
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 12:07	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160453
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:15 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-0 SDG#: PH090-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 09:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13226039404A	08/14/2013 22:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401B	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160454
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-4 SDG#: PH090-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.3	J	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	27.29
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160454
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-4 SDG#: PH090-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	2.9	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	9.2	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,500		43.9	7.91	1
06944	Antimony	7440-36-0	4.39	U	4.39	0.812	1
06935	Arsenic	7440-38-2	4.34	J	4.39	0.768	1
06946	Barium	7440-39-3	123		1.10	0.0362	1
06947	Beryllium	7440-41-7	0.857	J	1.10	0.0735	1
07914	Boron	7440-42-8	13.1		11.0	0.922	1
06949	Cadmium	7440-43-9	1.10	U	1.10	0.0834	1
01650	Calcium	7440-70-2	81,700		110	18.3	5
06951	Chromium	7440-47-3	34.9		3.29	0.176	1
06952	Cobalt	7440-48-4	10.2		1.10	0.109	1
06953	Copper	7440-50-8	24.0		2.20	0.318	1
01654	Iron	7439-89-6	33,800		220	19.9	5
06955	Lead	7439-92-1	14.0		3.29	0.549	1
01656	Lithium	7439-93-2	31.0		4.4	0.37	1
01657	Magnesium	7439-95-4	9,020		11.0	1.83	1
06958	Manganese	7439-96-5	281		1.10	0.0911	1
06960	Molybdenum	7439-98-7	2.20	U	2.20	0.187	1
06961	Nickel	7440-02-0	19.3		2.20	0.143	1
10145	Phosphorus	7723-14-0	568		11.0	3.17	1
01662	Potassium	7440-09-7	4,290		110	9.15	1
01667	Sodium	7440-23-5	169		110	18.3	1
06969	Tin	7440-31-5	3.61	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,540		5.49	0.933	5
06971	Vanadium	7440-62-2	78.2		1.10	0.143	1
06972	Zinc	7440-66-6	91.3		4.39	0.220	1
10146	Zirconium	7440-67-7	6.87		5.49	0.922	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.278	J	0.439	0.110	2
06142	Silver	7440-22-4	0.0362	J	0.220	0.0285	2
06144	Strontium	7440-24-6	187		2.20	0.373	10
06145	Thallium	7440-28-0	0.405		0.220	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0178	J	0.0181	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.9 C.	n.a.	7.96		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.8		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160454
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-4 SDG#: PH090-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160454
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-4 SDG#: PH090-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0711	1
11031	12378-PeCDD	40321-76-4	5.47	U	5.47	0.0553	1
11031	123478-HxCDD	39227-28-6	0.0806	J	5.47	0.0292	1
11031	123678-HxCDD	57653-85-7	0.0532	J	5.47	0.0309	1
11031	123789-HxCDD	19408-74-3	0.0377	JQ	5.47	0.0308	1
11031	1234678-HpCDD	35822-46-9	0.302	JB	5.47	0.0424	1
11031	OCDD	3268-87-9	1.75	JB	10.9	0.0335	1
11031	2378-TCDF	51207-31-9	0.0753	JQ	1.09	0.0724	1
11031	12378-PeCDF	57117-41-6	5.47	U	5.47	0.0350	1
11031	23478-PeCDF	57117-31-4	0.0642	JB	5.47	0.0378	1
11031	123478-HxCDF	70648-26-9	0.0408	JBQ	5.47	0.0276	1
11031	123678-HxCDF	57117-44-9	0.0581	JBQ	5.47	0.0226	1
11031	123789-HxCDF	72918-21-9	5.47	U	5.47	0.0389	1
11031	234678-HxCDF	60851-34-5	0.0309	JQ	5.47	0.0251	1
11031	1234678-HpCDF	67562-39-4	0.0859	JBQ	5.47	0.0102	1
11031	1234789-HpCDF	55673-89-7	0.0811	JBQ	5.47	0.0292	1
11031	OCDF	39001-02-0	0.209	JB	10.9	0.0731	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0364				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	55	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	54	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	47	26 - 138
13C12-OCDF	51	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160454
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-4 SDG#: PH090-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160454
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-4 SDG#: PH090-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 06:53	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13227A16A	08/16/2013 16:43	Laura M Krieger	27.29
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322632040	08/14/2013 15:46	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322632040	08/14/2013 15:46	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 13:32	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/22/2013 01:07	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/28/2013 06:47	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 07:39	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 07:39	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 07:39	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:40	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-609-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160454
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 12:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

609-4 SDG#: PH090-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 12:09	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 12:09	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 12:32	Choon Y Tian	10
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 12:09	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 09:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13226039404A	08/14/2013 22:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401B	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-614-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160455
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 13:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

614-0 SDG#: PH090-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	0.76	J	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.9		1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.87	J	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.1	J	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.0	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	0.90	J	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	J	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	0.97	J	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.0	J	1.8	0.71	1
12969	Naphthalene	91-20-3	2.1		1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	0.97	J	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	11		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	38		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-614-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160455
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 13:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

614-0 SDG#: PH090-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,600		42.0	7.56	1
06944	Antimony	7440-36-0	4.20	U	4.20	0.776	1
06935	Arsenic	7440-38-2	5.11		4.20	0.734	1
06946	Barium	7440-39-3	100		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.692	J	1.05	0.0703	1
07914	Boron	7440-42-8	14.7		10.5	0.881	1
06949	Cadmium	7440-43-9	0.148	J	1.05	0.0797	1
01650	Calcium	7440-70-2	73,500		105	17.5	5
06951	Chromium	7440-47-3	33.7		3.15	0.168	1
06952	Cobalt	7440-48-4	9.17		1.05	0.104	1
06953	Copper	7440-50-8	20.2		2.10	0.304	1
01654	Iron	7439-89-6	29,200		210	19.0	5
06955	Lead	7439-92-1	15.5		3.15	0.524	1
01656	Lithium	7439-93-2	28.5		4.2	0.36	1
01657	Magnesium	7439-95-4	8,240		10.5	1.75	1
06958	Manganese	7439-96-5	324		1.05	0.0871	1
06960	Molybdenum	7439-98-7	0.208	J	2.10	0.178	1
06961	Nickel	7440-02-0	18.4		2.10	0.136	1
10145	Phosphorus	7723-14-0	539		10.5	3.03	1
01662	Potassium	7440-09-7	5,780		105	8.75	1
01667	Sodium	7440-23-5	148		105	17.5	1
06969	Tin	7440-31-5	3.42	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,430		5.24	0.892	5
06971	Vanadium	7440-62-2	65.0		1.05	0.136	1
06972	Zinc	7440-66-6	81.2		4.20	0.210	1
10146	Zirconium	7440-67-7	6.45		5.24	0.881	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.344	J	0.420	0.105	2
06142	Silver	7440-22-4	0.0465	J	0.210	0.0273	2
06144	Strontium	7440-24-6	191		2.10	0.357	10
06145	Thallium	7440-28-0	0.349		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0289		0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.04		0.0100	0.0100	1
	The pH was measured in water at 20 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-614-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160455
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 13:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

614-0 SDG#: PH090-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.106	J	1.03	0.0656	1
11031	12378-PeCDD	40321-76-4	0.337	JBQ	5.15	0.0666	1
11031	123478-HxCDD	39227-28-6	0.201	JQ	5.15	0.0478	1
11031	123678-HxCDD	57653-85-7	0.296	J	5.15	0.0528	1
11031	123789-HxCDD	19408-74-3	0.228	JQ	5.15	0.0520	1
11031	1234678-HpCDD	35822-46-9	4.27	JB	5.15	0.0576	1
11031	OCDD	3268-87-9	34.4	B	10.3	0.0395	1
11031	2378-TCDF	51207-31-9	0.262	J	1.03	0.0944	1
11031	12378-PeCDF	57117-41-6	0.358	J	5.15	0.0469	1
11031	23478-PeCDF	57117-31-4	0.470	JBQ	5.15	0.0524	1
11031	123478-HxCDF	70648-26-9	0.236	JBQ	5.15	0.0505	1
11031	123678-HxCDF	57117-44-9	0.223	JBQ	5.15	0.0439	1
11031	123789-HxCDF	72918-21-9	5.15	U	5.15	0.0655	1
11031	234678-HxCDF	60851-34-5	0.266	J	5.15	0.0445	1
11031	1234678-HpCDF	67562-39-4	0.832	JB	5.15	0.0251	1
11031	1234789-HpCDF	55673-89-7	0.169	JB	5.15	0.0583	1
11031	OCDF	39001-02-0	1.56	JBQ	10.3	0.0565	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.262				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	92	25 - 181
13C12-123478-HxCDD	89	32 - 141
13C12-123678-HxCDD	93	28 - 130
13C12-123789-HxCDD	95	28 - 130
13C12-1234678-HpCDD	109	23 - 140
13C12-OCDD	106	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	103	24 - 185
13C12-23478-PeCDF	86	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	90	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	134	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-614-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160455
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 13:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

614-0 SDG#: PH090-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-614-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160455
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 13:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

614-0 SDG#: PH090-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 07:27	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 13:51	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/22/2013 02:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/28/2013 07:44	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 07:43	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 07:43	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 07:43	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:51	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 12:25	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 12:25	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 12:47	Choon Y Tian	10
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 12:25	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-614-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160455
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 13:45 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

614-0 SDG#: PH090-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 09:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13226039404A	08/14/2013 22:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401B	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-614-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160456
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 14:10 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

614-4 SDG#: PH090-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	0.86	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.1	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	0.97	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	2.2		1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	2.9		1.8	0.72	1
12969	Naphthalene	91-20-3	4.9		1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	2.0		1.8	0.72	1
12969	Pyrene	129-00-0	1.1	J	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-614-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160456
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 14:10 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

614-4 SDG#: PH090-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	6.7		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	26		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,800		42.5	7.67	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.787	1
06935	Arsenic	7440-38-2	4.71		4.25	0.744	1
06946	Barium	7440-39-3	112		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.713	J	1.06	0.0712	1
07914	Boron	7440-42-8	11.1		10.6	0.893	1
06949	Cadmium	7440-43-9	0.101	J	1.06	0.0808	1
01650	Calcium	7440-70-2	68,300		106	17.8	5
06951	Chromium	7440-47-3	33.4		3.19	0.170	1
06952	Cobalt	7440-48-4	11.3		1.06	0.105	1
06953	Copper	7440-50-8	21.5		2.13	0.308	1
01654	Iron	7439-89-6	32,000		213	19.2	5
06955	Lead	7439-92-1	14.4		3.19	0.532	1
01656	Lithium	7439-93-2	34.9		4.3	0.36	1
01657	Magnesium	7439-95-4	9,030		10.6	1.78	1
06958	Manganese	7439-96-5	301		1.06	0.0883	1
06960	Molybdenum	7439-98-7	2.13	U	2.13	0.181	1
06961	Nickel	7440-02-0	20.2		2.13	0.138	1
10145	Phosphorus	7723-14-0	529		10.6	3.07	1
01662	Potassium	7440-09-7	5,010		106	8.87	1
01667	Sodium	7440-23-5	151		106	17.8	1
06969	Tin	7440-31-5	3.56	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,450		5.32	0.904	5
06971	Vanadium	7440-62-2	65.2		1.06	0.138	1
06972	Zinc	7440-66-6	88.1		4.25	0.213	1
10146	Zirconium	7440-67-7	7.31		5.32	0.893	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.218	J	0.425	0.106	2
06142	Silver	7440-22-4	0.0338	J	0.213	0.0276	2
06144	Strontium	7440-24-6	186		2.13	0.362	10
06145	Thallium	7440-28-0	0.368		0.213	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0119	J	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.11		0.0100	0.0100	1
	The pH was measured in water at 20.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.8		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-614-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160456
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 14:10 by SM

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Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

614-4 SDG#: PH090-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

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Sample Description: SL-614-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160456
LL Group # 1411330
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614-4 SDG#: PH090-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0804	1
11031	12378-PeCDD	40321-76-4	0.129	JBQ	5.41	0.0674	1
11031	123478-HxCDD	39227-28-6	0.208	JQ	5.41	0.0441	1
11031	123678-HxCDD	57653-85-7	0.215	JQ	5.41	0.0484	1
11031	123789-HxCDD	19408-74-3	0.169	J	5.41	0.0514	1
11031	1234678-HpCDD	35822-46-9	2.73	JB	5.41	0.0581	1
11031	OCDD	3268-87-9	29.2	B	10.8	0.0447	1
11031	2378-TCDF	51207-31-9	0.224	JQ	1.08	0.0857	1
11031	12378-PeCDF	57117-41-6	0.438	J	5.41	0.0508	1
11031	23478-PeCDF	57117-31-4	0.284	JBQ	5.41	0.0525	1
11031	123478-HxCDF	70648-26-9	0.229	JB	5.41	0.0389	1
11031	123678-HxCDF	57117-44-9	0.213	JBQ	5.41	0.0329	1
11031	123789-HxCDF	72918-21-9	5.41	U	5.41	0.0580	1
11031	234678-HxCDF	60851-34-5	0.176	JQ	5.41	0.0359	1
11031	1234678-HpCDF	67562-39-4	0.406	JB	5.41	0.0218	1
11031	1234789-HpCDF	55673-89-7	0.0823	JBQ	5.41	0.0557	1
11031	OCDF	39001-02-0	0.958	JB	10.8	0.0761	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0934				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	88	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	54	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	52	26 - 138
13C12-OCDF	53	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-614-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160456
LL Group # 1411330
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Project Name: SSFL Phase 3 Sampling

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614-4 SDG#: PH090-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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SSFL Phase 3 Subarea 8

LL Sample # SW 7160456
LL Group # 1411330
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Project Name: SSFL Phase 3 Sampling

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614-4 SDG#: PH090-08*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

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12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 08:00	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13227A16A	08/16/2013 17:21	Laura M Krieger	25.1
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322632040	08/14/2013 16:11	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322632040	08/14/2013 16:12	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 14:09	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/22/2013 02:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/28/2013 08:41	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06946	Barium	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
07914	Boron	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	132250637002	08/23/2013 07:47	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06953	Copper	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
01654	Iron	SW-846 6010C	1	132250637002	08/23/2013 07:47	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06969	Tin	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	132250637002	08/23/2013 07:47	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	132250637002	08/23/2013 06:55	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-614-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7160456
LL Group # 1411330
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/13/2013 14:10 by SM

Submitted: 08/14/2013 09:20
Reported: 08/30/2013 13:32

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

614-4 SDG#: PH090-08*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132250637002B	08/19/2013 12:27	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132250637002A	08/19/2013 12:27	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132250637002A	08/19/2013 12:49	Choon Y Tian	10
06145	Thallium	SW-846 6020A	1	132250637002A	08/19/2013 12:27	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 10:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132250637002	08/14/2013 23:15	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13226039404A	08/14/2013 22:50	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13231162401B	08/20/2013 00:41	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411330
Reported: 08/30/13 at 01:32 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13232SLB026	Sample number(s): 7160447-7160450,7160452-7160456									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	105		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	98		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	105		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	109		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	113		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	103		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	111		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	101		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	104		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	102		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	119		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	110		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	101		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	100		79-112		
Batch number: 13227A16A	Sample number(s): 7160448-7160450,7160452,7160454,7160456									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	79		67-119		
Batch number: 13228A94A	Sample number(s): 7160446									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	118	119	75-135	1	30
Batch number: 132330010A	Sample number(s): 7160447-7160450,7160452-7160456									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	84	87	36-106	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	100		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411330
Reported: 08/30/13 at 01:32 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	107		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132330018A	Sample number(s): 7160447-7160450,7160452-7160456									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	83		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	84		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	85		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	81		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	69		49-107		
Batch number: 132250637002	Sample number(s): 7160447-7160456									
Aluminum	40.0	U	40.0	7.21	mg/kg	103		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	107		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	100		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	101		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	102		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	100		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	101		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	103		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	100		80-120		
Sodium	100 U		100.	16.7	mg/kg	99		80-120		
Tin	1.83	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	101		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	101		80-120		
Zinc	0.316	J	4.00	0.200	mg/kg	104		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	100		80-120		
Batch number: 132250637002A	Sample number(s): 7160447-7160456									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	106		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	97		80-120		
Batch number: 132250637002B	Sample number(s): 7160447-7160456									
Selenium	0.400	U	0.400	0.100	mg/kg	119		80-120		
Batch number: 132320638002	Sample number(s): 7160447-7160456									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	115		85-120		
Batch number: 13226039404A	Sample number(s): 7160447-7160448,7160451-7160456									
15a pH by 9045D						100		95-105		
Batch number: 13231162401B	Sample number(s): 7160447-7160456									

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411330
Reported: 08/30/13 at 01:32 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13234002	Sample number(s): 7160447-7160450,7160452-7160456								
2378-TCDD	1.00 U	1.00	0.0920	ng/kg	101		67-158		
12378-PeCDD	0.0869 J	5.00	0.0732	ng/kg	102		70-142		
123478-HxCDD	5.00 U	5.00	0.0379	ng/kg	98		70-164		
123678-HxCDD	5.00 U	5.00	0.0401	ng/kg	97		76-134		
123789-HxCDD	5.00 U	5.00	0.0409	ng/kg	95		64-162		
1234678-HpCDD	0.0505 J	5.00	0.0484	ng/kg	93		70-140		
OCDD	0.294 J	10.0	0.0320	ng/kg	93		78-144		
2378-TCDF	1.00 U	1.00	0.0703	ng/kg	105		75-158		
12378-PeCDF	5.00 U	5.00	0.0446	ng/kg	96		80-134		
23478-PeCDF	0.0473 J	5.00	0.0412	ng/kg	98		68-160		
123478-HxCDF	0.0573 J	5.00	0.0262	ng/kg	91		72-134		
123678-HxCDF	0.0277 J	5.00	0.0242	ng/kg	92		84-130		
123789-HxCDF	5.00 U	5.00	0.0390	ng/kg	87		78-130		
234678-HxCDF	5.00 U	5.00	0.0242	ng/kg	90		70-156		
1234678-HpCDF	0.0404 J	5.00	0.0133	ng/kg	88		82-122		
1234789-HpCDF	0.0549 J	5.00	0.0234	ng/kg	91		78-138		
OCDF	0.126 J	10.0	0.0614	ng/kg	89		63-170		
TEQ WHO 2005 - EDLx0.0	U			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13232SLB026	Sample number(s): 7160447-7160450,7160452-7160456 UNSPK: 7160448								
Acenaphthene	96	98	48-127	2	30				
Acenaphthylene	101	103	49-121	2	30				
Anthracene	99	100	52-126	2	30				
Benzo(a)anthracene	94	98	44-143	4	30				
Benzo(a)pyrene	100	99	44-140	1	30				
Benzo(b)fluoranthene	114	101	26-142	12	30				
Benzo(e)pyrene	87	88	70-130	0	30				
Benzo(g,h,i)perylene	98	94	33-141	4	30				
Benzo(k)fluoranthene	91	103	54-142	13	30				
Butylbenzylphthalate	116	119	49-151	3	30				
Di-n-butylphthalate	114	119	52-147	5	30				
Chrysene	96	97	29-148	2	30				
Dibenz(a,h)anthracene	105	103	20-137	3	30				

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411330
Reported: 08/30/13 at 01:32 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Diethylphthalate	106	113	43-145	6	30				
Dimethylphthalate	102	103	58-129	1	30				
Bis(2-Ethylhexyl)phthalate	110	137	39-167	22	30				
Fluoranthene	98	100	40-148	2	30				
Fluorene	96	100	51-137	4	30				
Indeno(1,2,3-cd)pyrene	103	101	17-136	2	30				
1-Methylnaphthalene	102	102	50-131	1	30				
2-Methylnaphthalene	98	101	35-152	3	30				
Naphthalene	95	97	31-148	2	30				
N-Nitrosodimethylamine	112	115*	48-113	2	30				
Di-n-octylphthalate	111	117	52-162	5	30				
Phenanthrene	95	97	29-142	2	30				
Pyrene	96	96	26-143	1	30				
Batch number: 13227A16A	Sample number(s): 7160448-7160450,7160452,7160454,7160456 UNSPK: 7160448								
11a TPH by EPA 8015B GRO	62	76	39-118	5	30				
Batch number: 132330010A	Sample number(s): 7160447-7160450,7160452-7160456 UNSPK: 7160448								
PCB-1016	90	92	16-146	2	50				
PCB-1260	107	109	40-134	2	50				
Batch number: 132330018A	Sample number(s): 7160447-7160450,7160452-7160456 UNSPK: 7160448								
EFH (C12-C14)	78	81	49-123	3	20				
EFH (C15-C20)	87	95	49-123	9	20				
EFH (C21-C30)	93	105	49-123	13	20				
EFH (C30-C40)	109	163*	49-123	40*	20				
EFH (C8-C11)	66	69	49-123	4	20				
Batch number: 132250637002	Sample number(s): 7160447-7160456 UNSPK: 7160448 BKG: 7160448								
Aluminum	1975 (2)	2935 (2)	75-125	5	20	32,600	31,200	4	20
Antimony	51*	52*	75-125	3	20	3.96 U	3.96 U	0 (1)	20
Arsenic	95	91	75-125	3	20	2.33 J	2.39 J	3 (1)	20
Barium	101	104	75-125	2	20	143	140	2	20
Beryllium	98	99	75-125	0	20	0.967 J	0.961 J	1 (1)	20
Boron	97	97	75-125	0	20	6.79 J	6.92 J	2 (1)	20
Cadmium	92	90	75-125	2	20	0.990 U	0.990 U	0 (1)	20
Calcium	176 (2)	91 (2)	75-125	4	20	7,190	7,670	7	20
Chromium	101	107	75-125	2	20	36.8	36.0	2	20
Cobalt	95	95	75-125	0	20	9.03	9.56	6	20
Copper	106	106	75-125	0	20	16.9	17.4	3	20
Iron	854 (2)	40 (2)	75-125	2	20	32,600	33,000	1	20
Lead	96	93	75-125	2	20	10.3	11.2	8 (1)	20
Lithium	100	102	75-125	1	20	25.0	24.4	2	20
Magnesium	198 (2)	278 (2)	75-125	2	20	7,050	7,070	0	20
Manganese	132 (2)	129 (2)	75-125	0	20	398	414	4	20
Molybdenum	93	92	75-125	1	20	0.224 J	1.98 U	200* (1)	20
Nickel	95	96	75-125	1	20	19.6	19.8	1	20
Phosphorus	161*	90	75-125	20	20	233	282	19	20
Potassium	190 (2)	152 (2)	75-125	6	20	4,390	4,620	5	20
Sodium	93	98	75-125	4	20	286	276	4 (1)	20
Tin	92	91	75-125	0	20	3.63 J	3.60 J	1 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411330
Reported: 08/30/13 at 01:32 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Titanium	225 (2)	242 (2)	75-125	1	20	1,690	1,600	5	20
Vanadium	105	111	75-125	2	20	68.8	67.7	2	20
Zinc	101	98	75-125	1	20	66.7	69.0	3	20
Zirconium	90	93	75-125	3	20	7.42	7.31	2 (1)	20
Batch number: 132250637002A	Sample number(s): 7160447-7160456 UNSPK: 7160448 BKG: 7160448								
Silver	121	124	75-125	2	20	0.0453 J	0.0537 J	17 (1)	20
Strontium	221 (2)	266 (2)	75-125	6	20	43.9	55.3	23*	20
Thallium	111	134*	75-125	11	20	0.359	0.430	18 (1)	20
Batch number: 132250637002B	Sample number(s): 7160447-7160456 UNSPK: 7160448 BKG: 7160448								
Selenium	103	102	75-125	0	20	0.177 J	0.274 J	43* (1)	20
Batch number: 132320638002	Sample number(s): 7160447-7160456 UNSPK: 7160448 BKG: 7160448								
3a Mercury 7471A	119	120	65-135	1	20	0.0157 U	0.0161 U	0 (1)	20
Batch number: 13226039404A	Sample number(s): 7160447-7160448,7160451-7160456 BKG: 7160448								
15a pH by 9045D						7.63	7.84	3	3
Batch number: 13231162401B	Sample number(s): 7160447-7160456 BKG: 7160448								
14a Moisture Content by 160.3						10.6	10.9	3	20
14a Moisture Content by 160.3						10.6	10.9	3	20
14a Moisture Content by 160.3						10.6	10.9	3	20
Batch number: 13234002	Sample number(s): 7160447-7160450,7160452-7160456 UNSPK: 7160448								
2378-TCDD	99	104	40-135	7	20				
12378-PeCDD	115	117	40-135	3	20				
123478-HxCDD	117	116	40-135	1	20				
123678-HxCDD	115	111	40-135	2	20				
123789-HxCDD	113	111	40-135	0	20				
1234678-HpCDD	109	107	40-135	0	20				
OCDD	107	111	40-135	5	20				
2378-TCDF	123	130	40-135	7	20				
12378-PeCDF	119	114	40-135	2	20				
23478-PeCDF	111	117	40-135	7	20				
123478-HxCDF	107	107	40-135	2	20				
123678-HxCDF	109	110	40-135	2	20				
123789-HxCDF	103	105	40-135	5	20				
234678-HxCDF	108	110	40-135	4	20				
1234678-HpCDF	103	102	40-135	1	20				
1234789-HpCDF	102	103	40-135	2	20				
OCDF	100	102	40-135	4	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411330
Reported: 08/30/13 at 01:32 PM

Surrogate Quality Control

Batch number: 13232SLB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7160447	88	92	99
7160448	85	94	99
7160449	87	96	98
7160450	89	97	100
7160452	89	97	101
7160453	86	95	96
7160454	89	96	97
7160455	85	95	92
7160456	88	94	97
Blank	89	98	103
LCS	91	102	103
MS	87	96	98
MSD	89	97	100
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13227A16A

	Trifluorotoluene-F
7160448	127*
7160449	60*
7160450	70
7160452	74
7160454	71
7160456	67
Blank	85
LCS	81
MS	60*
MSD	70
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13228A94A

	Trifluorotoluene-F
7160446	82
Blank	83
LCS	80
LCSD	77
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132330010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7160447	104	103
7160448	103	111
7160449	102	105
7160450	101	111

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411330
Reported: 08/30/13 at 01:32 PM

Surrogate Quality Control

7160452	111	114
7160453	99	103
7160454	100	105
7160455	96	101
7160456	91	85
Blank	112	120
LCS	101	106
LCSD	113	128*
MS	102	105
MSD	101	111
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132330018A

	Chlorobenzene	Orthoterphenyl
7160447	75	80
7160448	74	76
7160449	75	77
7160450	78	80
7160452	74	76
7160453	75	76
7160454	76	78
7160455	78	83
7160456	77	79
Blank	82	83
LCS	81	84
MS	75	77
MSD	78	80
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13234002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7160447	67	90	72	85	72	79
7160448	63	88	64	82	72	73
7160449	61	88	76	94	84	69
7160450	58	83	71	83	70	71
7160452	53	70	62	76	69	67
7160453	57	78	61	78	65	54
7160454	61	61	55	72	61	54
7160455	76	86	75	90	84	76
7160456	62	64	60	76	66	54
Blank	68	82	68	80	74	66
MS	61	88	76	94	84	69
MSD	58	83	71	83	70	71
OPR	57	69	52	61	57	64
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7160447	116	79	83	81	71	75

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411330
Reported: 08/30/13 at 01:32 PM

Surrogate Quality Control

7160448	121	68	67	88	71	78
7160449	123	74	76	76	76	83
7160450	121	72	73	77	69	73
7160452	106	61	59	66	66	70
7160453	113	58	59	78	64	67
7160454	96	47	51	74	70	76
7160455	134	75	66	92	89	93
7160456	95	52	53	76	71	78
Blank	106	78	79	89	83	92
MS	123	74	76	76	76	83
MSD	121	72	73	77	69	73
OPR	89	57	54	77	68	70
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7160447	70	91	101	66	92
7160448	75	93	93	65	101
7160449	80	95	96	65	95
7160450	68	91	94	59	92
7160452	69	80	81	54	81
7160453	67	86	91	58	93
7160454	74	78	91	54	68
7160455	95	109	106	73	103
7160456	74	86	88	58	70
Blank	89	105	114	63	83
MS	80	95	96	65	95
MSD	68	91	94	59	92
OPR	72	83	88	52	74
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Ap#1411330 Sample#7160446-56

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/13/2013
CarrierName: FedEx
AirbillNo: 796456924398

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130813-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-081313	8/13/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X												
SL-543-SA8-SB-0.0-0.5	8/13/13 07:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-543-SA8-SB-0.0-0.5	8/13/13 07:45	SO	None	1 - 4 oz glass	10 day														X																		
SL-543-SA8-SB-4.0-5.0MS	8/13/13 08:15	SO	None	6 - SS-Sleeve	10 day	X	X					X		X	X											X											MS/MSD
SL-543-SA8-SB-4.0-5.0MS	8/13/13 08:15	SO	None	1 - 16 oz glass	10 day														X																		MS/MSD
SL-543-SA8-SB-4.0-5.0MS	8/13/13 08:15	SO	None	6 - Encore	10 day																				X												MS/MSD
SL-843-SA8-SB-4.0-5.0	8/13/13 08:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-843-SA8-SB-4.0-5.0	8/13/13 08:30	SO	None	1 - 4 oz glass	10 day														X																		
SL-843-SA8-SB-4.0-5.0	8/13/13 08:30	SO	None	2 - Encore	10 day																				X												
SL-609-SA8-SB-0.0-0.5	8/13/13 12:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-609-SA8-SB-0.0-0.5	8/13/13 12:15	SO	None	1 - 4 oz glass	10 day														X																		
SL-609-SA8-SB-4.0-5.0	8/13/13 12:45	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X											X											
SL-609-SA8-SB-4.0-5.0	8/13/13 12:45	SO	None	1 - 4 oz glass	10 day														X																		
SL-609-SA8-SB-4.0-5.0	8/13/13 12:45	SO	None	2 - Encore	10 day																				X												
SL-614-SA8-SB-0.0-0.5	8/13/13 13:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-614-SA8-SB-0.0-0.5	8/13/13 13:45	SO	None	1 - 4 oz glass	10 day														X																		
SL-614-SA8-SB-4.0-5.0	8/13/13 14:10	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X											X											
SL-614-SA8-SB-4.0-5.0	8/13/13 14:10	SO	None	1 - 4 oz glass	10 day														X																		
SL-614-SA8-SB-4.0-5.0	8/13/13 14:10	SO	None	2 - Encore	10 day																				X												

Rec by Brandy Barely ELLE 8.14.13 920

acct# 13013 Gp# 1411330 Sample# 7160446-56

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped:	8/13/2013	Contact Name:	Pam Hartman	COC No:	20130813-01
CarrierName:	FedEx	Contact Phone:	(818)466-8007	Cooler #:	1
AirbillNo:	796456924398			Lab:	Lancaster
				Lab Phone:	717-556-7259
				Lab Address	2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: Stan Mercer

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stan Mercer	8/13/2013	1600									
									Brandy Tang	8.14.13	920

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C# 1411330

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 8.14.13

Time of Receipt: 920

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	0.8	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Barclay 2299 **Date/Time:** 8.14.13 940

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH091

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 30, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/15/2013
Group Number: 1411680
SDG: PH091
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB-081413 Water	7162021
TB-081413 Water	7162022
SL-600-SA8-SB-0.0-0.5 Soil	7162023
SL-600-SA8-SB-4.0-5.0 Soil	7162024
SL-602-SA8-SB-0.0-0.5 Soil	7162025
SL-602-SA8-SB-4.0-5.0 Soil	7162026
SL-613-SA8-SB-0.0-0.5 Soil	7162027
SL-613-SA8-SB-4.0-5.0 Soil	7162028

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,



Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: EB-081413 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7162021
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 15:00 by PH

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB814 SDG#: PH091-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.053	U	0.053	0.011	1
12971	Acenaphthylene	208-96-8	0.053	U	0.053	0.011	1
12971	Anthracene	120-12-7	0.053	U	0.053	0.011	1
12971	Benzo(a)anthracene	56-55-3	0.053	U	0.053	0.011	1
12971	Benzo(a)pyrene	50-32-8	0.053	U	0.053	0.011	1
12971	Benzo(b)fluoranthene	205-99-2	0.053	U	0.053	0.011	1
12971	Benzo(e)pyrene	192-97-2	0.053	U	0.053	0.011	1
12971	Benzo(g,h,i)perylene	191-24-2	0.053	U	0.053	0.011	1
12971	Benzo(k)fluoranthene	207-08-9	0.053	U	0.053	0.011	1
12971	Butylbenzylphthalate	85-68-7	1.1	U	1.1	0.053	1
12971	Di-n-butylphthalate	84-74-2	0.20	J	1.1	0.053	1
12971	Chrysene	218-01-9	0.053	U	0.053	0.011	1
12971	Dibenz(a,h)anthracene	53-70-3	0.053	U	0.053	0.011	1
12971	Diethylphthalate	84-66-2	0.31	J	1.1	0.053	1
12971	Dimethylphthalate	131-11-3	1.1	U	1.1	0.053	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.30	J	1.1	0.053	1
12971	Fluoranthene	206-44-0	0.053	U	0.053	0.011	1
12971	Fluorene	86-73-7	0.053	U	0.053	0.011	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.053	U	0.053	0.011	1
12971	1-Methylnaphthalene	90-12-0	0.053	U	0.053	0.011	1
12971	2-Methylnaphthalene	91-57-6	0.012	J	0.053	0.011	1
12971	Naphthalene	91-20-3	0.058		0.053	0.032	1
12971	N-Nitrosodimethylamine	62-75-9	0.053	U	0.053	0.011	1
12971	Di-n-octylphthalate	117-84-0	1.1	U	1.1	0.053	1
12971	Phenanthrene	85-01-8	0.053	U	0.053	0.032	1
12971	Pyrene	129-00-0	0.053	U	0.053	0.011	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.49	U	0.49	0.16	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.25	1
10407	2,4-DB	94-82-6	0.98	U	0.98	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.079	1
10407	Dinoseb	88-85-7	0.49	U	0.49	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.49	U	0.49	0.16	1
10407	MCPA	94-74-6	200	U	200	49	1
10407	MCPP	93-65-2	200	U	200	49	1
10407	2,4,5-T	93-76-5	0.049	U	0.049	0.015	1
10407	2,4,5-TP	93-72-1	0.049	U	0.049	0.0098	1
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0081	U	0.0081	0.0016	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-081413 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7162021
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 15:00 by PH

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB814 SDG#: PH091-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Alpha BHC	319-84-6	0.0081	U	0.0081	0.0024	1
10589	Beta BHC	319-85-7	0.0081	U	0.0081	0.0028	1
10589	Gamma BHC - Lindane	58-89-9	0.0081	U	0.0081	0.0016	1
10589	Chlordane	57-74-9	0.41	U	0.41	0.13	1
10589	p,p-DDD	72-54-8	0.016	U	0.016	0.0041	1
10589	p,p-DDE	72-55-9	0.016	U	0.016	0.0041	1
10589	p,p-DDT	50-29-3	0.016	U	0.016	0.0042	1
10589	Delta BHC	319-86-8	0.0081	U	0.0081	0.0028	1
10589	Dieldrin	60-57-1	0.016	U	0.016	0.0043	1
10589	Endosulfan I	959-98-8	0.0081	U	0.0081	0.0035	1
10589	Endosulfan II	33213-65-9	0.016	U	0.016	0.012	1
10589	Endosulfan Sulfate	1031-07-8	0.016	U	0.016	0.0047	1
10589	Endrin	72-20-8	0.016	U	0.016	0.0066	1
10589	Endrin Aldehyde	7421-93-4	0.081	U	0.081	0.016	1
10589	Endrin Ketone	53494-70-5	0.016	U	0.016	0.0041	1
10589	Heptachlor	76-44-8	0.0081	U	0.0081	0.0016	1
10589	Heptachlor Epoxide	1024-57-3	0.0081	U	0.0081	0.0019	1
10589	Methoxychlor	72-43-5	0.081	U	0.081	0.024	1
10589	Mirex	2385-85-5	0.20	U	0.20	0.069	1
10589	Toxaphene	8001-35-2	2.4	U	2.4	0.81	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.41	U	0.41	0.081	1
10591	Aroclor 5442	12642-23-8	0.41	U	0.41	0.081	1
10591	Aroclor 5460	11126-42-4	0.41	U	0.41	0.089	1
10591	PCB-1016	12674-11-2	0.41	U	0.41	0.081	1
10591	PCB-1221	11104-28-2	0.41	U	0.41	0.081	1
10591	PCB-1232	11141-16-5	0.41	U	0.41	0.16	1
10591	PCB-1242	53469-21-9	0.41	U	0.41	0.081	1
10591	PCB-1248	12672-29-6	0.41	U	0.41	0.081	1
10591	PCB-1254	11097-69-1	0.41	U	0.41	0.081	1
10591	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
10591	PCB-1262	37324-23-5	0.41	U	0.41	0.16	1
10591	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C15-C20)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C21-C30)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.099	1
10365	EFH (C8-C11)	n.a.	0.099	U	0.099	0.049	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-081413 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7162021
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 15:00 by PH

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB814 SDG#: PH091-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.0106 J	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.0798 J	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.8	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-081413 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7162021
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 15:00 by PH

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB814 SDG#: PH091-01EB

CAT No.	Analysis Name		CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**			pg/l		pg/l	pg/l	
10915	2378-TCDD		1746-01-6	0.406	JBQ	1.96	0.270	1
10915	12378-PeCDD		40321-76-4	0.617	JBQ	9.79	0.359	1
10915	123478-HxCDD		39227-28-6	0.594	JBQ	9.79	0.207	1
10915	123678-HxCDD		57653-85-7	0.708	JB	9.79	0.211	1
10915	123789-HxCDD		19408-74-3	0.501	JBQ	9.79	0.203	1
10915	1234678-HpCDD		35822-46-9	1.09	JBQ	9.79	0.258	1
10915	OCDD		3268-87-9	1.96	JBQ	19.6	0.390	1
10915	2378-TCDF		51207-31-9	0.235	JB	1.96	0.218	1
10915	12378-PeCDF		57117-41-6	0.985	JBQ	9.79	0.200	1
10915	23478-PeCDF		57117-31-4	0.744	JBQ	9.79	0.182	1
10915	123478-HxCDF		70648-26-9	0.495	JBQ	9.79	0.112	1
10915	123678-HxCDF		57117-44-9	0.528	JBQ	9.79	0.115	1
10915	123789-HxCDF		72918-21-9	0.826	JBQ	9.79	0.127	1
10915	234678-HxCDF		60851-34-5	0.129	JBQ	9.79	0.107	1
10915	1234678-HpCDF		67562-39-4	0.776	JB	9.79	0.0814	1
10915	1234789-HpCDF		55673-89-7	0.597	JBQ	9.79	0.0898	1
10915	OCDF		39001-02-0	1.52	JB	19.6	0.312	1
Toxic Equivalents	**EPA 1613B**			pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0		n.a.	0.103				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	56	25 - 164
13C12-12378-PeCDD	59	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	64	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	79	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB-081413 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7162021
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 15:00 by PH

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB814 SDG#: PH091-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB-081413 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7162021
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 15:00 by PH

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB814 SDG#: PH091-01EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13231WAH026	08/28/2013 01:35	Brian K Graham	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13231WAH026	08/20/2013 09:30	Anna E Stager	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13228A94A	08/16/2013 15:27	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13228A94A	08/16/2013 15:27	Catherine J Schwarz	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132320015A	08/26/2013 19:48	Elizabeth J Marin	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132320010A	08/21/2013 14:16	Lisa A Reinert	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	132320009A	08/23/2013 18:47	Monica M Souders	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	132320009A	08/20/2013 16:55	JoElla L Rice	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132320010A	08/20/2013 16:55	JoElla L Rice	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132320015A	08/20/2013 21:05	Karen L Beyer	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330013A	08/22/2013 20:41	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132330013A	08/21/2013 21:40	Karen L Beyer	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13232004	08/26/2013 14:59	Robert Brown	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13232004	08/22/2013 09:30	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07052	Cobalt	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
01756	Lithium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07060	Molybdenum	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07061	Nickel	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-081413 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7162021
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 15:00 by PH

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB814 SDG#: PH091-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10143	Phosphorus	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
07072	Zinc	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	132270635001	08/25/2013 13:44	Katlin N Cataldi	1
06041	Selenium	SW-846 6020A	1	132270639001B	08/21/2013 10:39	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	132270639001A	08/21/2013 10:39	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	132270639001A	08/21/2013 10:39	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	132270639001A	08/21/2013 10:39	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	132355713007	08/26/2013 09:17	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132270635001	08/20/2013 23:30	Annamaria Stipkovits	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132270639001	08/20/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132355713007	08/25/2013 08:30	Damary Valentin	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13227002101A	08/15/2013 21:44	Clayton C Litchmore	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-081413 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7162022
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:00

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB814 SDG#: PH091-02TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13228A94A	08/16/2013 15:52	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13228A94A	08/16/2013 15:52	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162023
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:25 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60000 SDG#: PH091-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.2	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.2	1
12969	Chrysene	218-01-9	1.0	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.2	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5	J	18	6.2	1
12969	Fluoranthene	206-44-0	0.94	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.1	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	0.93	J	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	12		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	47		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162023
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:25 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60000 SDG#: PH091-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,600		39.9	7.19	1
06944	Antimony	7440-36-0	3.99	U	3.99	0.738	1
06935	Arsenic	7440-38-2	5.47		3.99	0.698	1
06946	Barium	7440-39-3	89.1		0.997	0.0329	1
06947	Beryllium	7440-41-7	0.692	J	0.997	0.0668	1
07914	Boron	7440-42-8	15.7		9.97	0.837	1
06949	Cadmium	7440-43-9	0.647	J	0.997	0.0758	1
01650	Calcium	7440-70-2	62,300		99.7	16.6	5
06951	Chromium	7440-47-3	29.9		2.99	0.159	1
06952	Cobalt	7440-48-4	8.81		0.997	0.0987	1
06953	Copper	7440-50-8	19.1		1.99	0.289	1
01654	Iron	7439-89-6	26,500		39.9	3.61	1
06955	Lead	7439-92-1	14.1		2.99	0.498	1
01656	Lithium	7439-93-2	22.5		4.0	0.34	1
01657	Magnesium	7439-95-4	7,160		9.97	1.66	1
06958	Manganese	7439-96-5	475		0.997	0.0827	1
06960	Molybdenum	7439-98-7	0.355	J	1.99	0.169	1
06961	Nickel	7440-02-0	17.8		1.99	0.130	1
10145	Phosphorus	7723-14-0	707		9.97	2.88	1
01662	Potassium	7440-09-7	5,690		99.7	8.31	1
01667	Sodium	7440-23-5	93.3	J	99.7	16.6	1
06969	Tin	7440-31-5	3.27	J	9.97	0.219	1
06970	Titanium	7440-32-6	974		4.98	0.847	5
06971	Vanadium	7440-62-2	49.1		0.997	0.130	1
06972	Zinc	7440-66-6	70.7		3.99	0.199	1
10146	Zirconium	7440-67-7	3.86	J	4.98	0.837	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.416		0.399	0.0997	2
06142	Silver	7440-22-4	0.0273	J	0.199	0.0259	2
06144	Strontium	7440-24-6	80.9		0.399	0.0678	2
06145	Thallium	7440-28-0	0.296		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0192		0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.55		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162023
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:25 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60000 SDG#: PH091-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.986	U	0.986	0.0652	1
11031	12378-PeCDD	40321-76-4	0.213	JBQ	4.93	0.0576	1
11031	123478-HxCDD	39227-28-6	0.0772	JQ	4.93	0.0448	1
11031	123678-HxCDD	57653-85-7	0.163	JQ	4.93	0.0500	1
11031	123789-HxCDD	19408-74-3	0.169	JQ	4.93	0.0469	1
11031	1234678-HpCDD	35822-46-9	2.12	JB	4.93	0.0496	1
11031	OCDD	3268-87-9	15.7	B	9.86	0.0337	1
11031	2378-TCDF	51207-31-9	0.109	JQ	0.986	0.0701	1
11031	12378-PeCDF	57117-41-6	0.356	J	4.93	0.0419	1
11031	23478-PeCDF	57117-31-4	0.325	JB	4.93	0.0443	1
11031	123478-HxCDF	70648-26-9	0.196	JBQ	4.93	0.0372	1
11031	123678-HxCDF	57117-44-9	0.155	JBQ	4.93	0.0318	1
11031	123789-HxCDF	72918-21-9	0.0570	JQ	4.93	0.0419	1
11031	234678-HxCDF	60851-34-5	0.208	J	4.93	0.0334	1
11031	1234678-HpCDF	67562-39-4	0.447	JB	4.93	0.0224	1
11031	1234789-HpCDF	55673-89-7	0.137	JBQ	4.93	0.0482	1
11031	OCDF	39001-02-0	0.780	JB	9.86	0.0543	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.160				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	103	23 - 140
13C12-OCDD	97	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	118	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162023
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:25 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60000 SDG#: PH091-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162023
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:25 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60000 SDG#: PH091-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 08:33	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 14:28	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132340019A	08/23/2013 21:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132340019A	08/22/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/28/2013 09:38	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132330637001	08/26/2013 10:00	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132330637001	08/26/2013 10:00	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132330637001	08/25/2013 13:01	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132330637001B	08/22/2013 23:58	David K Beck	2
06142	Silver	SW-846 6020A	1	132330637001A	08/22/2013 23:58	David K Beck	2
06144	Strontium	SW-846 6020A	1	132330637001A	08/22/2013 23:58	David K Beck	2
06145	Thallium	SW-846 6020A	1	132330637001A	08/22/2013 23:58	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162023
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:25 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60000 SDG#: PH091-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 10:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132330637001	08/21/2013 22:52	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13227039402A	08/15/2013 21:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13235162401A	08/24/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162024
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60040 SDG#: PH091-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.44	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.3	J	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	0.89	J	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	0.83	J	1.8	0.73	1
12969	Naphthalene	91-20-3	1.7	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.3	U	1.3	0.3	28.54
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162024
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60040 SDG#: PH091-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	6.3		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,100		42.6	7.68	1
06944	Antimony	7440-36-0	4.26	U	4.26	0.789	1
06935	Arsenic	7440-38-2	5.85		4.26	0.746	1
06946	Barium	7440-39-3	102		1.07	0.0352	1
06947	Beryllium	7440-41-7	0.756	J	1.07	0.0714	1
07914	Boron	7440-42-8	14.3		10.7	0.895	1
06949	Cadmium	7440-43-9	0.633	J	1.07	0.0810	1
01650	Calcium	7440-70-2	68,100		107	17.8	5
06951	Chromium	7440-47-3	33.0		3.20	0.171	1
06952	Cobalt	7440-48-4	9.33		1.07	0.106	1
06953	Copper	7440-50-8	19.0		2.13	0.309	1
01654	Iron	7439-89-6	28,500		42.6	3.86	1
06955	Lead	7439-92-1	11.1		3.20	0.533	1
01656	Lithium	7439-93-2	25.3		4.3	0.36	1
01657	Magnesium	7439-95-4	7,250		10.7	1.78	1
06958	Manganese	7439-96-5	477		1.07	0.0885	1
06960	Molybdenum	7439-98-7	0.355	J	2.13	0.181	1
06961	Nickel	7440-02-0	19.4		2.13	0.139	1
10145	Phosphorus	7723-14-0	589		10.7	3.08	1
01662	Potassium	7440-09-7	4,490		107	8.89	1
01667	Sodium	7440-23-5	99.9	J	107	17.8	1
06969	Tin	7440-31-5	3.39	J	10.7	0.234	1
06970	Titanium	7440-32-6	1,070		5.33	0.906	5
06971	Vanadium	7440-62-2	55.5		1.07	0.139	1
06972	Zinc	7440-66-6	68.3		4.26	0.213	1
10146	Zirconium	7440-67-7	4.65	J	5.33	0.895	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.225	J	0.426	0.107	2
06142	Silver	7440-22-4	0.0339	J	0.213	0.0277	2
06144	Strontium	7440-24-6	79.6		0.426	0.0725	2
06145	Thallium	7440-28-0	0.309		0.213	0.0320	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0181	U	0.0181	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.88		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162024
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60040 SDG#: PH091-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162024
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60040 SDG#: PH091-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0532	1
11031	12378-PeCDD	40321-76-4	5.26	U	5.26	0.0582	1
11031	123478-HxCDD	39227-28-6	0.0774	JQ	5.26	0.0291	1
11031	123678-HxCDD	57653-85-7	0.0531	JQ	5.26	0.0313	1
11031	123789-HxCDD	19408-74-3	0.0629	J	5.26	0.0327	1
11031	1234678-HpCDD	35822-46-9	0.319	JBQ	5.26	0.0333	1
11031	OCDD	3268-87-9	2.35	JB	10.5	0.0281	1
11031	2378-TCDF	51207-31-9	0.0724	J	1.05	0.0604	1
11031	12378-PeCDF	57117-41-6	0.105	J	5.26	0.0325	1
11031	23478-PeCDF	57117-31-4	0.0800	JBQ	5.26	0.0341	1
11031	123478-HxCDF	70648-26-9	0.105	JB	5.26	0.0262	1
11031	123678-HxCDF	57117-44-9	0.0536	JB	5.26	0.0212	1
11031	123789-HxCDF	72918-21-9	0.0774	JQ	5.26	0.0303	1
11031	234678-HxCDF	60851-34-5	0.0537	JQ	5.26	0.0238	1
11031	1234678-HpCDF	67562-39-4	0.0667	JB	5.26	0.0113	1
11031	1234789-HpCDF	55673-89-7	0.0420	JBQ	5.26	0.0273	1
11031	OCDF	39001-02-0	0.390	JB	10.5	0.0562	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0340				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	56	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	60	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	49	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162024
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60040 SDG#: PH091-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162024
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60040 SDG#: PH091-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 09:06	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13227A16A	08/16/2013 17:59	Laura M Krieger	28.54
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322732053	08/15/2013 16:23	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322732053	08/15/2013 16:23	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 14:46	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132340019A	08/23/2013 20:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132340019A	08/22/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/28/2013 10:34	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132330637001	08/26/2013 10:03	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132330637001	08/26/2013 10:03	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132330637001	08/25/2013 13:05	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-600-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162024
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 08:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60040 SDG#: PH091-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132330637001B	08/23/2013 00:00	David K Beck	2
06142	Silver	SW-846 6020A	1	132330637001A	08/23/2013 00:00	David K Beck	2
06144	Strontium	SW-846 6020A	1	132330637001A	08/23/2013 00:00	David K Beck	2
06145	Thallium	SW-846 6020A	1	132330637001A	08/23/2013 00:00	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 10:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132330637001	08/21/2013 22:52	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13227039402A	08/15/2013 21:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13235162401A	08/24/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162025
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:15 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60200 SDG#: PH091-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.42	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.9		1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.8		1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	4.4		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.3	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.3	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	16	J	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	3.6		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.2	J	19	6.2	1
12969	Fluoranthene	206-44-0	3.8		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.2	J	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.9		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	2.5		1.7	0.69	1
12969	Naphthalene	91-20-3	5.2		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	3.8		1.7	0.69	1
12969	Pyrene	129-00-0	3.1		1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	3.6	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	28		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	55		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162025
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:15 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60200 SDG#: PH091-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,200		41.3	7.45	1
06944	Antimony	7440-36-0	0.811	J	4.13	0.764	1
06935	Arsenic	7440-38-2	5.96		4.13	0.723	1
06946	Barium	7440-39-3	86.6		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.638	J	1.03	0.0692	1
07914	Boron	7440-42-8	17.1		10.3	0.868	1
06949	Cadmium	7440-43-9	0.697	J	1.03	0.0785	1
01650	Calcium	7440-70-2	75,300		103	17.3	5
06951	Chromium	7440-47-3	27.4		3.10	0.165	1
06952	Cobalt	7440-48-4	8.91		1.03	0.102	1
06953	Copper	7440-50-8	20.1		2.07	0.300	1
01654	Iron	7439-89-6	25,500		41.3	3.74	1
06955	Lead	7439-92-1	16.7		3.10	0.517	1
01656	Lithium	7439-93-2	18.5		4.1	0.35	1
01657	Magnesium	7439-95-4	6,780		10.3	1.73	1
06958	Manganese	7439-96-5	437		1.03	0.0857	1
06960	Molybdenum	7439-98-7	0.386	J	2.07	0.176	1
06961	Nickel	7440-02-0	17.2		2.07	0.134	1
10145	Phosphorus	7723-14-0	730		10.3	2.99	1
01662	Potassium	7440-09-7	6,180		103	8.62	1
01667	Sodium	7440-23-5	101	J	103	17.3	1
06969	Tin	7440-31-5	3.05	J	10.3	0.227	1
06970	Titanium	7440-32-6	917		1.03	0.176	1
06971	Vanadium	7440-62-2	45.9		1.03	0.134	1
06972	Zinc	7440-66-6	73.6		4.13	0.207	1
10146	Zirconium	7440-67-7	4.34	J	5.17	0.868	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.301	J	0.413	0.103	2
06142	Silver	7440-22-4	0.0351	J	0.207	0.0269	2
06144	Strontium	7440-24-6	98.6		1.03	0.176	5
06145	Thallium	7440-28-0	0.240		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0251		0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.97		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162025
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:15 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60200 SDG#: PH091-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0629	1
11031	12378-PeCDD	40321-76-4	5.01	U	5.01	0.0605	1
11031	123478-HxCDD	39227-28-6	0.112	JQ	5.01	0.0457	1
11031	123678-HxCDD	57653-85-7	0.295	JQ	5.01	0.0527	1
11031	123789-HxCDD	19408-74-3	0.161	JQ	5.01	0.0528	1
11031	1234678-HpCDD	35822-46-9	6.64	B	5.01	0.0506	1
11031	OCDD	3268-87-9	88.3	B	10.0	0.0444	1
11031	2378-TCDF	51207-31-9	0.357	J	1.00	0.115	1
11031	12378-PeCDF	57117-41-6	0.511	J	5.01	0.0518	1
11031	23478-PeCDF	57117-31-4	0.226	JB	5.01	0.0579	1
11031	123478-HxCDF	70648-26-9	0.200	JBQ	5.01	0.0541	1
11031	123678-HxCDF	57117-44-9	0.195	JB	5.01	0.0450	1
11031	123789-HxCDF	72918-21-9	5.01	U	5.01	0.0723	1
11031	234678-HxCDF	60851-34-5	0.297	JQ	5.01	0.0505	1
11031	1234678-HpCDF	67562-39-4	2.21	JB	5.01	0.0364	1
11031	1234789-HpCDF	55673-89-7	0.273	JB	5.01	0.0948	1
11031	OCDF	39001-02-0	7.14	JB	10.0	0.0720	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.258				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	104	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	91	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	116	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	53	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162025
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:15 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60200 SDG#: PH091-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162025
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:15 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60200 SDG#: PH091-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 09:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 15:05	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132340019A	08/23/2013 21:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132340019A	08/22/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/28/2013 11:31	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132330637001	08/26/2013 09:37	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132330637001	08/25/2013 12:37	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132330637001B	08/22/2013 23:44	David K Beck	2
06142	Silver	SW-846 6020A	1	132330637001A	08/22/2013 23:44	David K Beck	2
06144	Strontium	SW-846 6020A	1	132330637001A	08/23/2013 22:49	David K Beck	5
06145	Thallium	SW-846 6020A	1	132330637001A	08/22/2013 23:44	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162025
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:15 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60200 SDG#: PH091-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 10:07	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132330637001	08/21/2013 22:52	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13227039402A	08/15/2013 21:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13235162401A	08/24/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162026
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60240 SDG#: PH091-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.0	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.2	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	0.88	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	J	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.5	J	1.8	0.72	1
12969	Naphthalene	91-20-3	3.2		1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.9		1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	26.71
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.6	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.6	1
10592	PCB-1254	11097-69-1	18	U	18	4.8	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.6	1
10592	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	2.5	J	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162026
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60240 SDG#: PH091-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	11		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	33		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,400		42.4	7.65	1
06944	Antimony	7440-36-0	4.24	U	4.24	0.785	1
06935	Arsenic	7440-38-2	6.20		4.24	0.743	1
06946	Barium	7440-39-3	83.2		1.06	0.0350	1
06947	Beryllium	7440-41-7	0.643	J	1.06	0.0711	1
07914	Boron	7440-42-8	14.2		10.6	0.891	1
06949	Cadmium	7440-43-9	0.625	J	1.06	0.0806	1
01650	Calcium	7440-70-2	107,000		106	17.7	5
06951	Chromium	7440-47-3	29.1		3.18	0.170	1
06952	Cobalt	7440-48-4	8.52		1.06	0.105	1
06953	Copper	7440-50-8	19.7		2.12	0.308	1
01654	Iron	7439-89-6	25,500		42.4	3.84	1
06955	Lead	7439-92-1	11.6		3.18	0.531	1
01656	Lithium	7439-93-2	22.5		4.2	0.36	1
01657	Magnesium	7439-95-4	7,110		10.6	1.77	1
06958	Manganese	7439-96-5	381		1.06	0.0881	1
06960	Molybdenum	7439-98-7	0.248	J	2.12	0.180	1
06961	Nickel	7440-02-0	16.8		2.12	0.138	1
10145	Phosphorus	7723-14-0	599		10.6	3.07	1
01662	Potassium	7440-09-7	4,650		106	8.85	1
01667	Sodium	7440-23-5	113		106	17.7	1
06969	Tin	7440-31-5	3.15	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,020		5.31	0.902	5
06971	Vanadium	7440-62-2	50.2		1.06	0.138	1
06972	Zinc	7440-66-6	65.9		4.24	0.212	1
10146	Zirconium	7440-67-7	5.12	J	5.31	0.891	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.300	J	0.424	0.106	2
06142	Silver	7440-22-4	0.212	U	0.212	0.0276	2
06144	Strontium	7440-24-6	136		1.06	0.180	5
06145	Thallium	7440-28-0	0.258		0.212	0.0318	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.99		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162026
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60240 SDG#: PH091-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162026
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60240 SDG#: PH091-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0591	1
11031	12378-PeCDD	40321-76-4	0.0716	JBQ	5.26	0.0681	1
11031	123478-HxCDD	39227-28-6	5.26	U	5.26	0.0331	1
11031	123678-HxCDD	57653-85-7	0.0522	JQ	5.26	0.0367	1
11031	123789-HxCDD	19408-74-3	5.26	U	5.26	0.0366	1
11031	1234678-HpCDD	35822-46-9	0.485	JBQ	5.26	0.0393	1
11031	OCDD	3268-87-9	3.37	JB	10.5	0.0361	1
11031	2378-TCDF	51207-31-9	1.05	U	1.05	0.0677	1
11031	12378-PeCDF	57117-41-6	0.231	J	5.26	0.0345	1
11031	23478-PeCDF	57117-31-4	0.0518	JBQ	5.26	0.0400	1
11031	123478-HxCDF	70648-26-9	0.0697	JBQ	5.26	0.0241	1
11031	123678-HxCDF	57117-44-9	0.0352	JBQ	5.26	0.0213	1
11031	123789-HxCDF	72918-21-9	0.0370	JQ	5.26	0.0282	1
11031	234678-HxCDF	60851-34-5	0.0319	JQ	5.26	0.0232	1
11031	1234678-HpCDF	67562-39-4	0.117	JB	5.26	0.0154	1
11031	1234789-HpCDF	55673-89-7	5.26	U	5.26	0.0366	1
11031	OCDF	39001-02-0	0.183	JBQ	10.5	0.0695	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00909				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	57	25 - 181
13C12-123478-HxCDD	59	32 - 141
13C12-123678-HxCDD	61	28 - 130
13C12-123789-HxCDD	62	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	61	24 - 185
13C12-23478-PeCDF	50	21 - 178
13C12-123478-HxCDF	50	26 - 152
13C12-123678-HxCDF	61	26 - 123
13C12-234678-HxCDF	54	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	44	26 - 138
13C12-OCDF	42	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162026
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60240 SDG#: PH091-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162026
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60240 SDG#: PH091-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 10:13	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13227A16A	08/16/2013 18:37	Laura M Krieger	26.71
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322732053	08/15/2013 16:24	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322732053	08/15/2013 16:24	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 15:23	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132340019A	08/23/2013 20:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132340019A	08/22/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/28/2013 12:28	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132330637001	08/26/2013 10:07	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132330637001	08/26/2013 10:07	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132330637001	08/25/2013 13:17	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-602-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162026
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 10:40 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

60240 SDG#: PH091-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132330637001B	08/23/2013 00:07	David K Beck	2
06142	Silver	SW-846 6020A	1	132330637001A	08/23/2013 00:07	David K Beck	2
06144	Strontium	SW-846 6020A	1	132330637001A	08/23/2013 22:59	David K Beck	5
06145	Thallium	SW-846 6020A	1	132330637001A	08/23/2013 00:07	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 10:09	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132330637001	08/21/2013 22:52	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13227039402A	08/15/2013 21:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13235162401A	08/24/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162027
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:30 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61300 SDG#: PH091-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	0.96	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	0.92	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	2.4		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.95	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	0.88	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	6.3	J	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.9		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	19	6.2	1
12969	Fluoranthene	206-44-0	2.1		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	J	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	0.74	J	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	0.77	J	1.7	0.69	1
12969	Naphthalene	91-20-3	1.4	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.4	J	1.7	0.69	1
12969	Pyrene	129-00-0	2.0		1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	3.7	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	25		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	76		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162027
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:30 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61300 SDG#: PH091-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,400		41.0	7.39	1
06944	Antimony	7440-36-0	4.10	U	4.10	0.758	1
06935	Arsenic	7440-38-2	4.93		4.10	0.717	1
06946	Barium	7440-39-3	93.4		1.02	0.0338	1
06947	Beryllium	7440-41-7	0.652	J	1.02	0.0687	1
07914	Boron	7440-42-8	16.9		10.2	0.861	1
06949	Cadmium	7440-43-9	0.723	J	1.02	0.0779	1
01650	Calcium	7440-70-2	74,900		102	17.1	5
06951	Chromium	7440-47-3	30.7		3.07	0.164	1
06952	Cobalt	7440-48-4	9.50		1.02	0.101	1
06953	Copper	7440-50-8	18.4		2.05	0.297	1
01654	Iron	7439-89-6	30,400		205	18.6	5
06955	Lead	7439-92-1	15.2		3.07	0.512	1
01656	Lithium	7439-93-2	22.7		4.1	0.35	1
01657	Magnesium	7439-95-4	7,590		10.2	1.71	1
06958	Manganese	7439-96-5	374		1.02	0.0851	1
06960	Molybdenum	7439-98-7	0.256	J	2.05	0.174	1
06961	Nickel	7440-02-0	19.4		2.05	0.133	1
10145	Phosphorus	7723-14-0	661		10.2	2.96	1
01662	Potassium	7440-09-7	6,700		102	8.55	1
01667	Sodium	7440-23-5	111		102	17.1	1
06969	Tin	7440-31-5	3.28	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,150		5.12	0.871	5
06971	Vanadium	7440-62-2	56.5		1.02	0.133	1
06972	Zinc	7440-66-6	76.8		4.10	0.205	1
10146	Zirconium	7440-67-7	5.15		5.12	0.861	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.360	J	0.410	0.102	2
06142	Silver	7440-22-4	0.0355	J	0.205	0.0266	2
06144	Strontium	7440-24-6	144		1.02	0.174	5
06145	Thallium	7440-28-0	0.275		0.205	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0188		0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.99		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162027
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:30 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61300 SDG#: PH091-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.987	U	0.987	0.0703	1
11031	12378-PeCDD	40321-76-4	4.93	U	4.93	0.0680	1
11031	123478-HxCDD	39227-28-6	0.135	JQ	4.93	0.0530	1
11031	123678-HxCDD	57653-85-7	0.195	JQ	4.93	0.0591	1
11031	123789-HxCDD	19408-74-3	0.253	J	4.93	0.0613	1
11031	1234678-HpCDD	35822-46-9	6.69	B	4.93	0.0784	1
11031	OCDD	3268-87-9	107	B	9.87	0.0552	1
11031	2378-TCDF	51207-31-9	0.287	J	0.987	0.118	1
11031	12378-PeCDF	57117-41-6	0.617	J	4.93	0.0589	1
11031	23478-PeCDF	57117-31-4	0.258	JB	4.93	0.0580	1
11031	123478-HxCDF	70648-26-9	0.145	JB	4.93	0.0550	1
11031	123678-HxCDF	57117-44-9	4.93	U	4.93	0.0480	1
11031	123789-HxCDF	72918-21-9	4.93	U	4.93	0.0762	1
11031	234678-HxCDF	60851-34-5	0.231	J	4.93	0.0497	1
11031	1234678-HpCDF	67562-39-4	1.23	JB	4.93	0.0286	1
11031	1234789-HpCDF	55673-89-7	4.93	U	4.93	0.0633	1
11031	OCDF	39001-02-0	2.66	JB	9.87	0.0686	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.300				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	98	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	110	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162027
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:30 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61300 SDG#: PH091-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162027
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:30 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61300 SDG#: PH091-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 10:47	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 15:42	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132340019A	08/23/2013 22:14	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132340019A	08/22/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/28/2013 13:24	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132330637001	08/26/2013 10:11	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132330637001	08/26/2013 10:11	Eric L Eby	5
06955	Lead	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132330637001	08/26/2013 10:11	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132330637001	08/25/2013 13:21	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132330637001B	08/23/2013 00:10	David K Beck	2
06142	Silver	SW-846 6020A	1	132330637001A	08/23/2013 00:10	David K Beck	2
06144	Strontium	SW-846 6020A	1	132330637001A	08/23/2013 23:01	David K Beck	5
06145	Thallium	SW-846 6020A	1	132330637001A	08/23/2013 00:10	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162027
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:30 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61300 SDG#: PH091-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 10:11	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132330637001	08/21/2013 22:52	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13227039402A	08/15/2013 21:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13235162401A	08/24/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162028
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:50 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61340 SDG#: PH091-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.3	J	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.2	J	1.9	0.74	1
12969	Naphthalene	91-20-3	2.4		1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.5	U	1.5	0.3	32.81
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162028
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:50 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61340 SDG#: PH091-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.9		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	12		11	4.5	1
12952	EFH (C8-C11)	n.a.	3.1	J	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,300		44.6	8.04	1
06944	Antimony	7440-36-0	4.46	U	4.46	0.825	1
06935	Arsenic	7440-38-2	5.92		4.46	0.780	1
06946	Barium	7440-39-3	93.8		1.11	0.0368	1
06947	Beryllium	7440-41-7	0.657	J	1.11	0.0747	1
07914	Boron	7440-42-8	13.7		11.1	0.936	1
06949	Cadmium	7440-43-9	0.635	J	1.11	0.0847	1
01650	Calcium	7440-70-2	84,100		111	18.6	5
06951	Chromium	7440-47-3	32.8		3.34	0.178	1
06952	Cobalt	7440-48-4	9.32		1.11	0.110	1
06953	Copper	7440-50-8	17.6		2.23	0.323	1
01654	Iron	7439-89-6	29,700		44.6	4.04	1
06955	Lead	7439-92-1	9.76		3.34	0.557	1
01656	Lithium	7439-93-2	24.5		4.5	0.38	1
01657	Magnesium	7439-95-4	7,670		11.1	1.86	1
06958	Manganese	7439-96-5	380		1.11	0.0925	1
06960	Molybdenum	7439-98-7	0.190	J	2.23	0.190	1
06961	Nickel	7440-02-0	19.3		2.23	0.145	1
10145	Phosphorus	7723-14-0	585		11.1	3.22	1
01662	Potassium	7440-09-7	4,760		111	9.30	1
01667	Sodium	7440-23-5	117		111	18.6	1
06969	Tin	7440-31-5	3.37	J	11.1	0.245	1
06970	Titanium	7440-32-6	1,130		5.57	0.948	5
06971	Vanadium	7440-62-2	59.5		1.11	0.145	1
06972	Zinc	7440-66-6	71.1		4.46	0.223	1
10146	Zirconium	7440-67-7	5.52	J	5.57	0.936	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.241	J	0.446	0.111	2
06142	Silver	7440-22-4	0.223	U	0.223	0.0290	2
06144	Strontium	7440-24-6	156		1.11	0.190	5
06145	Thallium	7440-28-0	0.309		0.223	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173	U	0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.03		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162028
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:50 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61340 SDG#: PH091-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162028
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:50 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61340 SDG#: PH091-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0921	1
11031	12378-PeCDD	40321-76-4	5.41	U	5.41	0.0905	1
11031	123478-HxCDD	39227-28-6	5.41	U	5.41	0.0417	1
11031	123678-HxCDD	57653-85-7	0.0446	JQ	5.41	0.0424	1
11031	123789-HxCDD	19408-74-3	5.41	U	5.41	0.0453	1
11031	1234678-HpCDD	35822-46-9	0.112	JBQ	5.41	0.0477	1
11031	OCDD	3268-87-9	0.593	JBQ	10.8	0.0485	1
11031	2378-TCDF	51207-31-9	0.114	JQ	1.08	0.0910	1
11031	12378-PeCDF	57117-41-6	5.41	U	5.41	0.0480	1
11031	23478-PeCDF	57117-31-4	5.41	U	5.41	0.0522	1
11031	123478-HxCDF	70648-26-9	0.0711	JBQ	5.41	0.0321	1
11031	123678-HxCDF	57117-44-9	0.0362	JBQ	5.41	0.0266	1
11031	123789-HxCDF	72918-21-9	5.41	U	5.41	0.0492	1
11031	234678-HxCDF	60851-34-5	5.41	U	5.41	0.0271	1
11031	1234678-HpCDF	67562-39-4	0.0635	JBQ	5.41	0.0169	1
11031	1234789-HpCDF	55673-89-7	5.41	U	5.41	0.0474	1
11031	OCDF	39001-02-0	0.175	JBQ	10.8	0.104	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	U				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	50	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	48	26 - 138
13C12-OCDF	44	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162028
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:50 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61340 SDG#: PH091-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162028
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:50 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61340 SDG#: PH091-08*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 11:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13227A16A	08/16/2013 19:15	Laura M Krieger	32.81
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201322732053	08/15/2013 16:26	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201322732053	08/15/2013 16:26	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 16:00	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132340019A	08/23/2013 20:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132340019A	08/22/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/28/2013 14:21	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132330637001	08/26/2013 10:22	Eric L Eby	5
06951	Chromium	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132330637001	08/26/2013 10:22	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132330637001	08/25/2013 13:25	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-613-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7162028
LL Group # 1411680
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/14/2013 13:50 by SM

Submitted: 08/15/2013 09:05
Reported: 08/30/2013 13:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61340 SDG#: PH091-08*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	132330637001B	08/23/2013 00:12	David K Beck	2
06142	Silver	SW-846 6020A	1	132330637001A	08/23/2013 00:12	David K Beck	2
06144	Strontium	SW-846 6020A	1	132330637001A	08/23/2013 23:03	David K Beck	5
06145	Thallium	SW-846 6020A	1	132330637001A	08/23/2013 00:12	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 10:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132330637001	08/21/2013 22:52	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13227039402A	08/15/2013 21:20	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13235162401A	08/24/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13231WAH026	Sample number(s): 7162021									
Acenaphthene	0.050	U	0.050	0.010	ug/l	102	93	77-118	9	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	110	101	80-123	9	30
Anthracene	0.050	U	0.050	0.010	ug/l	105	96	78-123	8	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	101	91	73-127	10	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	101	96	72-120	5	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	110	101	79-136	9	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	86	81	70-130	6	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	97	93	64-130	4	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	101	95	73-131	6	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	96	85	40-138	12	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	112	101	64-141	11	30
Chrysene	0.050	U	0.050	0.010	ug/l	102	96	76-125	6	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	100	95	58-131	4	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	108	99	64-128	9	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	100	91	23-139	9	30
Bis(2-Ethylhexyl)phthalate	0.099	J	1.0	0.050	ug/l	106	90	70-143	16	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	103	95	79-124	8	30
Fluorene	0.050	U	0.050	0.010	ug/l	102	93	74-115	9	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	97	92	62-130	6	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	105	97	80-126	8	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	103	96	81-124	7	30
Naphthalene	0.050	U	0.050	0.030	ug/l	102	95	75-120	7	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	75	74	36-120	0	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	92	78	57-145	17	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	98	92	75-120	7	30
Pyrene	0.050	U	0.050	0.010	ug/l	106	96	71-130	9	30
Batch number: 13232SLB026	Sample number(s): 7162023-7162028									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	105		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	98		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	105		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	109		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	113		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	103		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	111		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		85-122		

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	101		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	104		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	102		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	119		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	110		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	101		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	100		79-112		
Batch number: 13227A16A	Sample number(s): 7162024,7162026,7162028									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	79		67-119		
Batch number: 13228A94A	Sample number(s): 7162021-7162022									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	118	119	75-135	1	30
Batch number: 132320015A	Sample number(s): 7162021									
2,4-D	0.50	U	0.50	0.16	ug/l	118	101	68-155	16	30
Dalapon	1.3	U	1.3	0.25	ug/l	83	72	39-115	14	30
2,4-DB	1.0	U	1.0	0.30	ug/l	106	89	50-163	17	30
Dicamba	0.30	U	0.30	0.080	ug/l	115	99	55-163	15	30
Dinoseb	0.50	U	0.50	0.12	ug/l	81	69	16-163	16	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	140	121	89-162	15	30
MCPA	200 U		200.	50	ug/l	100	85	68-154	16	30
MCPP	200 U		200.	50	ug/l	103	88	46-173	16	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	114	99	55-169	13	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	123	103	58-155	17	30
Batch number: 132320009A	Sample number(s): 7162021									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	64	79	35-84	20	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	100	97	69-120	3	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	121	119	69-128	2	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132320010A	Sample number(s): 7162021									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	74	79	55-126	7	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	84	89	63-132	6	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	92	98	63-132	6	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	87	90	68-128	4	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	92	95	62-143	3	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	88	92	56-137	5	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	90	98	45-134	8	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	87	92	63-131	6	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dieldrin	0.016	U	0.016	0.0042	ug/l	85	89	65-135	5	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	85	88	48-124	3	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	88	91	53-123	4	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	82	86	60-129	5	30
Endrin	0.016	U	0.016	0.0065	ug/l	85	89	43-139	4	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	87	92	55-123	5	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	85	90	51-138	6	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	90	95	57-126	5	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	84	88	65-128	4	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	91	97	46-134	6	30
Mirex	0.20	U	0.20	0.068	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 132330010A	Sample number(s): 7162023-7162028									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	84	87	36-106	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	100		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	107		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132330013A	Sample number(s): 7162021									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	92	95	70-130	3	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	97	100	70-130	4	30
EFH (C21-C30)	0.051	J	0.10	0.050	mg/l	98	100	70-130	2	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	104	94	70-130	10	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	76	79	70-130	4	30
Batch number: 132340019A	Sample number(s): 7162023-7162028									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	86	84	70-123	2	20
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	87	86	75-128	2	20
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	88	87	64-134	1	20
EFH (C30-C40)	10	U	10.	4.0	mg/kg	81	82	65-128	2	20
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	72	69	49-107	3	20
Batch number: 132270635001	Sample number(s): 7162021									
Aluminum	0.400	U	0.400	0.0828	mg/l	104		90-112		
Antimony	0.0400	U	0.0400	0.0053	mg/l	105		88-111		
Arsenic	0.0400	U	0.0400	0.0068	mg/l	105		90-113		
Barium	0.0100	U	0.0100	0.00033	mg/l	105		90-110		
Beryllium	0.0100	U	0.0100	0.00067	mg/l	102		88-110		
Boron	0.100	U	0.100	0.0084	mg/l	98		89-110		
Cadmium	0.0100	U	0.0100	0.00076	mg/l	105		90-112		
Calcium	0.0464	J	0.400	0.0334	mg/l	102		90-110		
Chromium	0.0300	U	0.0300	0.0016	mg/l	103		90-110		
Cobalt	0.0100	U	0.0100	0.0013	mg/l	106		90-110		
Copper	0.0200	U	0.0200	0.0027	mg/l	106		90-112		
Iron	0.400	U	0.400	0.0430	mg/l	101		90-112		
Lead	0.0300	U	0.0300	0.0047	mg/l	105		88-110		
Lithium	0.0400	U	0.0400	0.0047	mg/l	105		90-110		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Magnesium	0.200 U	0.200	0.0167	mg/l	102		90-110		
Manganese	0.0100 U	0.0100	0.00083	mg/l	104		90-110		
Molybdenum	0.0200 U	0.0200	0.0017	mg/l	104		90-110		
Nickel	0.0200 U	0.0200	0.0015	mg/l	108		90-111		
Phosphorus	0.200 U	0.200	0.0418	mg/l	105		90-110		
Potassium	1.00 U	1.00	0.0980	mg/l	102		85-115		
Sodium	2.00 U	2.00	0.167	mg/l	102		87-114		
Tin	0.0400 U	0.0400	0.0029	mg/l	102		90-110		
Titanium	0.0200 U	0.0200	0.0017	mg/l	107		90-113		
Vanadium	0.0100 U	0.0100	0.0020	mg/l	104		90-110		
Zinc	0.0400 U	0.0400	0.0020	mg/l	104		90-110		
Zirconium	0.100 U	0.100	0.0084	mg/l	104		90-110		
Batch number: 132270639001A	Sample number(s): 7162021								
Silver	0.0010 U	0.0010	0.00011	mg/l	102		90-115		
Strontium	0.0020 U	0.0020	0.00034	mg/l	103		80-120		
Thallium	0.0010 U	0.0010	0.00015	mg/l	105		80-120		
Batch number: 132270639001B	Sample number(s): 7162021								
Selenium	0.0040 U	0.0040	0.00050	mg/l	103		80-120		
Batch number: 132320638002	Sample number(s): 7162023-7162028								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	115		85-120		
Batch number: 132330637001	Sample number(s): 7162023-7162028								
Aluminum	40.0 U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00 U	4.00	0.740	mg/kg	107		80-120		
Arsenic	4.00 U	4.00	0.700	mg/kg	101		80-120		
Barium	1.00 U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00 U	1.00	0.0670	mg/kg	99		80-120		
Boron	10.0 U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00 U	1.00	0.0760	mg/kg	100		80-120		
Calcium	8.85 J	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0 U	40.0	3.62	mg/kg	99		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	98		80-120		
Lithium	4.0 U	4.0	0.34	mg/kg	105		80-120		
Magnesium	10.0 U	10.0	1.67	mg/kg	100		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	103		80-120		
Nickel	0.208 J	2.00	0.130	mg/kg	104		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	104		80-120		
Potassium	100 U	100.	8.34	mg/kg	100		80-120		
Sodium	100 U	100.	16.7	mg/kg	101		80-120		
Tin	1.66 J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00 U	1.00	0.130	mg/kg	104		80-120		
Zinc	0.326 J	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00 U	5.00	0.840	mg/kg	103		80-120		
Batch number: 132330637001A	Sample number(s): 7162023-7162028								
Silver	0.200 U	0.200	0.0260	mg/kg	107		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Strontium	0.400	U	0.400	0.0680	mg/kg	111		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	108		80-120		
Batch number: 132330637001B	Sample number(s): 7162023-7162028									
Selenium	0.400	U	0.400	0.100	mg/kg	109		80-120		
Batch number: 132355713007	Sample number(s): 7162021									
3b Mercury 7470A	0.00020	U	0.00020	0.00006 0	mg/l	97		90-115		
Batch number: 13227002101A	Sample number(s): 7162021									
28b pH (9040B and 9040C)						99		99-103		
Batch number: 13227039402A	Sample number(s): 7162023-7162028									
15a pH by 9045D						100		95-105		
Batch number: 13235162401A	Sample number(s): 7162023-7162028									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13232004	Sample number(s): 7162021									
2378-TCDD	0.318	J	2.00	0.121	pg/l	106		60-150		
12378-PeCDD	0.454	J	10.0	0.169	pg/l	109		60-150		
123478-HxCDD	0.364	J	10.0	0.119	pg/l	110		60-150		
123678-HxCDD	0.413	J	10.0	0.117	pg/l	104		60-150		
123789-HxCDD	0.373	J	10.0	0.112	pg/l	106		60-150		
1234678-HpCDD	1.05	J	10.0	0.141	pg/l	105		60-150		
OCDD	1.90	J	20.0	0.183	pg/l	103		60-150		
2378-TCDF	0.149	J	2.00	0.110	pg/l	108		60-150		
12378-PeCDF	0.859	J	10.0	0.101	pg/l	109		60-150		
23478-PeCDF	0.497	J	10.0	0.0856	pg/l	109		60-150		
123478-HxCDF	0.477	J	10.0	0.0610	pg/l	110		60-150		
123678-HxCDF	0.404	J	10.0	0.0633	pg/l	108		60-150		
123789-HxCDF	0.681	J	10.0	0.0595	pg/l	108		60-150		
234678-HxCDF	0.454	J	10.0	0.0555	pg/l	110		60-150		
1234678-HpCDF	0.894	J	10.0	0.0461	pg/l	108		60-150		
1234789-HpCDF	0.686	J	10.0	0.0531	pg/l	105		60-150		
OCDF	1.57	J	20.0	0.142	pg/l	104		60-150		
Batch number: 13234002	Sample number(s): 7162023-7162028									
2378-TCDD	1.00	U	1.00	0.0920	ng/kg	101		67-158		
12378-PeCDD	0.0869	J	5.00	0.0732	ng/kg	102		70-142		
123478-HxCDD	5.00	U	5.00	0.0379	ng/kg	98		70-164		
123678-HxCDD	5.00	U	5.00	0.0401	ng/kg	97		76-134		
123789-HxCDD	5.00	U	5.00	0.0409	ng/kg	95		64-162		
1234678-HpCDD	0.0505	J	5.00	0.0484	ng/kg	93		70-140		
OCDD	0.294	J	10.0	0.0320	ng/kg	93		78-144		
2378-TCDF	1.00	U	1.00	0.0703	ng/kg	105		75-158		
12378-PeCDF	5.00	U	5.00	0.0446	ng/kg	96		80-134		
23478-PeCDF	0.0473	J	5.00	0.0412	ng/kg	98		68-160		
123478-HxCDF	0.0573	J	5.00	0.0262	ng/kg	91		72-134		
123678-HxCDF	0.0277	J	5.00	0.0242	ng/kg	92		84-130		
123789-HxCDF	5.00	U	5.00	0.0390	ng/kg	87		78-130		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
234678-HxCDF	5.00	U	5.00	0.0242	ng/kg	90		70-156		
1234678-HpCDF	0.0404	J	5.00	0.0133	ng/kg	88		82-122		
1234789-HpCDF	0.0549	J	5.00	0.0234	ng/kg	91		78-138		
OCDF	0.126	J	10.0	0.0614	ng/kg	89		63-170		
Batch number: 13232004	Sample number(s): 7162021									
TEQ WHO 2005 - EDLx0.0	0.667				pg/l					
Batch number: 13234002	Sample number(s): 7162023-7162028									
TEQ WHO 2005 - EDLx0.0	U				ng/kg					

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13232SLB026	Sample number(s): 7162023-7162028 UNSPK: P160448								
Acenaphthene	96	98	48-127	2	30				
Acenaphthylene	101	103	49-121	2	30				
Anthracene	99	100	52-126	2	30				
Benzo(a)anthracene	94	98	44-143	4	30				
Benzo(a)pyrene	100	99	44-140	1	30				
Benzo(b)fluoranthene	114	101	26-142	12	30				
Benzo(e)pyrene	87	88	70-130	0	30				
Benzo(g,h,i)perylene	98	94	33-141	4	30				
Benzo(k)fluoranthene	91	103	54-142	13	30				
Butylbenzylphthalate	116	119	49-151	3	30				
Di-n-butylphthalate	114	119	52-147	5	30				
Chrysene	96	97	29-148	2	30				
Dibenz(a,h)anthracene	105	103	20-137	3	30				
Diethylphthalate	106	113	43-145	6	30				
Dimethylphthalate	102	103	58-129	1	30				
Bis(2-Ethylhexyl)phthalate	110	137	39-167	22	30				
Fluoranthene	98	100	40-148	2	30				
Fluorene	96	100	51-137	4	30				
Indeno(1,2,3-cd)pyrene	103	101	17-136	2	30				
1-Methylnaphthalene	102	102	50-131	1	30				
2-Methylnaphthalene	98	101	35-152	3	30				
Naphthalene	95	97	31-148	2	30				
N-Nitrosodimethylamine	112	115*	48-113	2	30				
Di-n-octylphthalate	111	117	52-162	5	30				
Phenanthrene	95	97	29-142	2	30				
Pyrene	96	96	26-143	1	30				
Batch number: 13227A16A	Sample number(s): 7162024,7162026,7162028 UNSPK: P160448								
11a TPH by EPA 8015B GRO	62	76	39-118	5	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132330010A	Sample number(s): 7162023-7162028 UNSPK: P160448								
PCB-1016	90	92	16-146	2	50				
PCB-1260	107	109	40-134	2	50				
Batch number: 132270635001	Sample number(s): 7162021 UNSPK: P162045 BKG: P162045								
Aluminum	2846 (2)	2628 (2)	75-125	2	20	158	168	6	20
Antimony	44*	43*	75-125	4	20	0.0400 U	0.0400 U	0 (1)	20
Arsenic	104	105	75-125	0	20	0.0344 J	0.0351 J	2 (1)	20
Barium	102	100	75-125	1	20	1.09	1.12	3	20
Beryllium	101	100	75-125	1	20	0.0058 J	0.0062 J	7 (1)	20
Boron	97	97	75-125	0	20	0.130	0.143	9 (1)	20
Cadmium	93	92	75-125	1	20	0.0069 J	0.0069 J	1 (1)	20
Calcium	216 (2)	136 (2)	75-125	3	20	91.3	93.9	3	20
Chromium	117	114	75-125	1	20	0.305	0.324	6	20
Cobalt	96	94	75-125	2	20	0.262	0.268	2	20
Copper	109	109	75-125	0	20	0.118	0.122	3	20
Iron	2359 (2)	1611 (2)	75-125	3	20	236	244	3	20
Lead	99	95	75-125	3	20	0.0598	0.0623	4 (1)	20
Lithium	109	106	75-125	2	20	0.201	0.211	5	20
Magnesium	266 (2)	225 (2)	75-125	2	20	32.7	33.7	3	20
Manganese	127 (2)	121 (2)	75-125	1	20	2.67	2.79	5	20
Molybdenum	96	95	75-125	1	20	0.0439	0.0416	5 (1)	20
Nickel	97	95	75-125	1	20	0.113	0.121	6	20
Phosphorus	762 (2)	294 (2)	75-125	3	20	143	153	7	20
Potassium	124	118	75-125	2	20	15.5	16.1	4	20
Sodium	364 (2)	210 (2)	75-125	3	20	551	586	6	20
Tin	91	90	75-125	1	20	0.0248 J	0.0238 J	4 (1)	20
Titanium	167 (2)	167 (2)	75-125	0	20	4.04	4.27	5	20
Vanadium	111	109	75-125	2	20	0.258	0.270	5	20
Zinc	106	101	75-125	2	20	0.871	0.887	2	20
Zirconium	87	87	75-125	1	20	0.0234 J	0.0271 J	15 (1)	20
Batch number: 132270639001A	Sample number(s): 7162021 UNSPK: P162042 BKG: P162042								
Silver	94	97	75-125	2	20	0.00029 J	0.00021 J	32* (1)	20
Strontium	89 (2)	99 (2)	75-125	2	20	0.235	0.236	0	20
Thallium	104	100	75-125	3	20	0.00057 J	0.00053 J	8 (1)	20
Batch number: 132270639001B	Sample number(s): 7162021 UNSPK: P162042 BKG: P162042								
Selenium	94	101	75-125	7	20	0.00061 J	0.00055 J	10 (1)	20
Batch number: 132320638002	Sample number(s): 7162023-7162028 UNSPK: P160448 BKG: P160448								
3a Mercury 7471A	119	120	65-135	1	20	0.0157 U	0.0161 U	0 (1)	20
Batch number: 132330637001	Sample number(s): 7162023-7162028 UNSPK: 7162025 BKG: 7162025								
Aluminum	3772 (2)	4554 (2)	75-125	6	20	18,600	19,300	4	20
Antimony	50*	51*	75-125	1	20	0.785 J	4.00 U	200* (1)	20
Arsenic	102	101	75-125	1	20	5.77	6.05	5 (1)	20
Barium	110	112	75-125	1	20	83.8	86.2	3	20
Beryllium	99	102	75-125	3	20	0.618 J	0.647 J	5 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Boron	99	102	75-125	2	20	16.6	16.3	2 (1)	20
Cadmium	92	93	75-125	1	20	0.675 J	0.660 J	2 (1)	20
Calcium	1148 (2)	-1573 (2)	75-125	15	20	72,900	65,800	10	20
Chromium	120	130*	75-125	4	20	26.5	27.0	2	20
Cobalt	93	96	75-125	3	20	8.62	8.49	2	20
Copper	109	115	75-125	3	20	19.5	20.2	4	20
Iron	1950 (2)	2375 (2)	75-125	2	20	24,700	25,800	5	20
Lead	91	99	75-125	4	20	16.2	17.2	6	20
Lithium	107	110	75-125	3	20	17.9	18.2	2 (1)	20
Magnesium	503 (2)	706 (2)	75-125	5	20	6,570	6,770	3	20
Manganese	100 (2)	112 (2)	75-125	1	20	423	425	1	20
Molybdenum	95	97	75-125	1	20	0.374 J	0.483 J	25* (1)	20
Nickel	95	98	75-125	3	20	16.6	17.1	3	20
Phosphorus	221 (2)	111 (2)	75-125	13	20	707	728	3	20
Potassium	191 (2)	234 (2)	75-125	5	20	5,980	6,190	3	20
Sodium	101	103	75-125	1	20	97.7 J	103	6 (1)	20
Tin	92	93	75-125	2	20	2.95 J	3.02 J	2 (1)	20
Titanium	504 (2)	577 (2)	75-125	5	20	887	933	5	20
Vanadium	122	130*	75-125	4	20	44.4	45.9	3	20
Zinc	102	106	75-125	2	20	71.2	73.2	3	20
Zirconium	80	82	75-125	2	20	4.20 J	4.38 J	4 (1)	20
Batch number: 132330637001A	Sample number(s): 7162023-7162028 UNSPK: 7162025 BKG: 7162025								
Silver	100	100	75-125	1	20	0.0340 J	0.0496 J	37* (1)	20
Strontium	164 (2)	123 (2)	75-125	3	20	95.4	93.7	2	20
Thallium	96	98	75-125	2	20	0.232	0.280	19 (1)	20
Batch number: 132330637001B	Sample number(s): 7162023-7162028 UNSPK: 7162025 BKG: 7162025								
Selenium	100	95	75-125	5	20	0.291 J	0.282 J	3 (1)	20
Batch number: 132355713007	Sample number(s): 7162021 UNSPK: P162044 BKG: P162044								
3b Mercury 7470A	99	91	75-125	8	20	0.00020 U	0.00020 U	0 (1)	20
Batch number: 13227002101A	Sample number(s): 7162021 BKG: P161774								
28b pH (9040B and 9040C)						6.8	7.1	4*	3
Batch number: 13227039402A	Sample number(s): 7162023-7162028 BKG: 7162023								
15a pH by 9045D						7.55	7.55	0	3
Batch number: 13235162401A	Sample number(s): 7162023-7162028 BKG: 7162028								
14a Moisture Content by 160.3						10.3	10.0	2	20
Batch number: 13234002	Sample number(s): 7162023-7162028 UNSPK: P160448								
2378-TCDD	99	104	40-135	7	20				
12378-PeCDD	115	117	40-135	3	20				
123478-HxCDD	117	116	40-135	1	20				
123678-HxCDD	115	111	40-135	2	20				
123789-HxCDD	113	111	40-135	0	20				
1234678-HpCDD	109	107	40-135	0	20				
OCDD	107	111	40-135	5	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDF	123	130	40-135	7	20				
12378-PeCDF	119	114	40-135	2	20				
23478-PeCDF	111	117	40-135	7	20				
123478-HxCDF	107	107	40-135	2	20				
123678-HxCDF	109	110	40-135	2	20				
123789-HxCDF	103	105	40-135	5	20				
234678-HxCDF	108	110	40-135	4	20				
1234678-HpCDF	103	102	40-135	1	20				
1234789-HpCDF	102	103	40-135	2	20				
OCDF	100	102	40-135	4	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13231WAH026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7162021	92	94	104
Blank	87	91	95
LCS	90	96	101
LCSD	83	92	94
Limits:	44-137	62-141	51-136

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13232SLB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7162023	87	97	97
7162024	85	95	95
7162025	84	91	95
7162026	90	100	101
7162027	85	93	98
7162028	92	103	102
Blank	89	98	103
LCS	91	102	103
MS	87	96	98
MSD	89	97	100
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13227A16A

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Surrogate Quality Control

	Trifluorotoluene-F
7162024	75
7162026	147*
7162028	158*
Blank	85
LCS	81
MS	60*
MSD	70
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13228A94A

	Trifluorotoluene-F
7162021	73
7162022	82
Blank	83
LCS	80
LCSD	77
Limits:	63-135

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132320009A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7162021	103	87
Blank	102	101
LCS	118	79
LCSD	110	103
Limits:	45-120	45-120

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 132320010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7162021	78	69
Blank	78	82
LCS	79	47
LCSD	85	53
Limits:	60-140	20-120

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 132320015A

	2,4-Dichlorophenylacetic acid
7162021	63
Blank	67
LCS	89
LCSD	79

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Surrogate Quality Control

Limits: 50-150

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132330010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7162023	104	101
7162024	99	96
7162025	89	93
7162026	103	109
7162027	103	101
7162028	102	104
Blank	112	120
LCS	101	106
LCSD	113	128*
MS	102	105
MSD	101	111
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132330013A

	Chlorobenzene	Orthoterphenyl
7162021	99	94
Blank	103	94
LCS	97	96
LCSD	99	98
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132340019A

	Chlorobenzene	Orthoterphenyl
7162023	78	77
7162024	79	77
7162025	77	78
7162026	82	81
7162027	80	82
7162028	74	70
Blank	81	79
LCS	82	84
LCSD	80	82
Limits:	37-125	66-123

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13232004

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7162021	56	72	78	78	77	74
Blank	62	75	72	71	73	78
OPR	66	79	84	85	84	85
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Surrogate Quality Control

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7162021	77	77	79	59	66	66
Blank	75	74	74	63	65	64
OPR	87	88	87	74	81	83
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7162021	64	67	72	67	70
Blank	64	66	71	62	67
OPR	81	84	85	72	78
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13234002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7162023	68	78	67	79	74	78
7162024	56	58	57	72	63	60
7162025	65	73	62	78	67	59
7162026	62	50	50	61	54	58
7162027	66	77	63	74	68	59
7162028	58	58	56	73	64	50
Blank	68	82	68	80	74	66
MS	61	88	76	94	84	69
MSD	58	83	71	83	70	71
OPR	57	69	52	61	57	64
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7162023	118	74	64	82	79	81
7162024	93	49	50	65	69	73
7162025	116	62	53	81	76	79
7162026	79	44	42	57	59	61
7162027	110	66	56	82	74	78
7162028	98	48	44	67	70	79
Blank	106	78	79	89	83	92
MS	123	74	76	76	76	83
MSD	121	72	73	77	69	73
OPR	89	57	54	77	68	70
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7162023	83	103	97	66	89
7162024	72	77	83	53	67
7162025	79	104	91	63	91
7162026	62	68	68	51	61
7162027	77	98	89	63	86

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411680
Reported: 08/30/13 at 01:38 PM

Surrogate Quality Control

7162028	75	90	78	53	70
Blank	89	105	114	63	83
MS	80	95	96	65	95
MSD	68	91	94	59	92
OPR	72	83	88	52	74
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1411680 7162021-28

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/14/2013
CarrierName: FedEx
AirbillNo: 796466403239

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130814-01
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB-081413	8/14/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB-081413	8/14/13 15:00	WQ	None	3 - 250 mL Amber	10 day							X			X							X														
EB-081413	8/14/13 15:00	WQ	None	4 - 1 L Amber	10 day									X							X															
EB-081413	8/14/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB-081413	8/14/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																	
EB-081413	8/14/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Myers	08/14/2013	1600							Brian Kay	8.15.13	905

13013 1411680 7162021-28

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/14/2013
CarrierName: FedEx
AirbillNo: 796466403239

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130814-02
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-081413	8/14/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-600-SA8-SB-0.0-0.5	8/14/13 08:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-600-SA8-SB-0.0-0.5	8/14/13 08:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-600-SA8-SB-4.0-5.0	8/14/13 08:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-600-SA8-SB-4.0-5.0	8/14/13 08:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-600-SA8-SB-4.0-5.0	8/14/13 08:40	SO	None	2 - Encore	10 day																			X												
SL-602-SA8-SB-0.0-0.5	8/14/13 10:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-602-SA8-SB-0.0-0.5	8/14/13 10:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-602-SA8-SB-4.0-5.0	8/14/13 10:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-602-SA8-SB-4.0-5.0	8/14/13 10:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-602-SA8-SB-4.0-5.0	8/14/13 10:40	SO	None	2 - Encore	10 day																			X												
SL-613-SA8-SB-0.0-0.5	8/14/13 13:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-613-SA8-SB-0.0-0.5	8/14/13 13:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-613-SA8-SB-4.0-5.0	8/14/13 13:50	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X											X										
SL-613-SA8-SB-4.0-5.0	8/14/13 13:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-613-SA8-SB-4.0-5.0	8/14/13 13:50	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: Steve Merve

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Myers	8/14/2013	1600							Brewerly 8.15.13 905		

COC Rev 2

COC: 20130814-02, Page 1 of 1

1 of 1

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1411680

Client/Project: COM

Date of Receipt: 8.15.13

Time of Receipt: 905

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	0.7	TB	WI	X	B	
2	↓	1.8	↓	↓	↓	↓	
3	↓	1.1	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Bauder 2299 **Date/Time:** 8.15.13 1234

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH092

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 03, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/16/2013
Group Number: 1411980
SDG: PH092
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-594-SA8-SB-0.0-0.5 Soil	7163550
SL-595-SA8-SB-0.0-0.5 Soil	7163551
SL-597-SA8-SB-0.0-0.5 Soil	7163552

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-594-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163550
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:00 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL594 SDG#: PH092-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.68	J	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.1	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.6	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.0	J	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	0.86	J	1.7	0.67	1
12969	Naphthalene	91-20-3	2.0		1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.2	J	1.7	0.67	1
12969	Pyrene	129-00-0	1.2	J	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	160		17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	3.6	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	7.0	J	10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-594-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163550
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:00 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL594 SDG#: PH092-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,500		38.9	7.02	1
06944	Antimony	7440-36-0	3.89	U	3.89	0.720	1
06935	Arsenic	7440-38-2	4.64		3.89	0.681	1
06946	Barium	7440-39-3	89.7		0.973	0.0321	1
06947	Beryllium	7440-41-7	0.486	J	0.973	0.0652	1
07914	Boron	7440-42-8	5.01	J	9.73	0.818	1
06949	Cadmium	7440-43-9	0.290	J	0.973	0.0740	1
01650	Calcium	7440-70-2	4,040		19.5	3.25	1
06951	Chromium	7440-47-3	19.4		2.92	0.156	1
06952	Cobalt	7440-48-4	5.23		0.973	0.0963	1
06953	Copper	7440-50-8	8.48		1.95	0.282	1
01654	Iron	7439-89-6	21,100		38.9	3.52	1
06955	Lead	7439-92-1	8.75		2.92	0.487	1
01656	Lithium	7439-93-2	26.4		3.9	0.33	1
01657	Magnesium	7439-95-4	4,570		9.73	1.63	1
06958	Manganese	7439-96-5	305		0.973	0.0808	1
06960	Molybdenum	7439-98-7	0.244	J	1.95	0.165	1
06961	Nickel	7440-02-0	10.3		1.95	0.127	1
10145	Phosphorus	7723-14-0	337		9.73	2.81	1
01662	Potassium	7440-09-7	3,170		97.3	8.12	1
01667	Sodium	7440-23-5	80.3	J	97.3	16.3	1
06969	Tin	7440-31-5	3.23	J	9.73	0.214	1
06970	Titanium	7440-32-6	1,130		4.87	0.827	5
06971	Vanadium	7440-62-2	32.7		0.973	0.127	1
06972	Zinc	7440-66-6	68.9		3.89	0.195	1
10146	Zirconium	7440-67-7	3.49	J	4.87	0.818	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.140	J	0.389	0.0973	2
06142	Silver	7440-22-4	0.195	U	0.195	0.0253	2
06144	Strontium	7440-24-6	17.6		0.389	0.0662	2
06145	Thallium	7440-28-0	0.273		0.195	0.0292	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0162	U	0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.09		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-594-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163550
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:00 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL594 SDG#: PH092-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0645	1
11031	12378-PeCDD	40321-76-4	0.162	JBQ	5.01	0.0801	1
11031	123478-HxCDD	39227-28-6	0.107	JQ	5.01	0.0463	1
11031	123678-HxCDD	57653-85-7	0.275	J	5.01	0.0532	1
11031	123789-HxCDD	19408-74-3	0.177	JQ	5.01	0.0533	1
11031	1234678-HpCDD	35822-46-9	3.89	JB	5.01	0.0612	1
11031	OCDD	3268-87-9	34.2	B	10.0	0.0516	1
11650	2378-TCDF-Conf	51207-31-9	0.938	JC	1.00	0.159	1
11031	12378-PeCDF	57117-41-6	7.84		5.01	0.0825	1
11031	23478-PeCDF	57117-31-4	1.95	JB	5.01	0.0915	1
11031	123478-HxCDF	70648-26-9	0.878	JB	5.01	0.0546	1
11031	123678-HxCDF	57117-44-9	0.273	JBQ	5.01	0.0457	1
11031	123789-HxCDF	72918-21-9	0.189	JQ	5.01	0.0600	1
11031	234678-HxCDF	60851-34-5	0.185	JQ	5.01	0.0478	1
11031	1234678-HpCDF	67562-39-4	1.12	JB	5.01	0.0254	1
11031	1234789-HpCDF	55673-89-7	0.188	JBQ	5.01	0.0551	1
11031	OCDF	39001-02-0	3.16	JBQ	10.0	0.0750	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.09				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-2378-TCDF-Conf	74	24 - 169
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	84	17 - 157
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	108	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-594-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163550
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:00 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL594 SDG#: PH092-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-594-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163550
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:00 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL594 SDG#: PH092-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 11:53	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/26/2013 18:41	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/22/2013 22:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/28/2013 15:18	Joseph D Anderson	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	13234002	08/30/2013 16:00	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132330637001	08/26/2013 10:26	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132330637001	08/25/2013 13:29	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132330637001B	08/23/2013 00:14	David K Beck	2
06142	Silver	SW-846 6020A	1	132330637001A	08/23/2013 00:14	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-594-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163550
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:00 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL594 SDG#: PH092-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	132330637001A	08/23/2013 00:14	David K Beck	2
06145	Thallium	SW-846 6020A	1	132330637001A	08/23/2013 00:14	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 10:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132330637001	08/21/2013 22:52	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13228039401A	08/16/2013 19:26	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13235162401A	08/24/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-595-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163551
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:35 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL595 SDG#: PH092-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.0	J	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.4	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	3.3		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	0.82	J	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.1	J	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	2.6		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J	18	6.0	1
12969	Fluoranthene	206-44-0	3.5		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.81	J	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.4	J	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	0.94	J	1.7	0.67	1
12969	Naphthalene	91-20-3	2.0		1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	1.5	J	1.7	0.67	1
12969	Pyrene	129-00-0	2.8		1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	170	U	170	50	5
10592	Aroclor 5442	12642-23-8	170	U	170	50	5
10592	Aroclor 5460	11126-42-4	170	U	170	50	5
10592	PCB-1016	12674-11-2	85	U	85	17	5
10592	PCB-1221	11104-28-2	85	U	85	26	5
10592	PCB-1232	11141-16-5	85	U	85	21	5
10592	PCB-1242	53469-21-9	85	U	85	21	5
10592	PCB-1248	12672-29-6	85	U	85	17	5
10592	PCB-1254	11097-69-1	380		85	22	5
10592	PCB-1260	11096-82-5	85	U	85	20	5
10592	PCB-1262	37324-23-5	85	U	85	17	5
10592	PCB-1268	11100-14-4	85	U	85	17	5
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	5.0	J	5.0	2.0	1
12952	EFH (C30-C40)	n.a.	15		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-595-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163551
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:35 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL595 SDG#: PH092-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,000		39.0	7.04	1
06944	Antimony	7440-36-0	3.90	U	3.90	0.722	1
06935	Arsenic	7440-38-2	4.67		3.90	0.683	1
06946	Barium	7440-39-3	94.1		0.976	0.0322	1
06947	Beryllium	7440-41-7	0.549	J	0.976	0.0654	1
07914	Boron	7440-42-8	5.66	J	9.76	0.820	1
06949	Cadmium	7440-43-9	0.321	J	0.976	0.0742	1
01650	Calcium	7440-70-2	3,230		19.5	3.26	1
06951	Chromium	7440-47-3	20.0		2.93	0.156	1
06952	Cobalt	7440-48-4	6.12		0.976	0.0966	1
06953	Copper	7440-50-8	10.3		1.95	0.283	1
01654	Iron	7439-89-6	22,100		39.0	3.53	1
06955	Lead	7439-92-1	11.6		2.93	0.488	1
01656	Lithium	7439-93-2	24.6		3.9	0.33	1
01657	Magnesium	7439-95-4	4,620		9.76	1.63	1
06958	Manganese	7439-96-5	328		0.976	0.0810	1
06960	Molybdenum	7439-98-7	0.355	J	1.95	0.166	1
06961	Nickel	7440-02-0	11.2		1.95	0.127	1
10145	Phosphorus	7723-14-0	370		9.76	2.82	1
01662	Potassium	7440-09-7	3,450		97.6	8.14	1
01667	Sodium	7440-23-5	76.2	J	97.6	16.3	1
06969	Tin	7440-31-5	3.17	J	9.76	0.215	1
06970	Titanium	7440-32-6	1,230		4.88	0.830	5
06971	Vanadium	7440-62-2	36.1		0.976	0.127	1
06972	Zinc	7440-66-6	65.6		3.90	0.195	1
10146	Zirconium	7440-67-7	3.90	J	4.88	0.820	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.126	J	0.390	0.0976	2
06142	Silver	7440-22-4	0.195	U	0.195	0.0254	2
06144	Strontium	7440-24-6	16.2		0.390	0.0664	2
06145	Thallium	7440-28-0	0.240		0.195	0.0293	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0111	J	0.0161	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.81		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.52		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-595-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163551
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:35 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL595 SDG#: PH092-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.990	U	0.990	0.0914	1
11031	12378-PeCDD	40321-76-4	0.202	JBQ	4.95	0.114	1
11031	123478-HxCDD	39227-28-6	0.352	JQ	4.95	0.0908	1
11031	123678-HxCDD	57653-85-7	0.972	J	4.95	0.103	1
11031	123789-HxCDD	19408-74-3	0.695	J	4.95	0.0972	1
11031	1234678-HpCDD	35822-46-9	20.9	B	4.95	0.103	1
11031	OCDD	3268-87-9	197	B	9.90	0.0583	1
11031	2378-TCDF	51207-31-9	5.17	C	0.990	0.279	1
11031	12378-PeCDF	57117-41-6	13.2		4.95	0.115	1
11031	23478-PeCDF	57117-31-4	7.74	B	4.95	0.112	1
11031	123478-HxCDF	70648-26-9	2.07	JBQ	4.95	0.0649	1
11031	123678-HxCDF	57117-44-9	0.772	JB	4.95	0.0575	1
11031	123789-HxCDF	72918-21-9	0.412	JQ	4.95	0.0803	1
11031	234678-HxCDF	60851-34-5	0.791	J	4.95	0.0604	1
11031	1234678-HpCDF	67562-39-4	4.38	JB	4.95	0.0402	1
11031	1234789-HpCDF	55673-89-7	0.626	JB	4.95	0.0648	1
11031	OCDF	39001-02-0	11.5	B	9.90	0.0711	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	3.88				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	97	23 - 140
13C12-OCDD	105	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	106	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-595-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163551
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:35 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL595 SDG#: PH092-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-595-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163551
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:35 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL595 SDG#: PH092-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 12:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 17:51	Jessica L Miller	5
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/22/2013 23:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/29/2013 13:18	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132330637001	08/26/2013 10:30	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132330637001	08/25/2013 13:33	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132330637001B	08/23/2013 00:17	David K Beck	2
06142	Silver	SW-846 6020A	1	132330637001A	08/23/2013 00:17	David K Beck	2
06144	Strontium	SW-846 6020A	1	132330637001A	08/23/2013 00:17	David K Beck	2
06145	Thallium	SW-846 6020A	1	132330637001A	08/23/2013 00:17	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-595-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163551
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 08:35 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL595 SDG#: PH092-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 10:21	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132330637001	08/21/2013 22:52	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13228039401A	08/16/2013 19:26	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13235162401A	08/24/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-597-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163552
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 09:40 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL597 SDG#: PH092-03*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	0.87	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	0.76	J	1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.0	1
12969	Fluoranthene	206-44-0	1.1	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	0.84	J	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	0.82	J	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	9.6		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	33		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-597-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163552
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 09:40 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL597 SDG#: PH092-03*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,300		39.4	7.10	1
06944	Antimony	7440-36-0	3.94	U	3.94	0.729	1
06935	Arsenic	7440-38-2	4.55		3.94	0.689	1
06946	Barium	7440-39-3	107		0.985	0.0325	1
06947	Beryllium	7440-41-7	0.557	J	0.985	0.0660	1
07914	Boron	7440-42-8	5.50	J	9.85	0.827	1
06949	Cadmium	7440-43-9	0.405	J	0.985	0.0748	1
01650	Calcium	7440-70-2	2,980		19.7	3.29	1
06951	Chromium	7440-47-3	22.6		2.95	0.158	1
06952	Cobalt	7440-48-4	6.29		0.985	0.0975	1
06953	Copper	7440-50-8	10.6		1.97	0.286	1
01654	Iron	7439-89-6	24,400		39.4	3.57	1
06955	Lead	7439-92-1	9.25		2.95	0.492	1
01656	Lithium	7439-93-2	29.2		3.9	0.33	1
01657	Magnesium	7439-95-4	5,790		9.85	1.64	1
06958	Manganese	7439-96-5	352		0.985	0.0817	1
06960	Molybdenum	7439-98-7	0.444	J	1.97	0.167	1
06961	Nickel	7440-02-0	13.4		1.97	0.128	1
10145	Phosphorus	7723-14-0	578		9.85	2.85	1
01662	Potassium	7440-09-7	4,350		98.5	8.21	1
01667	Sodium	7440-23-5	67.7	J	98.5	16.4	1
06969	Tin	7440-31-5	3.21	J	9.85	0.217	1
06970	Titanium	7440-32-6	1,420		4.92	0.837	5
06971	Vanadium	7440-62-2	44.2		0.985	0.128	1
06972	Zinc	7440-66-6	60.8		3.94	0.197	1
10146	Zirconium	7440-67-7	4.28	J	4.92	0.827	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.152	J	0.394	0.0985	2
06142	Silver	7440-22-4	0.0577	J	0.197	0.0256	2
06144	Strontium	7440-24-6	18.6		0.394	0.0670	2
06145	Thallium	7440-28-0	0.250		0.197	0.0295	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0161	U	0.0161	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.22		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.45		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-597-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163552
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 09:40 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL597 SDG#: PH092-03*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0900	JQ	0.971	0.0676	1
11031	12378-PeCDD	40321-76-4	0.103	JBQ	4.86	0.0699	1
11031	123478-HxCDD	39227-28-6	0.0966	JQ	4.86	0.0409	1
11031	123678-HxCDD	57653-85-7	0.185	J	4.86	0.0442	1
11031	123789-HxCDD	19408-74-3	0.195	JQ	4.86	0.0418	1
11031	1234678-HpCDD	35822-46-9	2.93	JB	4.86	0.0479	1
11031	OCDD	3268-87-9	27.7	B	9.71	0.0325	1
11031	2378-TCDF	51207-31-9	0.108	JQ	0.971	0.0789	1
11031	12378-PeCDF	57117-41-6	0.309	J	4.86	0.0403	1
11031	23478-PeCDF	57117-31-4	0.231	JB	4.86	0.0396	1
11031	123478-HxCDF	70648-26-9	0.156	JB	4.86	0.0288	1
11031	123678-HxCDF	57117-44-9	0.122	JB	4.86	0.0257	1
11031	123789-HxCDF	72918-21-9	0.102	JQ	4.86	0.0341	1
11031	234678-HxCDF	60851-34-5	0.111	J	4.86	0.0263	1
11031	1234678-HpCDF	67562-39-4	0.561	JBQ	4.86	0.0188	1
11031	1234789-HpCDF	55673-89-7	0.104	JBQ	4.86	0.0315	1
11031	OCDF	39001-02-0	1.23	JBQ	9.71	0.0519	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.174				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	97	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-597-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163552
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 09:40 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL597 SDG#: PH092-03*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-597-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163552
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 09:40 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL597 SDG#: PH092-03*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13232SLB026	08/23/2013 13:00	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13232SLB026	08/20/2013 16:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132330010A	08/23/2013 18:09	Jessica L Miller	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132330010A	08/21/2013 15:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132330018A	08/22/2013 04:14	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132330018A	08/21/2013 14:00	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13234002	08/29/2013 14:15	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13234002	08/22/2013 12:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	132330637001	08/26/2013 10:33	Eric L Eby	5
06971	Vanadium	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	132330637001	08/25/2013 13:37	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	132330637001B	08/23/2013 00:19	David K Beck	2
06142	Silver	SW-846 6020A	1	132330637001A	08/23/2013 00:19	David K Beck	2
06144	Strontium	SW-846 6020A	1	132330637001A	08/23/2013 00:19	David K Beck	2
06145	Thallium	SW-846 6020A	1	132330637001A	08/23/2013 00:19	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-597-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7163552
LL Group # 1411980
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/15/2013 09:40 by SM

Submitted: 08/16/2013 08:50
Reported: 09/03/2013 10:14

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL597 SDG#: PH092-03*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132320638002	08/22/2013 10:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132330637001	08/21/2013 22:52	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132320638002	08/21/2013 12:10	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13228039401A	08/16/2013 19:26	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13235162401A	08/24/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411980
Reported: 09/03/13 at 10:14 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13232SLB026	Sample number(s): 7163550-7163552									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	105		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	98		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	105		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	109		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	113		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	103		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	111		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	101		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	104		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	102		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	119		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	110		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	101		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	100		79-112		
Batch number: 132330010A	Sample number(s): 7163550-7163552									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	84	87	36-106	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	100		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	107		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132330018A	Sample number(s): 7163550-7163552									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	83		70-123		

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411980
Reported: 09/03/13 at 10:14 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	84		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	85		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	81		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	69		49-107		
Batch number: 132320638002	Sample number(s): 7163550-7163552									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	115		85-120		
Batch number: 132330637001	Sample number(s): 7163550-7163552									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	107		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	101		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	99		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	100		80-120		
Calcium	8.85	J	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	99		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	98		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	105		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	0.208	J	2.00	0.130	mg/kg	104		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	104		80-120		
Potassium	100 U		100.	8.34	mg/kg	100		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.66	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	104		80-120		
Zinc	0.326	J	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	103		80-120		
Batch number: 132330637001A	Sample number(s): 7163550-7163552									
Silver	0.200	U	0.200	0.0260	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	111		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	108		80-120		
Batch number: 132330637001B	Sample number(s): 7163550-7163552									
Selenium	0.400	U	0.400	0.100	mg/kg	109		80-120		
Batch number: 13228039401A	Sample number(s): 7163550-7163552									
15a pH by 9045D						99		95-105		
Batch number: 13235162401A	Sample number(s): 7163550-7163552									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411980
Reported: 09/03/13 at 10:14 AM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13234002	Sample number(s): 7163550-7163552									
2378-TCDD	1.00	U	1.00	0.0920	ng/kg	101		67-158		
12378-PeCDD	0.0869	J	5.00	0.0732	ng/kg	102		70-142		
123478-HxCDD	5.00	U	5.00	0.0379	ng/kg	98		70-164		
123678-HxCDD	5.00	U	5.00	0.0401	ng/kg	97		76-134		
123789-HxCDD	5.00	U	5.00	0.0409	ng/kg	95		64-162		
1234678-HpCDD	0.0505	J	5.00	0.0484	ng/kg	93		70-140		
OCDD	0.294	J	10.0	0.0320	ng/kg	93		78-144		
2378-TCDF	1.00	U	1.00	0.0703	ng/kg	105		75-158		
2378-TCDF-Conf	1.00	U	1.00	0.0439	ng/kg	105		75-158		
12378-PeCDF	5.00	U	5.00	0.0446	ng/kg	96		80-134		
23478-PeCDF	0.0473	J	5.00	0.0412	ng/kg	98		68-160		
123478-HxCDF	0.0573	J	5.00	0.0262	ng/kg	91		72-134		
123678-HxCDF	0.0277	J	5.00	0.0242	ng/kg	92		84-130		
123789-HxCDF	5.00	U	5.00	0.0390	ng/kg	87		78-130		
234678-HxCDF	5.00	U	5.00	0.0242	ng/kg	90		70-156		
1234678-HpCDF	0.0404	J	5.00	0.0133	ng/kg	88		82-122		
1234789-HpCDF	0.0549	J	5.00	0.0234	ng/kg	91		78-138		
OCDF	0.126	J	10.0	0.0614	ng/kg	89		63-170		
TEQ WHO 2005 - EDLx0.0	U				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13232SLB026	Sample number(s): 7163550-7163552 UNSPK: P160448								
Acenaphthene	96	98	48-127	2	30				
Acenaphthylene	101	103	49-121	2	30				
Anthracene	99	100	52-126	2	30				
Benzo(a)anthracene	94	98	44-143	4	30				
Benzo(a)pyrene	100	99	44-140	1	30				
Benzo(b)fluoranthene	114	101	26-142	12	30				
Benzo(e)pyrene	87	88	70-130	0	30				
Benzo(g,h,i)perylene	98	94	33-141	4	30				
Benzo(k)fluoranthene	91	103	54-142	13	30				
Butylbenzylphthalate	116	119	49-151	3	30				
Di-n-butylphthalate	114	119	52-147	5	30				
Chrysene	96	97	29-148	2	30				
Dibenz(a,h)anthracene	105	103	20-137	3	30				
Diethylphthalate	106	113	43-145	6	30				
Dimethylphthalate	102	103	58-129	1	30				
Bis(2-Ethylhexyl)phthalate	110	137	39-167	22	30				
Fluoranthene	98	100	40-148	2	30				
Fluorene	96	100	51-137	4	30				
Indeno(1,2,3-cd)pyrene	103	101	17-136	2	30				
1-Methylnaphthalene	102	102	50-131	1	30				

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411980
Reported: 09/03/13 at 10:14 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Methylnaphthalene	98	101	35-152	3	30				
Naphthalene	95	97	31-148	2	30				
N-Nitrosodimethylamine	112	115*	48-113	2	30				
Di-n-octylphthalate	111	117	52-162	5	30				
Phenanthrene	95	97	29-142	2	30				
Pyrene	96	96	26-143	1	30				
Batch number: 132330010A	Sample number(s): 7163550-7163552 UNSPK: P160448								
PCB-1016	90	92	16-146	2	50				
PCB-1260	107	109	40-134	2	50				
Batch number: 132330018A	Sample number(s): 7163550-7163552 UNSPK: P160448								
EFH (C12-C14)	78	81	49-123	3	20				
EFH (C15-C20)	87	95	49-123	9	20				
EFH (C21-C30)	93	105	49-123	13	20				
EFH (C30-C40)	109	163*	49-123	40*	20				
EFH (C8-C11)	66	69	49-123	4	20				
Batch number: 132320638002	Sample number(s): 7163550-7163552 UNSPK: P160448 BKG: P160448								
3a Mercury 7471A	119	120	65-135	1	20	0.0157 U	0.0161 U	0 (1)	20
Batch number: 132330637001	Sample number(s): 7163550-7163552 UNSPK: P162025 BKG: P162025								
Aluminum	3772 (2)	4554 (2)	75-125	6	20	18,600	19,300	4	20
Antimony	50*	51*	75-125	1	20	0.785 J	4.00 U	200* (1)	20
Arsenic	102	101	75-125	1	20	5.77	6.05	5 (1)	20
Barium	110	112	75-125	1	20	83.8	86.2	3	20
Beryllium	99	102	75-125	3	20	0.618 J	0.647 J	5 (1)	20
Boron	99	102	75-125	2	20	16.6	16.3	2 (1)	20
Cadmium	92	93	75-125	1	20	0.675 J	0.660 J	2 (1)	20
Calcium	1148 (2)	-1573 (2)	75-125	15	20	72,900	65,800	10	20
Chromium	120	130*	75-125	4	20	26.5	27.0	2	20
Cobalt	93	96	75-125	3	20	8.62	8.49	2	20
Copper	109	115	75-125	3	20	19.5	20.2	4	20
Iron	1950 (2)	2375 (2)	75-125	2	20	24,700	25,800	5	20
Lead	91	99	75-125	4	20	16.2	17.2	6	20
Lithium	107	110	75-125	3	20	17.9	18.2	2 (1)	20
Magnesium	503 (2)	706 (2)	75-125	5	20	6,570	6,770	3	20
Manganese	100 (2)	112 (2)	75-125	1	20	423	425	1	20
Molybdenum	95	97	75-125	1	20	0.374 J	0.483 J	25* (1)	20
Nickel	95	98	75-125	3	20	16.6	17.1	3	20
Phosphorus	221 (2)	111 (2)	75-125	13	20	707	728	3	20
Potassium	191 (2)	234 (2)	75-125	5	20	5,980	6,190	3	20
Sodium	101	103	75-125	1	20	97.7 J	103	6 (1)	20
Tin	92	93	75-125	2	20	2.95 J	3.02 J	2 (1)	20
Titanium	504 (2)	577 (2)	75-125	5	20	887	933	5	20
Vanadium	122	130*	75-125	4	20	44.4	45.9	3	20
Zinc	102	106	75-125	2	20	71.2	73.2	3	20
Zirconium	80	82	75-125	2	20	4.20 J	4.38 J	4 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411980
Reported: 09/03/13 at 10:14 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132330637001A	Sample number(s): 7163550-7163552 UNSPK: P162025 BKG: P162025								
Silver	100	100	75-125	1	20	0.0340 J	0.0496 J	37* (1)	20
Strontium	164 (2)	123 (2)	75-125	3	20	95.4	93.7	2	20
Thallium	96	98	75-125	2	20	0.232	0.280	19 (1)	20
Batch number: 132330637001B	Sample number(s): 7163550-7163552 UNSPK: P162025 BKG: P162025								
Selenium	100	95	75-125	5	20	0.291 J	0.282 J	3 (1)	20
Batch number: 13228039401A	Sample number(s): 7163550-7163552 BKG: 7163550								
15a pH by 9045D						7.09	6.93	2	3
Batch number: 13235162401A	Sample number(s): 7163550-7163552 BKG: P162028								
14a Moisture Content by 160.3						10.3	10.0	2	20
Batch number: 13234002	Sample number(s): 7163550-7163552 UNSPK: P160448								
2378-TCDD	99	104	40-135	7	20				
12378-PeCDD	115	117	40-135	3	20				
123478-HxCDD	117	116	40-135	1	20				
123678-HxCDD	115	111	40-135	2	20				
123789-HxCDD	113	111	40-135	0	20				
1234678-HpCDD	109	107	40-135	0	20				
OCDD	107	111	40-135	5	20				
2378-TCDF	123	130	40-135	7	20				
2378-TCDF-Conf	123	130	40-135	7	20				
12378-PeCDF	119	114	40-135	2	20				
23478-PeCDF	111	117	40-135	7	20				
123478-HxCDF	107	107	40-135	2	20				
123678-HxCDF	109	110	40-135	2	20				
123789-HxCDF	103	105	40-135	5	20				
234678-HxCDF	108	110	40-135	4	20				
1234678-HpCDF	103	102	40-135	1	20				
1234789-HpCDF	102	103	40-135	2	20				
OCDF	100	102	40-135	4	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13232SLB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7163550	92	100	102
7163551	91	98	102
7163552	87	94	98
Blank	89	98	103
LCS	91	102	103

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411980
Reported: 09/03/13 at 10:14 AM

Surrogate Quality Control

MS	87	96	98
MSD	89	97	100
Limits:	54-129	59-125	61-125

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132330010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7163550	113	107
7163551	102	113
7163552	113	114
Blank	112	120
LCS	101	106
LCSD	113	128*
MS	102	105
MSD	101	111
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132330018A

	Chlorobenzene	Orthoterphenyl
7163550	79	80
7163551	79	81
7163552	77	83
Blank	82	83
LCS	81	84
MS	75	77
MSD	78	80
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13234002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7163550	69	70	64	78	72	73
7163551	66	77	71	83	75	76
7163552	65	74	67	76	74	73
Blank	68	82	68	80	74	66
MS	61	88	76	94	84	69
MSD	58	83	71	83	70	71
OPR	57	69	52	61	57	64
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7163550	108	63	56	76	77	82
7163551	106	80	78	79	78	79
7163552	99	71	66	77	76	80
Blank	106	78	79	89	83	92
MS	123	74	76	76	76	83
MSD	121	72	73	77	69	73

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1411980
Reported: 09/03/13 at 10:14 AM

Surrogate Quality Control

OPR	89	57	54	77	68	70
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	13C12-2378-TCDF-Conf
7163550	81	96	84		82	74
7163551	79	97	105	69	84	
7163552	80	97	89	62	83	
Blank	89	105	114	63	83	80
MS	80	95	96	65	95	65
MSD	68	91	94	59	92	59
OPR	72	83	88	52	74	52
Limits:	28-130	23-140	17-157	24-169	24-185	24-169

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Cp# 1411980 sample# 7163550-52

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/15/2013
CarrierName: FedEx
AirbillNo: 796473161555

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130815-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	1,4 Dioxane 8260 SIM	VOCs 8260	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-594-SA8-SB-0.0-0.5	8/15/13 08:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-594-SA8-SB-0.0-0.5	8/15/13 08:00	SO	None	1 - 4 oz glass	10 day														X																	
SL-595-SA8-SB-0.0-0.5	8/15/13 08:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-595-SA8-SB-0.0-0.5	8/15/13 08:35	SO	None	1 - 4 oz glass	10 day														X																	
SL-597-SA8-SB-0.0-0.5	8/15/13 09:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-597-SA8-SB-0.0-0.5	8/15/13 09:40	SO	None	1 - 4 oz glass	10 day														X																	

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	08/15/2013	1600									
										8/16/13	0850

eurofins | Lancaster Laboratories

G# 1411980

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 8/16/13

Time of Receipt: 0850

Source Code: 56-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.9	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 3647 **Date/Time:** 8/16/13 0920

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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SAMPLE DELIVERY GROUP

PH094

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 11, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/28/2013
Group Number: 1414782
SDG: PH094
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-082713 Water	7177747
SL-615-SA8-SB-0.0-0.5 Soil	7177748
SL-553-SA8-SB-0.0-0.5 Soil	7177749
SL-553-SA8-SB-4.0-5.0 Soil	7177750
SL-553-SA8-SB-4.0-5.0MS Soil	7177751
SL-553-SA8-SB-4.0-5.0MSD Soil	7177752
SL-553-SA8-SB-4.0-5.0DUP Soil	7177753
SL-853-SA8-SB-4.0-5.0 Soil	7177754

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-082713 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7177747
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 08:00

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB827 SDG#: PH094-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13241A20A	08/29/2013 14:07	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13241A20A	08/29/2013 14:07	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-615-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177748
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 10:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

615-0 SDG#: PH094-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	0.76	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	2.4		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.3		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5	J	18	6.1	1
12969	Fluoranthene	206-44-0	2.4		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	0.78	J	1.7	0.67	1
12969	Naphthalene	91-20-3	0.83	J	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.3	J	1.7	0.67	1
12969	Pyrene	129-00-0	2.1		1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	10	J	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	14		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	21		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-615-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177748
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 10:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

615-0 SDG#: PH094-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,500		39.7	7.15	1
06944	Antimony	7440-36-0	3.97	U	3.97	0.734	1
06935	Arsenic	7440-38-2	6.46		3.97	0.694	1
06946	Barium	7440-39-3	131		0.992	0.0327	1
06947	Beryllium	7440-41-7	0.937	J	0.992	0.0664	1
07914	Boron	7440-42-8	5.02	J	9.92	0.833	1
06949	Cadmium	7440-43-9	0.225	J	0.992	0.0754	1
01650	Calcium	7440-70-2	6,610		19.8	3.31	1
06951	Chromium	7440-47-3	31.7		2.98	0.159	1
06952	Cobalt	7440-48-4	9.14		0.992	0.0982	1
06953	Copper	7440-50-8	19.4		1.98	0.288	1
01654	Iron	7439-89-6	31,200		198	17.9	5
06955	Lead	7439-92-1	13.3		2.98	0.496	1
01656	Lithium	7439-93-2	21.0		4.0	0.34	1
01657	Magnesium	7439-95-4	6,450		9.92	1.66	1
06958	Manganese	7439-96-5	470		0.992	0.0823	1
06960	Molybdenum	7439-98-7	0.258	J	1.98	0.169	1
06961	Nickel	7440-02-0	19.2		1.98	0.129	1
10145	Phosphorus	7723-14-0	306		9.92	2.87	1
01662	Potassium	7440-09-7	4,720		99.2	8.27	1
01667	Sodium	7440-23-5	91.0	J	99.2	16.6	1
06969	Tin	7440-31-5	3.11	J	9.92	0.218	1
06970	Titanium	7440-32-6	989		0.992	0.169	1
06971	Vanadium	7440-62-2	61.8		0.992	0.129	1
06972	Zinc	7440-66-6	84.7		3.97	0.198	1
10146	Zirconium	7440-67-7	6.55		4.96	0.833	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.231	J	0.397	0.0992	2
06142	Silver	7440-22-4	0.0567	J	0.198	0.0258	2
06144	Strontium	7440-24-6	39.2		0.397	0.0674	2
06145	Thallium	7440-28-0	0.377		0.198	0.0298	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	J	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.05		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-615-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177748
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 10:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

615-0 SDG#: PH094-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.988	U	0.988	0.0515	1
11031	12378-PeCDD	40321-76-4	0.444	JB	4.94	0.0547	1
11031	123478-HxCDD	39227-28-6	0.446	JB	4.94	0.0420	1
11031	123678-HxCDD	57653-85-7	2.47	JB	4.94	0.0447	1
11031	123789-HxCDD	19408-74-3	1.31	JB	4.94	0.0401	1
11031	1234678-HpCDD	35822-46-9	41.2	B	4.94	0.0675	1
11031	OCDD	3268-87-9	949	B	9.88	0.0569	1
11031	2378-TCDF	51207-31-9	0.265	J	0.988	0.0582	1
11031	12378-PeCDF	57117-41-6	0.574	JB	4.94	0.0321	1
11031	23478-PeCDF	57117-31-4	0.481	JB	4.94	0.0302	1
11031	123478-HxCDF	70648-26-9	0.851	JB	4.94	0.0245	1
11031	123678-HxCDF	57117-44-9	0.572	JB	4.94	0.0210	1
11031	123789-HxCDF	72918-21-9	1.08	JB	4.94	0.0251	1
11031	234678-HxCDF	60851-34-5	0.690	JB	4.94	0.0216	1
11031	1234678-HpCDF	67562-39-4	13.5	B	4.94	0.0248	1
11031	1234789-HpCDF	55673-89-7	0.900	JB	4.94	0.0376	1
11031	OCDF	39001-02-0	28.3	B	9.88	0.0368	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.22				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	91	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	114	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-615-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177748
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 10:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

615-0 SDG#: PH094-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-615-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177748
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 10:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

615-0 SDG#: PH094-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 06:48	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 16:32	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/05/2013 00:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/06/2013 21:12	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132400637001	09/03/2013 19:23	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132400637001	09/02/2013 21:04	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132400637001B	08/29/2013 07:35	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132400637001A	08/29/2013 07:35	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132400637001A	08/29/2013 07:35	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132400637001A	08/29/2013 07:35	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-615-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177748
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 10:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

615-0 SDG#: PH094-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	132400638001	08/30/2013 07:48	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132400637001	08/28/2013 22:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132400638001	08/29/2013 01:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13240039401A	08/28/2013 22:21	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401A	08/31/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177749
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:35 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-0 SDG#: PH094-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.2	J	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.0	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.1	J	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	0.87	J	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	99	U	99	49	1
10401	2,4-DB	94-82-6	19	U	19	6.9	1
10401	Dicamba	1918-00-9	13	U	13	4.4	1
10401	Dinoseb	88-85-7	27	U	27	9.9	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	9.9	1
10401	MCPA	94-74-6	2,800	U	2,800	840	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	830	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.91	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.83	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	3.6		2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.4	J	1.9	0.36	1
10590	p,p-DDT	50-29-3	0.43	J	1.9	0.39	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177749
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:35 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-0 SDG#: PH094-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Delta BHC	319-86-8	0.91	U	0.91	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1
10590	Methoxychlor	72-43-5	7.4	U	7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	4.9	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	8.1	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,700		43.5	7.84	1
06944	Antimony	7440-36-0	4.35	U	4.35	0.804	1
06935	Arsenic	7440-38-2	6.87		4.35	0.761	1
06946	Barium	7440-39-3	125		1.09	0.0359	1
06947	Beryllium	7440-41-7	0.938	J	1.09	0.0728	1
07914	Boron	7440-42-8	7.27	J	10.9	0.913	1
06949	Cadmium	7440-43-9	0.214	J	1.09	0.0826	1
01650	Calcium	7440-70-2	12,200		21.7	3.63	1
06951	Chromium	7440-47-3	33.8		3.26	0.174	1
06952	Cobalt	7440-48-4	8.97		1.09	0.108	1
06953	Copper	7440-50-8	20.8		2.17	0.315	1
01654	Iron	7439-89-6	34,100		217	19.7	5
06955	Lead	7439-92-1	12.9		3.26	0.543	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177749
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:35 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-0 SDG#: PH094-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	21.7		4.3	0.37	1
01657	Magnesium	7439-95-4	7,200		10.9	1.82	1
06958	Manganese	7439-96-5	432		1.09	0.0902	1
06960	Molybdenum	7439-98-7	0.271	J	2.17	0.185	1
06961	Nickel	7440-02-0	19.9		2.17	0.141	1
10145	Phosphorus	7723-14-0	407		10.9	3.14	1
01662	Potassium	7440-09-7	5,640		109	9.06	1
01667	Sodium	7440-23-5	96.5	J	109	18.2	1
06969	Tin	7440-31-5	3.19	J	10.9	0.239	1
06970	Titanium	7440-32-6	1,000		1.09	0.185	1
06971	Vanadium	7440-62-2	61.5		1.09	0.141	1
06972	Zinc	7440-66-6	77.3		4.35	0.217	1
10146	Zirconium	7440-67-7	6.41		5.43	0.913	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.261	J	0.435	0.109	2
06142	Silver	7440-22-4	0.0559	J	0.217	0.0283	2
06144	Strontium	7440-24-6	48.2		0.435	0.0739	2
06145	Thallium	7440-28-0	0.363		0.217	0.0326	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0153	J	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.80		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177749
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:35 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-0 SDG#: PH094-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0678	J	1.21	0.0661	1
11031	12378-PeCDD	40321-76-4	0.0850	JBQ	6.06	0.0509	1
11031	123478-HxCDD	39227-28-6	0.107	JBQ	6.06	0.0471	1
11031	123678-HxCDD	57653-85-7	0.322	JBQ	6.06	0.0488	1
11031	123789-HxCDD	19408-74-3	0.347	JBQ	6.06	0.0460	1
11031	1234678-HpCDD	35822-46-9	6.29	B	6.06	0.0484	1
11031	OCDD	3268-87-9	65.5	B	12.1	0.0371	1
11031	2378-TCDF	51207-31-9	0.144	JQ	1.21	0.0650	1
11031	12378-PeCDF	57117-41-6	0.340	JB	6.06	0.0325	1
11031	23478-PeCDF	57117-31-4	0.181	JBQ	6.06	0.0309	1
11031	123478-HxCDF	70648-26-9	0.127	JB	6.06	0.0244	1
11031	123678-HxCDF	57117-44-9	0.142	JB	6.06	0.0202	1
11031	123789-HxCDF	72918-21-9	0.313	JB	6.06	0.0248	1
11031	234678-HxCDF	60851-34-5	0.225	JBQ	6.06	0.0220	1
11031	1234678-HpCDF	67562-39-4	4.06	JB	6.06	0.0295	1
11031	1234789-HpCDF	55673-89-7	0.157	JBQ	6.06	0.0460	1
11031	OCDF	39001-02-0	10.2	JB	12.1	0.0500	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.263				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177749
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:35 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-0 SDG#: PH094-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177749
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:35 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-0 SDG#: PH094-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 07:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132460019A	09/06/2013 17:48	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132420008A	09/05/2013 12:55	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 16:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132420008A	09/01/2013 09:30	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132460019A	09/04/2013 10:00	Kelli M Barto	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/04/2013 23:42	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/06/2013 22:09	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132400637001	09/03/2013 19:27	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177749
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:35 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-0 SDG#: PH094-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132400637001	09/02/2013 21:08	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132400637001B	08/29/2013 07:37	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132400637001A	08/29/2013 07:37	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132400637001A	08/29/2013 07:37	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132400637001A	08/29/2013 07:37	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132400638001	08/30/2013 07:50	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132400637001	08/28/2013 22:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132400638001	08/29/2013 01:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13240039401A	08/28/2013 22:21	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401A	08/31/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177750
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	0.84	J	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.2	J	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.81
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	41	U	41	14	1
10401	Dalapon	75-99-0	100	U	100	50	1
10401	2,4-DB	94-82-6	19	U	19	7.0	1
10401	Dicamba	1918-00-9	14	U	14	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	860	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	850	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.92	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.85	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.92	U	0.92	0.19	1
10590	Alpha BHC	319-84-6	0.92	U	0.92	0.19	1
10590	Beta BHC	319-85-7	3.8		2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.92	U	0.92	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177750
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.92	U	0.92	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.92	U	0.92	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.92	U	0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.92	U	0.92	0.19	1
10590	Methoxychlor	72-43-5	7.4	U	7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,300		44.6	8.05	1
06944	Antimony	7440-36-0	4.46	U	4.46	0.826	1
06935	Arsenic	7440-38-2	6.33		4.46	0.781	1
06946	Barium	7440-39-3	137		1.12	0.0368	1
06947	Beryllium	7440-41-7	0.979	J	1.12	0.0748	1
07914	Boron	7440-42-8	7.73	J	11.2	0.938	1
06949	Cadmium	7440-43-9	0.221	J	1.12	0.0848	1
01650	Calcium	7440-70-2	7,840		22.3	3.73	1
06951	Chromium	7440-47-3	32.2		3.35	0.179	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177750
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	9.33		1.12	0.111	1
06953	Copper	7440-50-8	20.4		2.23	0.324	1
01654	Iron	7439-89-6	33,400		223	20.2	5
06955	Lead	7439-92-1	10.2		3.35	0.558	1
01656	Lithium	7439-93-2	20.7		4.5	0.38	1
01657	Magnesium	7439-95-4	6,660		11.2	1.86	1
06958	Manganese	7439-96-5	488		1.12	0.0926	1
06960	Molybdenum	7439-98-7	0.374	J	2.23	0.190	1
06961	Nickel	7440-02-0	19.5		2.23	0.145	1
10145	Phosphorus	7723-14-0	307		11.2	3.23	1
01662	Potassium	7440-09-7	4,800		112	9.31	1
01667	Sodium	7440-23-5	90.6	J	112	18.6	1
06969	Tin	7440-31-5	3.17	J	11.2	0.246	1
06970	Titanium	7440-32-6	822		1.12	0.190	1
06971	Vanadium	7440-62-2	60.9		1.12	0.145	1
06972	Zinc	7440-66-6	71.2		4.46	0.223	1
10146	Zirconium	7440-67-7	6.08		5.58	0.938	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.265	J	0.446	0.112	2
06142	Silver	7440-22-4	0.0515	J	0.223	0.0290	2
06144	Strontium	7440-24-6	44.7		0.446	0.0759	2
06145	Thallium	7440-28-0	0.421		0.223	0.0335	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184	U	0.0184	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.79		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177750
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0496	J	1.10	0.0454	1
11031	12378-PeCDD	40321-76-4	0.0976	JB	5.48	0.0437	1
11031	123478-HxCDD	39227-28-6	0.0546	JBQ	5.48	0.0335	1
11031	123678-HxCDD	57653-85-7	0.247	JBQ	5.48	0.0346	1
11031	123789-HxCDD	19408-74-3	0.376	JBQ	5.48	0.0344	1
11031	1234678-HpCDD	35822-46-9	0.424	JBQ	5.48	0.0371	1
11031	OCDD	3268-87-9	2.73	JB	11.0	0.0335	1
11031	2378-TCDF	51207-31-9	1.10	U	1.10	0.0443	1
11031	12378-PeCDF	57117-41-6	0.255	JBQ	5.48	0.0215	1
11031	23478-PeCDF	57117-31-4	0.126	JBQ	5.48	0.0218	1
11031	123478-HxCDF	70648-26-9	0.0751	JBQ	5.48	0.0186	1
11031	123678-HxCDF	57117-44-9	5.48	U	5.48	0.0162	1
11031	123789-HxCDF	72918-21-9	0.705	JB	5.48	0.0194	1
11031	234678-HxCDF	60851-34-5	0.0637	JBQ	5.48	0.0169	1
11031	1234678-HpCDF	67562-39-4	0.309	JBQ	5.48	0.0191	1
11031	1234789-HpCDF	55673-89-7	0.0647	JB	5.48	0.0322	1
11031	OCDF	39001-02-0	0.737	JB	11.0	0.0441	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.219				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177750
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177750
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 04:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13242A16A	08/31/2013 03:46	Laura M Krieger	22.81
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324032195	08/28/2013 14:39	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324032195	08/28/2013 14:39	Lisa J Cooke	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132460019A	09/06/2013 18:14	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132420008A	09/05/2013 13:10	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 17:09	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132420008A	09/01/2013 09:30	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132460019A	09/04/2013 10:00	Kelli M Barto	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/04/2013 20:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/06/2013 23:06	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132400637001	09/03/2013 19:01	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177750
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132400637001	09/02/2013 20:40	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132400637001B	08/29/2013 07:16	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132400637001A	08/29/2013 07:16	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132400637001A	08/29/2013 07:16	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132400637001A	08/29/2013 07:16	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132400638001	08/30/2013 07:52	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132400637001	08/28/2013 22:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132400638001	08/29/2013 01:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13240039401A	08/28/2013 22:21	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401A	08/31/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177751
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	35		1.9	0.75	1
12969	Acenaphthylene	208-96-8	35		1.9	0.37	1
12969	Anthracene	120-12-7	36		1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	38		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	39		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	47		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	36		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	26		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	38		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	46		20	6.7	1
12969	Di-n-butylphthalate	84-74-2	39		20	6.7	1
12969	Chrysene	218-01-9	38		1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	31		1.9	0.75	1
12969	Diethylphthalate	84-66-2	35		20	6.7	1
12969	Dimethylphthalate	131-11-3	35		20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	45		20	6.7	1
12969	Fluoranthene	206-44-0	35		1.9	0.75	1
12969	Fluorene	86-73-7	36		1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	30		1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	37		1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	36		1.9	0.75	1
12969	Naphthalene	91-20-3	35		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	29		1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	49		20	6.7	1
12969	Phenanthrene	85-01-8	35		1.9	0.75	1
12969	Pyrene	129-00-0	36		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	9.0		1.1	0.2	24.04
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	98		40	13	1
10401	Dalapon	75-99-0	88	J	100	49	1
10401	2,4-DB	94-82-6	150		19	6.9	1
10401	Dicamba	1918-00-9	11	J	13	4.5	1
10401	Dinoseb	88-85-7	57		27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	110		19	10	1
10401	MCPA	94-74-6	8,200		2,800	850	1
10401	MCPP (Mecoprop)	93-65-2	7,800		2,800	840	1
10401	2,4,5-T	93-76-5	12		1.9	0.92	1
10401	2,4,5-TP	93-72-1	10		1.9	0.84	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	2.9		0.92	0.19	1
10590	Alpha BHC	319-84-6	3.5		0.92	0.19	1
10590	Beta BHC	319-85-7	1.5	J	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	3.4		0.92	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177751
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	8.4		1.9	0.37	1
10590	p,p-DDE	72-55-9	6.5		1.9	0.37	1
10590	p,p-DDT	50-29-3	8.0		1.9	0.39	1
10590	Delta BHC	319-86-8	3.0		0.92	0.50	1
10590	Dieldrin	60-57-1	8.1		1.9	0.37	1
10590	Endosulfan I	959-98-8	3.9		0.92	0.24	1
10590	Endosulfan II	33213-65-9	6.7		1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	6.5		1.9	0.37	1
10590	Endrin	72-20-8	7.8		1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	6.3		1.9	0.37	1
10590	Endrin Ketone	53494-70-5	6.5		2.0	0.67	1
10590	Heptachlor	76-44-8	3.6		0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	3.2		0.92	0.19	1
10590	Methoxychlor	72-43-5	37		7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	180		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	210		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	2.7	J	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	5.1	J	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	5.9	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	31,900		44.6	8.05	1
06944	Antimony	7440-36-0	32.6		4.46	0.826	1
06935	Arsenic	7440-38-2	22.4		4.46	0.781	1
06946	Barium	7440-39-3	344		1.12	0.0368	1
06947	Beryllium	7440-41-7	6.41		1.12	0.0748	1
07914	Boron	7440-42-8	203		11.2	0.938	1
06949	Cadmium	7440-43-9	5.18		1.12	0.0848	1
01650	Calcium	7440-70-2	7,810		22.3	3.73	1
06951	Chromium	7440-47-3	57.9		3.35	0.179	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177751
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg	mg/kg	mg/kg	
06952	Cobalt	7440-48-4	59.4	1.12	0.111	1
06953	Copper	7440-50-8	47.8	2.23	0.324	1
01654	Iron	7439-89-6	35,300	223	20.2	5
06955	Lead	7439-92-1	25.3	3.35	0.558	1
01656	Lithium	7439-93-2	133	4.5	0.38	1
01657	Magnesium	7439-95-4	7,520	11.2	1.86	1
06958	Manganese	7439-96-5	555	1.12	0.0926	1
06960	Molybdenum	7439-98-7	193	2.23	0.190	1
06961	Nickel	7440-02-0	71.7	2.23	0.145	1
10145	Phosphorus	7723-14-0	406	11.2	3.23	1
01662	Potassium	7440-09-7	6,390	112	9.31	1
01667	Sodium	7440-23-5	1,160	112	18.6	1
06969	Tin	7440-31-5	383	11.2	0.246	1
06970	Titanium	7440-32-6	1,190	1.12	0.190	1
06971	Vanadium	7440-62-2	121	1.12	0.145	1
06972	Zinc	7440-66-6	127	4.46	0.223	1
10146	Zirconium	7440-67-7	107	5.58	0.938	1
	SW-846 6020A		mg/kg	mg/kg	mg/kg	
06141	Selenium	7782-49-2	2.72	0.446	0.112	2
06142	Silver	7440-22-4	14.6	0.223	0.0290	2
06144	Strontium	7440-24-6	63.1	0.446	0.0759	2
06145	Thallium	7440-28-0	1.03	0.223	0.0335	2
	SW-846 7471B		mg/kg	mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.208	0.0184	0.0111	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	11.3	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177751
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.6		1.12	0.0602	1
11031	12378-PeCDD	40321-76-4	113	B	5.60	0.0547	1
11031	123478-HxCDD	39227-28-6	114	B	5.60	0.0464	1
11031	123678-HxCDD	57653-85-7	114	B	5.60	0.0480	1
11031	123789-HxCDD	19408-74-3	115	B	5.60	0.0451	1
11031	1234678-HpCDD	35822-46-9	112	B	5.60	0.0555	1
11031	OCDD	3268-87-9	213	B	11.2	0.0353	1
11031	2378-TCDF	51207-31-9	22.6		1.12	0.0570	1
11031	12378-PeCDF	57117-41-6	114	B	5.60	0.0295	1
11031	23478-PeCDF	57117-31-4	115	B	5.60	0.0295	1
11031	123478-HxCDF	70648-26-9	110	B	5.60	0.0281	1
11031	123678-HxCDF	57117-44-9	110	B	5.60	0.0238	1
11031	123789-HxCDF	72918-21-9	111	B	5.60	0.0320	1
11031	234678-HxCDF	60851-34-5	111	B	5.60	0.0258	1
11031	1234678-HpCDF	67562-39-4	108	B	5.60	0.0245	1
11031	1234789-HpCDF	55673-89-7	110	B	5.60	0.0430	1
11031	OCDF	39001-02-0	212	B	11.2	0.0459	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	90	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	95	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	114	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177751
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 05:12	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13242A16A	08/31/2013 04:24	Laura M Krieger	24.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324032195	08/28/2013 14:38	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324032195	08/28/2013 14:38	Lisa J Cooke	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132460019A	09/06/2013 18:41	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132420008A	09/05/2013 13:25	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 17:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132420008A	09/01/2013 09:30	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132460019A	09/04/2013 10:00	Kelli M Barto	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/04/2013 20:52	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/07/2013 00:02	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132400637001	09/03/2013 19:12	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177751
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132400637001	09/02/2013 20:52	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132400637001B	08/29/2013 07:23	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132400637001A	08/29/2013 07:23	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132400637001A	08/29/2013 07:23	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132400637001A	08/29/2013 07:23	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132400638001	08/30/2013 07:58	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132400637001	08/28/2013 22:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132400638001	08/29/2013 01:00	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401A	08/31/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177752
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	30		1.9	0.75	1
12969	Acenaphthylene	208-96-8	31		1.9	0.37	1
12969	Anthracene	120-12-7	30		1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	32		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	33		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	40		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	31		19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	22		1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	32		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	40		20	6.7	1
12969	Di-n-butylphthalate	84-74-2	33		20	6.7	1
12969	Chrysene	218-01-9	33		1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	26		1.9	0.75	1
12969	Diethylphthalate	84-66-2	31		20	6.7	1
12969	Dimethylphthalate	131-11-3	30		20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	36		20	6.7	1
12969	Fluoranthene	206-44-0	30		1.9	0.75	1
12969	Fluorene	86-73-7	31		1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	25		1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	33		1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	32		1.9	0.75	1
12969	Naphthalene	91-20-3	31		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	26		1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	42		20	6.7	1
12969	Phenanthrene	85-01-8	30		1.9	0.75	1
12969	Pyrene	129-00-0	31		1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.4		1.0	0.2	22.2
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	100		40	13	1
10401	Dalapon	75-99-0	82	J	100	49	1
10401	2,4-DB	94-82-6	150		19	6.9	1
10401	Dicamba	1918-00-9	11	J	13	4.5	1
10401	Dinoseb	88-85-7	64		27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	110		19	10	1
10401	MCPA	94-74-6	8,500		2,800	850	1
10401	MCPP (Mecoprop)	93-65-2	7,800		2,800	840	1
10401	2,4,5-T	93-76-5	13		1.9	0.92	1
10401	2,4,5-TP	93-72-1	11		1.9	0.84	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	3.0		0.92	0.19	1
10590	Alpha BHC	319-84-6	3.7		0.92	0.19	1
10590	Beta BHC	319-85-7	1.5	J	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	3.6		0.92	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177752
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	8.5		1.9	0.37	1
10590	p,p-DDE	72-55-9	6.7		1.9	0.37	1
10590	p,p-DDT	50-29-3	8.2		1.9	0.39	1
10590	Delta BHC	319-86-8	3.3		0.92	0.50	1
10590	Dieldrin	60-57-1	8.2		1.9	0.37	1
10590	Endosulfan I	959-98-8	4.0		0.92	0.24	1
10590	Endosulfan II	33213-65-9	6.7		1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	6.6		1.9	0.37	1
10590	Endrin	72-20-8	7.9		1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	6.3		1.9	0.37	1
10590	Endrin Ketone	53494-70-5	6.7		2.0	0.67	1
10590	Heptachlor	76-44-8	3.7		0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	3.2		0.92	0.19	1
10590	Methoxychlor	72-43-5	39		7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	180		19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	210		19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	2.7	J	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	5.3	J	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	6.3	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,800		44.6	8.05	1
06944	Antimony	7440-36-0	33.4		4.46	0.826	1
06935	Arsenic	7440-38-2	22.6		4.46	0.781	1
06946	Barium	7440-39-3	355		1.12	0.0368	1
06947	Beryllium	7440-41-7	6.51		1.12	0.0748	1
07914	Boron	7440-42-8	209		11.2	0.938	1
06949	Cadmium	7440-43-9	5.26		1.12	0.0848	1
01650	Calcium	7440-70-2	11,200		22.3	3.73	1
06951	Chromium	7440-47-3	59.3		3.35	0.179	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177752
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	60.1	1.12	0.111	1
06953	Copper	7440-50-8	48.6	2.23	0.324	1
01654	Iron	7439-89-6	36,100	223	20.2	5
06955	Lead	7439-92-1	25.9	3.35	0.558	1
01656	Lithium	7439-93-2	134	4.5	0.38	1
01657	Magnesium	7439-95-4	7,830	11.2	1.86	1
06958	Manganese	7439-96-5	517	1.12	0.0926	1
06960	Molybdenum	7439-98-7	198	2.23	0.190	1
06961	Nickel	7440-02-0	72.5	2.23	0.145	1
10145	Phosphorus	7723-14-0	430	11.2	3.23	1
01662	Potassium	7440-09-7	6,170	112	9.31	1
01667	Sodium	7440-23-5	1,170	112	18.6	1
06969	Tin	7440-31-5	388	11.2	0.246	1
06970	Titanium	7440-32-6	1,260	1.12	0.190	1
06971	Vanadium	7440-62-2	124	1.12	0.145	1
06972	Zinc	7440-66-6	130	4.46	0.223	1
10146	Zirconium	7440-67-7	107	5.58	0.938	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.29	0.446	0.112	2
06142	Silver	7440-22-4	11.7	0.223	0.0290	2
06144	Strontium	7440-24-6	49.7	0.446	0.0759	2
06145	Thallium	7440-28-0	0.851	0.223	0.0335	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.208	0.0183	0.0110	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	11.3	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177752
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.3		1.12	0.0613	1
11031	12378-PeCDD	40321-76-4	112	B	5.58	0.0559	1
11031	123478-HxCDD	39227-28-6	114	B	5.58	0.0406	1
11031	123678-HxCDD	57653-85-7	113	B	5.58	0.0418	1
11031	123789-HxCDD	19408-74-3	114	B	5.58	0.0413	1
11031	1234678-HpCDD	35822-46-9	111	B	5.58	0.0476	1
11031	OCDD	3268-87-9	213	B	11.2	0.0428	1
11031	2378-TCDF	51207-31-9	22.5		1.12	0.0629	1
11031	12378-PeCDF	57117-41-6	113	B	5.58	0.0310	1
11031	23478-PeCDF	57117-31-4	113	B	5.58	0.0304	1
11031	123478-HxCDF	70648-26-9	113	B	5.58	0.0302	1
11031	123678-HxCDF	57117-44-9	112	B	5.58	0.0262	1
11031	123789-HxCDF	72918-21-9	111	B	5.58	0.0317	1
11031	234678-HxCDF	60851-34-5	111	B	5.58	0.0281	1
11031	1234678-HpCDF	67562-39-4	107	B	5.58	0.0260	1
11031	1234789-HpCDF	55673-89-7	110	B	5.58	0.0413	1
11031	OCDF	39001-02-0	212	B	11.2	0.0434	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	92	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	106	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177752
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 05:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13242A16A	08/31/2013 05:02	Laura M Krieger	22.2
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324032195	08/28/2013 14:38	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324032195	08/28/2013 14:39	Lisa J Cooke	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132460019A	09/06/2013 19:08	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132420008A	09/05/2013 13:40	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 17:46	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132420008A	09/01/2013 09:30	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132460019A	09/04/2013 10:00	Kelli M Barto	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/04/2013 21:13	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/07/2013 00:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132400637001	09/03/2013 19:16	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177752
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132400637001	09/02/2013 20:56	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132400637001B	08/29/2013 07:26	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132400637001A	08/29/2013 07:26	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132400637001A	08/29/2013 07:26	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132400637001A	08/29/2013 07:26	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132400638001	08/30/2013 08:00	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132400637001	08/28/2013 22:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132400638001	08/29/2013 01:00	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401A	08/31/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177753
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,900		44.6	8.05	1
06944	Antimony	7440-36-0	4.46	U	4.46	0.826	1
06935	Arsenic	7440-38-2	6.47		4.46	0.781	1
06946	Barium	7440-39-3	134		1.12	0.0368	1
06947	Beryllium	7440-41-7	0.963	J	1.12	0.0748	1
07914	Boron	7440-42-8	5.40	J	11.2	0.938	1
06949	Cadmium	7440-43-9	0.202	J	1.12	0.0848	1
01650	Calcium	7440-70-2	7,230		22.3	3.73	1
06951	Chromium	7440-47-3	31.4		3.35	0.179	1
06952	Cobalt	7440-48-4	9.34		1.12	0.111	1
06953	Copper	7440-50-8	19.7		2.23	0.324	1
01654	Iron	7439-89-6	32,500		223	20.2	5
06955	Lead	7439-92-1	9.82		3.35	0.558	1
01656	Lithium	7439-93-2	20.9		4.5	0.38	1
01657	Magnesium	7439-95-4	6,620		11.2	1.86	1
06958	Manganese	7439-96-5	461		1.12	0.0926	1
06960	Molybdenum	7439-98-7	0.244	J	2.23	0.190	1
06961	Nickel	7440-02-0	19.6		2.23	0.145	1
10145	Phosphorus	7723-14-0	283		11.2	3.23	1
01662	Potassium	7440-09-7	4,680		112	9.31	1
01667	Sodium	7440-23-5	91.8	J	112	18.6	1
06969	Tin	7440-31-5	2.97	J	11.2	0.246	1
06970	Titanium	7440-32-6	785		1.12	0.190	1
06971	Vanadium	7440-62-2	59.5		1.12	0.145	1
06972	Zinc	7440-66-6	70.3		4.46	0.223	1
10146	Zirconium	7440-67-7	6.28		5.58	0.938	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.290	J	0.446	0.112	2
06142	Silver	7440-22-4	0.0615	J	0.223	0.0290	2
06144	Strontium	7440-24-6	55.9		0.446	0.0759	2
06145	Thallium	7440-28-0	0.513		0.223	0.0335	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.84		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	11.3		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	11.1		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177753
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 12:50 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

553-4 SDG#: PH094-04DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132400637001	09/03/2013 19:08	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132400637001	09/02/2013 20:48	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132400637001B	08/29/2013 07:21	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132400637001A	08/29/2013 07:21	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132400637001A	08/29/2013 07:21	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132400637001A	08/29/2013 07:21	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132400638001	08/30/2013 07:56	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132400637001	08/28/2013 22:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132400638001	08/29/2013 01:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13240039401A	08/28/2013 22:21	Clayton C Litchmore	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401A	08/31/2013 00:12	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401A	08/31/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177754
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 13:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

853-4 SDG#: PH094-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	0.93	J	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.2	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.69
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	41	U	41	14	1
10401	Dalapon	75-99-0	100	U	100	50	1
10401	2,4-DB	94-82-6	19	U	19	7.0	1
10401	Dicamba	1918-00-9	14	U	14	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	1,300	J	2,800	860	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	850	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.92	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.85	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.93	U	0.93	0.19	1
10590	Alpha BHC	319-84-6	0.93	U	0.93	0.19	1
10590	Beta BHC	319-85-7	5.0		2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.93	U	0.93	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177754
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 13:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

853-4 SDG#: PH094-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.93	U	0.93	0.51	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.93	U	0.93	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.93	U	0.93	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.93	U	0.93	0.19	1
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	5.0	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,700		44.6	8.05	1
06944	Antimony	7440-36-0	4.46	U	4.46	0.826	1
06935	Arsenic	7440-38-2	6.43		4.46	0.781	1
06946	Barium	7440-39-3	134		1.12	0.0368	1
06947	Beryllium	7440-41-7	0.977	J	1.12	0.0748	1
07914	Boron	7440-42-8	5.70	J	11.2	0.938	1
06949	Cadmium	7440-43-9	0.184	J	1.12	0.0848	1
01650	Calcium	7440-70-2	7,530		22.3	3.73	1
06951	Chromium	7440-47-3	32.8		3.35	0.179	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177754
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 13:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

853-4 SDG#: PH094-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	9.27		1.12	0.111	1
06953	Copper	7440-50-8	19.9		2.23	0.324	1
01654	Iron	7439-89-6	33,000		223	20.2	5
06955	Lead	7439-92-1	10.2		3.35	0.558	1
01656	Lithium	7439-93-2	22.3		4.5	0.38	1
01657	Magnesium	7439-95-4	6,890		11.2	1.86	1
06958	Manganese	7439-96-5	428		1.12	0.0926	1
06960	Molybdenum	7439-98-7	0.258	J	2.23	0.190	1
06961	Nickel	7440-02-0	19.4		2.23	0.145	1
10145	Phosphorus	7723-14-0	288		11.2	3.23	1
01662	Potassium	7440-09-7	4,680		112	9.31	1
01667	Sodium	7440-23-5	96.3	J	112	18.6	1
06969	Tin	7440-31-5	3.18	J	11.2	0.246	1
06970	Titanium	7440-32-6	859		1.12	0.190	1
06971	Vanadium	7440-62-2	62.1		1.12	0.145	1
06972	Zinc	7440-66-6	70.8		4.46	0.223	1
10146	Zirconium	7440-67-7	6.20		5.58	0.938	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.300	J	0.446	0.112	2
06142	Silver	7440-22-4	0.0663	J	0.223	0.0290	2
06144	Strontium	7440-24-6	51.7		0.446	0.0759	2
06145	Thallium	7440-28-0	0.453		0.223	0.0335	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0181	U	0.0181	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.68		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177754
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 13:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

853-4 SDG#: PH094-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.12	U	1.12	0.0485	1
11031	12378-PeCDD	40321-76-4	0.193	JBQ	5.59	0.0435	1
11031	123478-HxCDD	39227-28-6	0.175	JBQ	5.59	0.0366	1
11031	123678-HxCDD	57653-85-7	0.311	JBQ	5.59	0.0379	1
11031	123789-HxCDD	19408-74-3	0.446	JBQ	5.59	0.0362	1
11031	1234678-HpCDD	35822-46-9	0.415	JB	5.59	0.0353	1
11031	OCDD	3268-87-9	2.12	JB	11.2	0.0335	1
11031	2378-TCDF	51207-31-9	0.0616	JQ	1.12	0.0457	1
11031	12378-PeCDF	57117-41-6	0.294	JB	5.59	0.0225	1
11031	23478-PeCDF	57117-31-4	0.150	JB	5.59	0.0224	1
11031	123478-HxCDF	70648-26-9	0.163	JBQ	5.59	0.0175	1
11031	123678-HxCDF	57117-44-9	0.156	JB	5.59	0.0150	1
11031	123789-HxCDF	72918-21-9	0.736	JBQ	5.59	0.0193	1
11031	234678-HxCDF	60851-34-5	0.140	JBQ	5.59	0.0158	1
11031	1234678-HpCDF	67562-39-4	0.187	JB	5.59	0.0125	1
11031	1234789-HpCDF	55673-89-7	0.189	JB	5.59	0.0203	1
11031	OCDF	39001-02-0	0.506	JB	11.2	0.0408	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0781				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	97	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177754
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 13:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

853-4 SDG#: PH094-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177754
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 13:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

853-4 SDG#: PH094-05*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 07:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13242A16A	08/30/2013 20:47	Laura M Krieger	22.69
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324032195	08/28/2013 14:40	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324032195	08/28/2013 14:41	Lisa J Cooke	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132460019A	09/06/2013 19:35	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132420008A	09/05/2013 13:56	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 18:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132420008A	09/01/2013 09:30	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132460019A	09/04/2013 10:00	Kelli M Barto	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132460005A	09/04/2013 21:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132460005A	09/03/2013 18:50	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248003	09/07/2013 01:55	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13248003	09/05/2013 10:45	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132400637001	09/03/2013 19:38	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA8-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7177754
LL Group # 1414782
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/27/2013 13:00 by VC

Submitted: 08/28/2013 09:20
Reported: 09/11/2013 19:34

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

853-4 SDG#: PH094-05*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06961	Nickel	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132400637001	09/02/2013 21:20	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132400637001B	08/29/2013 07:40	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132400637001A	08/29/2013 07:40	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132400637001A	08/29/2013 07:40	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	132400637001A	08/29/2013 07:40	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132400638001	08/30/2013 08:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132400637001	08/28/2013 22:21	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132400638001	08/29/2013 01:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13240039401A	08/28/2013 22:21	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401B	08/31/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414782
Reported: 09/11/13 at 07:34 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13243SLC026	Sample number(s): 7177748-7177752,7177754									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	93		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	92		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	96		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	123		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	97		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	119		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	104		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	99		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	98		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	93		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	108		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	96		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	96		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	95		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	92		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	82		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	116		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	92		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	98		79-112		
Batch number: 13241A20A	Sample number(s): 7177747									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	97	98	75-135	1	30
Batch number: 13242A16A	Sample number(s): 7177750-7177752,7177754									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	76		67-119		
Batch number: 132460019A	Sample number(s): 7177749-7177752,7177754									
2,4-D	36	U	36.	12	ug/kg	104		59-122		
Dalapon	90	U	90.	44	ug/kg	49		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	137*		54-131		
Dicamba	12	U	12.	4.0	ug/kg	94		60-123		
Dinoseb	24	U	24.	9.0	ug/kg	19		10-36		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	114		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	88		60-127		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	87		54-134		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414782
Reported: 09/11/13 at 07:34 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	114		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	113		63-130		
Batch number: 132420008A	Sample number(s): 7177749-7177752,7177754									
Aldrin	0.83	U	0.83	0.17	ug/kg	81		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	100		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	92		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	97		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	109		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	92		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	104		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	89		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	111		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	106		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	95		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	92		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	99		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	88		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	92		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	98		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	90		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	97		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132430008A	Sample number(s): 7177748-7177752,7177754									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	83	78	36-106	7	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	103		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	115		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132460005A	Sample number(s): 7177748-7177752,7177754									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	105		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	108		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	111		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	104		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	89		49-107		
Batch number: 132400637001	Sample number(s): 7177748-7177754									
Aluminum	40.0	U	40.0	7.21	mg/kg	101		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	102		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	99		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	98		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	97		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	101		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414782
Reported: 09/11/13 at 07:34 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Calcium	20.0	U	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	107		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	101		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	100		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	104		80-120		
Potassium	100 U		100.	8.34	mg/kg	101		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.74	J	10.0	0.220	mg/kg	99		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	105		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	100		80-120		
Zinc	0.311	J	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132400637001A	Sample number(s): 7177748-7177754									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	107		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	109		80-120		
Batch number: 132400637001B	Sample number(s): 7177748-7177754									
Selenium	0.400	U	0.400	0.100	mg/kg	106		80-120		
Batch number: 132400638001	Sample number(s): 7177748-7177754									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	109		85-120		
Batch number: 13240039401A	Sample number(s): 7177748-7177750,7177753-7177754									
15a pH by 9045D						99		95-105		
Batch number: 13242162401A	Sample number(s): 7177748-7177753									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
Batch number: 13242162401B	Sample number(s): 7177754									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13248003	Sample number(s): 7177748-7177752,7177754									
2378-TCDD	1.00	U	1.00	0.0486	ng/kg	99		67-158		
12378-PeCDD	0.0657	J	5.00	0.0361	ng/kg	99		70-142		
123478-HxCDD	0.0423	J	5.00	0.0239	ng/kg	100		70-164		
123678-HxCDD	0.0502	J	5.00	0.0246	ng/kg	98		76-134		
123789-HxCDD	0.0844	J	5.00	0.0236	ng/kg	99		64-162		
1234678-HpCDD	0.122	J	5.00	0.0287	ng/kg	98		70-140		
OCDD	0.464	J	10.0	0.0292	ng/kg	94		78-144		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414782
Reported: 09/11/13 at 07:34 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
2378-TCDF	1.00	U	1.00	0.0435	ng/kg	101		75-158		
12378-PeCDF	0.0612	J	5.00	0.0217	ng/kg	98		80-134		
23478-PeCDF	0.0677	J	5.00	0.0205	ng/kg	99		68-160		
123478-HxCDF	0.0557	J	5.00	0.0146	ng/kg	99		72-134		
123678-HxCDF	0.0251	J	5.00	0.0128	ng/kg	98		84-130		
123789-HxCDF	0.0604	J	5.00	0.0161	ng/kg	97		78-130		
234678-HxCDF	0.0455	J	5.00	0.0138	ng/kg	98		70-156		
1234678-HpCDF	0.0567	J	5.00	0.0111	ng/kg	94		82-122		
1234789-HpCDF	0.0816	J	5.00	0.0182	ng/kg	96		78-138		
OCDF	0.216	J	10.0	0.0364	ng/kg	96		63-170		
TEQ WHO 2005 - EDLx0.0	0.0715				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13243SLC026	Sample number(s): 7177748-7177752,7177754 UNSPK: 7177750								
Acenaphthene	92	81	48-127	13	30				
Acenaphthylene	92	82	49-121	12	30				
Anthracene	96	81	52-126	17	30				
Benzo(a)anthracene	102	87	44-143	16	30				
Benzo(a)pyrene	104	87	44-140	18	30				
Benzo(b)fluoranthene	125	107	26-142	16	30				
Benzo(e)pyrene	96	82	70-130	16	30				
Benzo(g,h,i)perylene	70	58	33-141	19	30				
Benzo(k)fluoranthene	101	85	54-142	18	30				
Butylbenzylphthalate	124	106	49-151	16	30				
Di-n-butylphthalate	104	89	52-147	16	30				
Chrysene	100	86	29-148	15	30				
Dibenz(a,h)anthracene	82	69	20-137	17	30				
Diethylphthalate	93	84	43-145	11	30				
Dimethylphthalate	93	81	58-129	14	30				
Bis(2-Ethylhexyl)phthalate	120	97	39-167	22	30				
Fluoranthene	94	81	40-148	15	30				
Fluorene	95	84	51-137	13	30				
Indeno(1,2,3-cd)pyrene	80	67	17-136	18	30				
1-Methylnaphthalene	96	84	50-131	13	30				
2-Methylnaphthalene	97	86	35-152	12	30				
Naphthalene	93	83	31-148	12	30				
N-Nitrosodimethylamine	76	69	48-113	11	30				
Di-n-octylphthalate	130	112	52-162	15	30				
Phenanthrene	95	81	29-142	16	30				
Pyrene	96	83	26-143	15	30				
Batch number: 13242A16A	Sample number(s): 7177750-7177752,7177754 UNSPK: 7177750								
11a TPH by EPA 8015B GRO	76	76	69-123	7	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414782
Reported: 09/11/13 at 07:34 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Batch number: 132460019A	Sample number(s): 7177749-7177752,7177754 UNSPK: 7177750										
2,4-D	105	111	42-143	5	35						
Dalapon	38	35	19-109	7	50						
2,4-DB	161	164	10-179	2	50						
Dicamba	115	119	45-147	4	50						
Dinoseb	36	40	10-52	12	35						
2,4-DP (Dichlorprop)	113	116	32-171	2	50						
MCPA	88	91	23-169	4	50						
MCPP (Mecoprop)	83	83	24-164	0	50						
2,4,5-T	133	139	12-172	4	35						
2,4,5-TP	109	113	10-142	4	35						
Batch number: 132420008A	Sample number(s): 7177749-7177752,7177754 UNSPK: 7177750										
Aldrin	78	81	16-126	4	50						
Alpha BHC	93	98	14-140	5	50						
Beta BHC	-58*	-59*	10-173	4	50						
Gamma BHC - Lindane	90	94	30-137	4	50						
p,p-DDD	105	105	43-149	1	50						
p,p-DDE	88	90	18-161	2	50						
p,p-DDT	100	103	12-193	3	50						
Delta BHC	78	86	13-153	10	50						
Dieldrin	103	104	19-154	1	50						
Endosulfan I	101	101	16-137	0	50						
Endosulfan II	89	89	10-156	0	50						
Endosulfan Sulfate	87	89	10-181	2	50						
Endrin	96	97	30-152	1	50						
Endrin Aldehyde	81	81	10-152	0	35						
Endrin Ketone	87	89	10-160	2	50						
Heptachlor	94	96	16-152	2	50						
Heptachlor Epoxide	84	85	17-167	1	50						
Methoxychlor	94	98	34-168	5	50						
Batch number: 132430008A	Sample number(s): 7177748-7177752,7177754 UNSPK: 7177750										
PCB-1016	98	97	16-146	0	50						
PCB-1260	110	111	40-134	2	50						
Batch number: 132460005A	Sample number(s): 7177748-7177752,7177754 UNSPK: 7177750										
EFH (C12-C14)	87	84	49-123	3	20						
EFH (C15-C20)	97	96	49-123	1	20						
EFH (C21-C30)	108	113	49-123	4	20						
EFH (C30-C40)	105	112	49-123	7	20						
EFH (C8-C11)	82	80	49-123	3	20						
Batch number: 132400637001	Sample number(s): 7177748-7177754 UNSPK: 7177750 BKG: 7177750										
Aluminum	3393 (2)	3808 (2)	75-125	3	20	21,500		21,200		1	20
Antimony	58*	60*	75-125	3	20	3.96	U	3.96	U	0 (1)	20
Arsenic	96	97	75-125	1	20	5.61		5.74		2 (1)	20
Barium	93	98	75-125	3	20	121		119		2	20
Beryllium	97	99	75-125	2	20	0.868	J	0.854	J	2 (1)	20
Boron	87	90	75-125	3	20	6.86	J	4.79	J	35* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414782
Reported: 09/11/13 at 07:34 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Cadmium	89	90	75-125	2	20	0.196 J	0.179 J	9 (1)	20
Calcium	-7 (2)	760 (2)	75-125	36*	20	6,960	6,410	8	20
Chromium	115	121	75-125	2	20	28.6	27.9	3	20
Cobalt	90	91	75-125	1	20	8.28	8.28	0	20
Copper	98	101	75-125	2	20	18.1	17.5	3	20
Iron	1661 (2)	2347 (2)	75-125	2	20	29,700	28,800	3	20
Lead	90	93	75-125	2	20	9.05	8.71	4 (1)	20
Lithium	101	102	75-125	1	20	18.4	18.5	1 (1)	20
Magnesium	386 (2)	525 (2)	75-125	4	20	5,910	5,870	1	20
Manganese	120 (2)	52 (2)	75-125	7	20	433	409	6	20
Molybdenum	86	88	75-125	2	20	0.332 J	0.217 J	42* (1)	20
Nickel	93	95	75-125	1	20	17.3	17.4	0	20
Phosphorus	89	110	75-125	6	20	273	251	8	20
Potassium	142 (2)	123 (2)	75-125	4	20	4,260	4,150	2	20
Sodium	96	96	75-125	1	20	80.3 J	81.4 J	1 (1)	20
Tin	85	86	75-125	1	20	2.81 J	2.63 J	7 (1)	20
Titanium	332 (2)	391 (2)	75-125	5	20	730	696	5	20
Vanadium	108	114	75-125	2	20	54.1	52.8	2	20
Zinc	100	105	75-125	2	20	63.2	62.3	1	20
Zirconium	90	90	75-125	0	20	5.39	5.57	3 (1)	20
Batch number: 132400637001A	Sample number(s): 7177748-7177754 UNSPK: 7177750 BKG: 7177750								
Silver	130*	104	75-125	22*	20	0.0457 J	0.0545 J	18 (1)	20
Strontium	206 (2)	56 (2)	75-125	24*	20	39.7	49.5	22*	20
Thallium	136*	96	75-125	19	20	0.374	0.455	20 (1)	20
Batch number: 132400637001B	Sample number(s): 7177748-7177754 UNSPK: 7177750 BKG: 7177750								
Selenium	110	91	75-125	17	20	0.235 J	0.258 J	9 (1)	20
Batch number: 132400638001	Sample number(s): 7177748-7177754 UNSPK: 7177750 BKG: 7177750								
3a Mercury 7471A	113	114	65-135	0	20	0.0163 U	0.0159 U	0 (1)	20
Batch number: 13240039401A	Sample number(s): 7177748-7177750,7177753-7177754 BKG: 7177750								
15a pH by 9045D						7.79	7.84	1	3
Batch number: 13242162401A	Sample number(s): 7177748-7177753 BKG: 7177750								
14a Moisture Content by 160.3						11.3	11.1	2	20
14a Moisture Content by 160.3						11.3	11.1	2	20
14a Moisture Content by 160.3						11.3	11.1	2	20
Batch number: 13242162401B	Sample number(s): 7177754 BKG: 7177754								
14a Moisture Content by 160.3						11.3	10.8	5	20
Batch number: 13248003	Sample number(s): 7177748-7177752,7177754 UNSPK: 7177750								
2378-TCDD	101	100	40-135	2	20				
12378-PeCDD	101	101	40-135	1	20				
123478-HxCDD	102	102	40-135	0	20				
123678-HxCDD	102	101	40-135	1	20				
123789-HxCDD	102	102	40-135	0	20				
1234678-HpCDD	100	99	40-135	1	20				
OCDD	94	94	40-135	0	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414782
Reported: 09/11/13 at 07:34 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDF	101	101	40-135	0	20				
12378-PeCDF	102	101	40-135	1	20				
23478-PeCDF	103	102	40-135	1	20				
123478-HxCDF	98	102	40-135	3	20				
123678-HxCDF	99	101	40-135	2	20				
123789-HxCDF	98	99	40-135	1	20				
234678-HxCDF	99	100	40-135	0	20				
1234678-HpCDF	96	96	40-135	1	20				
1234789-HpCDF	98	99	40-135	0	20				
OCDF	94	95	40-135	0	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13243SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7177748	85	97	102
7177749	81	96	101
7177750	83	92	96
7177751	86	100	99
7177752	74	84	89
7177754	83	94	97
Blank	83	97	99
LCS	83	94	96
MS	86	100	99
MSD	74	84	89
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13241A20A

	Trifluorotoluene-F
7177747	87
Blank	87
LCS	121
LCSD	121
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13242A16A

	Trifluorotoluene-F

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414782
Reported: 09/11/13 at 07:34 PM

Surrogate Quality Control

7177750	70	
7177751	72	
7177752	70	
7177754	70	
Blank	76	
LCS	76	
MS	72	
MSD	70	
Limits:	50-142	

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 132420008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7177749	75	79
7177750	79	80
7177751	79	87
7177752	83	91
7177754	85	90
Blank	78	87
LCS	85	92
MS	79	87
MSD	83	91
Limits:	50-130	20-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132430008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7177748	106	104
7177749	111	112
7177750	105	107
7177751	108	109
7177752	101	108
7177754	111	110
Blank	116	112
LCS	112	116
LCSD	123*	120
MS	108	109
MSD	101	108
Limits:	45-120	45-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 132460019A

	2,4-Dichlorophenylacetic acid
7177749	59
7177750	57
7177751	71
7177752	72
7177754	61

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414782
Reported: 09/11/13 at 07:34 PM

Surrogate Quality Control

Blank	56	
LCS	73	
MS	71	
MSD	72	
Limits:	50-150	

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132460005A

	Chlorobenzene	Orthoterphenyl
7177748	96	101
7177749	85	87
7177750	83	76
7177751	90	86
7177752	84	79
7177754	89	85
Blank	94	99
LCS	98	103
MS	90	86
MSD	84	79
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13248003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7177748	75	84	82	91	87	84
7177749	75	81	78	89	82	77
7177750	75	72	76	85	78	73
7177751	73	83	83	95	87	80
7177752	70	77	83	92	85	78
7177754	74	73	77	87	80	74
Blank	67	74	75	83	76	71
MS	73	83	83	95	87	80
MSD	70	77	83	92	85	78
OPR	76	85	84	96	87	79
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7177748	114	81	75	76	85	83
7177749	101	72	66	75	78	78
7177750	91	61	56	67	75	74
7177751	114	71	69	77	84	84
7177752	106	75	71	71	79	80
7177754	97	67	62	69	76	77
Blank	99	68	63	73	76	78
MS	114	71	69	77	84	84
MSD	106	75	71	71	79	80
OPR	120	77	70	86	89	89
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1414782
Reported: 09/11/13 at 07:34 PM

Surrogate Quality Control

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7177748	84	92	91	77	88
7177749	78	78	79	76	87
7177750	73	67	67	75	80
7177751	82	81	86	75	90
7177752	78	81	84	74	84
7177754	78	76	72	75	80
Blank	75	78	77	67	78
MS	82	81	86	75	90
MSD	78	81	84	74	84
OPR	90	92	93	76	93
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Acct# 13013 Cp# 1414782 Sample# 7177747-54

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 8/27/2013
CarrierName: FedEx
AirbillNo: 796559389195

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130827-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-082713	8/27/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-615-SA8-SB-0.0-0.5	8/27/13 10:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-615-SA8-SB-0.0-0.5	8/27/13 10:00	SO	None	1 - 4 oz glass	10 day														X																	
SL-553-SA8-SB-0.0-0.5	8/27/13 12:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X	X			X											
SL-553-SA8-SB-0.0-0.5	8/27/13 12:35	SO	None	1 - 4 oz glass	10 day														X																	
SL-553-SA8-SB-4.0-5.0MS	8/27/13 12:50	SO	None	6 - 16 oz glass	10 day	X	X					X		X	X			X		X	X	X			X											MS/MSD
SL-553-SA8-SB-4.0-5.0MS	8/27/13 12:50	SO	None	6 - Encore	10 day																			X												MS/MSD
SL-853-SA8-SB-4.0-5.0	8/27/13 13:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X		X	X	X			X											
SL-853-SA8-SB-4.0-5.0	8/27/13 13:00	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Gonzalez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Myers	8/27/2013	1600							Brandy Berry	8.28.13	920

COC Rev 2

COC: 20130827-01, Page 1 of 1

1 of 1

eurofins | Lancaster Laboratories

C*1414782

Environmental Sample Administration Receipt Documentation Log

Client/Project: COM

Date of Receipt: 8.28.13

Time of Receipt: 920

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	2.7	TB	WI	Y		
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brianely Bern 2299 **Date/Time:** 8.28.13 941

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

SAMPLE DELIVERY GROUP

PH096

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

September 17, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 08/29/2013
Group Number: 1415082
SDG: PH096
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB3-082813 Water	7179334
EB4-082813 Water	7179335
TB1-082813 Water	7179336
SL-553-SA8-SB-9.0-10.0 Soil	7179337
SL-553-SA8-SB-14.0-15.0 Soil	7179338
SL-553-SA8-SB-18.0-19.0 Soil	7179339

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,



Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: EB3-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179334
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB328 SDG#: PH096-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.053	U	0.053	0.011	1
12971	Acenaphthylene	208-96-8	0.053	U	0.053	0.011	1
12971	Anthracene	120-12-7	0.053	U	0.053	0.011	1
12971	Benzo(a)anthracene	56-55-3	0.053	U	0.053	0.011	1
12971	Benzo(a)pyrene	50-32-8	0.053	U	0.053	0.011	1
12971	Benzo(b)fluoranthene	205-99-2	0.053	U	0.053	0.011	1
12971	Benzo(e)pyrene	192-97-2	0.053	U	0.053	0.011	1
12971	Benzo(g,h,i)perylene	191-24-2	0.053	U	0.053	0.011	1
12971	Benzo(k)fluoranthene	207-08-9	0.053	U	0.053	0.011	1
12971	Butylbenzylphthalate	85-68-7	1.1	U	1.1	0.053	1
12971	Di-n-butylphthalate	84-74-2	0.22	J	1.1	0.053	1
12971	Chrysene	218-01-9	0.053	U	0.053	0.011	1
12971	Dibenz(a,h)anthracene	53-70-3	0.053	U	0.053	0.011	1
12971	Diethylphthalate	84-66-2	0.36	J	1.1	0.053	1
12971	Dimethylphthalate	131-11-3	1.1	U	1.1	0.053	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.12	J	1.1	0.053	1
12971	Fluoranthene	206-44-0	0.053	U	0.053	0.011	1
12971	Fluorene	86-73-7	0.053	U	0.053	0.011	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.053	U	0.053	0.011	1
12971	1-Methylnaphthalene	90-12-0	0.053	U	0.053	0.011	1
12971	2-Methylnaphthalene	91-57-6	0.053	U	0.053	0.011	1
12971	Naphthalene	91-20-3	0.053	U	0.053	0.032	1
12971	N-Nitrosodimethylamine	62-75-9	0.053	U	0.053	0.011	1
12971	Di-n-octylphthalate	117-84-0	1.1	U	1.1	0.053	1
12971	Phenanthrene	85-01-8	0.053	U	0.053	0.032	1
12971	Pyrene	129-00-0	0.053	U	0.053	0.011	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	
10407	2,4-D	94-75-7	0.49	U	0.49	0.16	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.98	U	0.98	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.078	1
10407	Dinoseb	88-85-7	0.49	U	0.49	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.49	U	0.49	0.16	1
10407	MCPA	94-74-6	200	U	200	49	1
10407	MCPP	93-65-2	200	U	200	49	1
10407	2,4,5-T	93-76-5	0.049	U	0.049	0.015	1
10407	2,4,5-TP	93-72-1	0.049	U	0.049	0.0098	1
Pesticides/PCBs	**SW-846 8081B**		ug/l		ug/l	ug/l	
10589	Aldrin	309-00-2	0.0082	U	0.0082	0.0016	1

*=This limit was used in the evaluation of the final result

Sample Description: EB3-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179334
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB328 SDG#: PH096-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Alpha BHC	319-84-6	0.0082	U	0.0082	0.0025	1
10589	Beta BHC	319-85-7	0.0082	U	0.0082	0.0028	1
10589	Gamma BHC - Lindane	58-89-9	0.0082	U	0.0082	0.0016	1
10589	Chlordane	57-74-9	0.41	U	0.41	0.13	1
10589	p,p-DDD	72-54-8	0.016	U	0.016	0.0041	1
10589	p,p-DDE	72-55-9	0.016	U	0.016	0.0041	1
10589	p,p-DDT	50-29-3	0.016	U	0.016	0.0043	1
10589	Delta BHC	319-86-8	0.0082	U	0.0082	0.0028	1
10589	Dieldrin	60-57-1	0.016	U	0.016	0.0043	1
10589	Endosulfan I	959-98-8	0.0082	U	0.0082	0.0035	1
10589	Endosulfan II	33213-65-9	0.016	U	0.016	0.012	1
10589	Endosulfan Sulfate	1031-07-8	0.016	U	0.016	0.0048	1
10589	Endrin	72-20-8	0.016	U	0.016	0.0066	1
10589	Endrin Aldehyde	7421-93-4	0.082	U	0.082	0.016	1
10589	Endrin Ketone	53494-70-5	0.016	U	0.016	0.0041	1
10589	Heptachlor	76-44-8	0.0082	U	0.0082	0.0016	1
10589	Heptachlor Epoxide	1024-57-3	0.0082	U	0.0082	0.0019	1
10589	Methoxychlor	72-43-5	0.082	U	0.082	0.025	1
10589	Mirex	2385-85-5	0.20	U	0.20	0.069	1
10589	Toxaphene	8001-35-2	2.5	U	2.5	0.82	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.41	U	0.41	0.082	1
13092	Aroclor 5442	12642-23-8	0.41	U	0.41	0.082	1
13092	Aroclor 5460	11126-42-4	0.41	U	0.41	0.090	1
13092	PCB-1016	12674-11-2	0.41	U	0.41	0.082	1
13092	PCB-1221	11104-28-2	0.41	U	0.41	0.082	1
13092	PCB-1232	11141-16-5	0.41	U	0.41	0.16	1
13092	PCB-1242	53469-21-9	0.41	U	0.41	0.082	1
13092	PCB-1248	12672-29-6	0.41	U	0.41	0.082	1
13092	PCB-1254	11097-69-1	0.41	U	0.41	0.082	1
13092	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
13092	PCB-1262	37324-23-5	0.41	U	0.41	0.16	1
13092	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C15-C20)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C21-C30)	n.a.	0.097	U	0.097	0.048	1
10365	EFH (C30 - C40)	n.a.	0.48	U	0.48	0.097	1
10365	EFH (C8-C11)	n.a.	0.097	U	0.097	0.048	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

*=This limit was used in the evaluation of the final result

Sample Description: EB3-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179334
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB328 SDG#: PH096-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
	For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.					
Metals		**SW-846 6010C**	**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
		SW-846 6020A	**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
		SW-846 7470A	**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry		**SW-846 9040C**	**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.5	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB3-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179334
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB328 SDG#: PH096-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.92	U	1.92	0.492	1
10915	12378-PeCDD	40321-76-4	9.62	U	9.62	0.492	1
10915	123478-HxCDD	39227-28-6	9.62	U	9.62	0.300	1
10915	123678-HxCDD	57653-85-7	0.382	JBQ	9.62	0.316	1
10915	123789-HxCDD	19408-74-3	0.353	JBQ	9.62	0.295	1
10915	1234678-HpCDD	35822-46-9	0.585	JBQ	9.62	0.436	1
10915	OCDD	3268-87-9	0.727	JBQ	19.2	0.421	1
10915	2378-TCDF	51207-31-9	1.92	U	1.92	0.358	1
10915	12378-PeCDF	57117-41-6	0.492	JBQ	9.62	0.282	1
10915	23478-PeCDF	57117-31-4	9.62	U	9.62	0.248	1
10915	123478-HxCDF	70648-26-9	0.274	JBQ	9.62	0.158	1
10915	123678-HxCDF	57117-44-9	9.62	U	9.62	0.151	1
10915	123789-HxCDF	72918-21-9	9.62	U	9.62	0.174	1
10915	234678-HxCDF	60851-34-5	0.442	JBQ	9.62	0.157	1
10915	1234678-HpCDF	67562-39-4	0.330	JBQ	9.62	0.157	1
10915	1234789-HpCDF	55673-89-7	0.288	JBQ	9.62	0.185	1
10915	OCDF	39001-02-0	0.808	JBQ	19.2	0.554	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	U				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	56	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	66	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	45	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB3-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179334
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB328 SDG#: PH096-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB3-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179334
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB328 SDG#: PH096-01EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243WAJ026	09/04/2013 02:42	Brian K Graham	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13243WAJ026	09/03/2013 09:10	Anna E Stager	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13242A20A	08/30/2013 14:01	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13242A20A	08/30/2013 14:01	Catherine J Schwarz	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	132470014A	09/07/2013 00:02	Elizabeth J Marin	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	132470020A	09/05/2013 20:14	Jamie L Brillhart	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132470019A	09/06/2013 00:07	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132470019A	09/04/2013 23:30	Karen L Beyer	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	132470020A	09/04/2013 23:30	Karen L Beyer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	132470014A	09/04/2013 20:00	Elaine F Stoltzfus	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470006A	09/05/2013 03:36	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132470006A	09/04/2013 15:45	Seth A Farrier	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248004	09/10/2013 00:01	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13248004	09/06/2013 14:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07052	Cobalt	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
01756	Lithium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07060	Molybdenum	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07061	Nickel	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: EB3-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179334
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:00 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB328 SDG#: PH096-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10143	Phosphorus	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
07072	Zinc	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	132410635001	09/02/2013 10:24	Katlin N Cataldi	1
06041	Selenium	SW-846 6020A	1	132410639001B	08/30/2013 22:08	David K Beck	1
06042	Silver	SW-846 6020A	1	132410639001A	08/30/2013 22:08	David K Beck	1
06044	Strontium	SW-846 6020A	1	132410639001A	08/30/2013 22:08	David K Beck	1
06045	Thallium	SW-846 6020A	1	132410639001A	08/30/2013 22:08	David K Beck	1
00259	3b Mercury 7470A	SW-846 7470A	1	132425713008	09/01/2013 10:07	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132410635001	08/29/2013 23:30	Annamaria Stipkovits	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132410639001	08/29/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132425713008	08/31/2013 09:50	Nelli S Markaryan	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13241006101A	08/29/2013 19:29	Clayton C Litchmore	1

*=This limit was used in the evaluation of the final result

Sample Description: EB4-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179335
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB428 SDG#: PH096-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.25	J	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.40	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.32	J	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.013	J	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.011	J	0.051	0.010	1
12971	Naphthalene	91-20-3	0.051	U	0.051	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.031	1
12971	Pyrene	129-00-0	0.015	J	0.051	0.010	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.41	U	0.41	0.083	1
13092	Aroclor 5442	12642-23-8	0.41	U	0.41	0.083	1
13092	Aroclor 5460	11126-42-4	0.41	U	0.41	0.091	1
13092	PCB-1016	12674-11-2	0.41	U	0.41	0.083	1
13092	PCB-1221	11104-28-2	0.41	U	0.41	0.083	1
13092	PCB-1232	11141-16-5	0.41	U	0.41	0.17	1
13092	PCB-1242	53469-21-9	0.41	U	0.41	0.083	1
13092	PCB-1248	12672-29-6	0.41	U	0.41	0.083	1
13092	PCB-1254	11097-69-1	0.41	U	0.41	0.083	1
13092	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
13092	PCB-1262	37324-23-5	0.41	U	0.41	0.17	1
13092	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.094	U	0.094	0.047	1
10365	EFH (C15-C20)	n.a.	0.094	U	0.094	0.047	1
10365	EFH (C21-C30)	n.a.	0.094	U	0.094	0.047	1

*=This limit was used in the evaluation of the final result

Sample Description: EB4-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179335
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB428 SDG#: PH096-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C30 - C40)	n.a.	0.47 U	0.47	0.094	1
10365	EFH (C8-C11)	n.a.	0.094 U	0.094	0.047	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits. For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.					
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	
01504	1b Anions by 300.0-Fluoride	16984-48-8	0.10 U	0.10	0.080	1
00368	1b Anions by 300.0-Nitrate	14797-55-8	0.10 U	0.10	0.050	1
01506	1b Anions by 300.0-Nitrite	14797-65-0	0.10 U	0.10	0.080	1

*=This limit was used in the evaluation of the final result

Sample Description: EB4-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179335
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB428 SDG#: PH096-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/l**		**mg/l**	**mg/l**	
00228	1b Anions by 300.0-Sulfate	14808-79-8	1.0	U	1.0	0.30	1
	EPA 377.1		**mg/l**		**mg/l**	**mg/l**	
00229	29b Sulfite in Water EPA377.1	14265-45-3	5.0	U	5.0	1.5	1
	The 40 CFR Part 136 requires that this analysis be performed immediately (within 15 minutes) upon sample collection. Because this was not possible, the result may not be used for reporting purposes.						
	SW-846 9040C		**Std. Units**		**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.7		0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB4-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179335
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB428 SDG#: PH096-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.92	U	1.92	0.328	1
10915	12378-PeCDD	40321-76-4	9.62	U	9.62	0.357	1
10915	123478-HxCDD	39227-28-6	9.62	U	9.62	0.244	1
10915	123678-HxCDD	57653-85-7	0.297	JBQ	9.62	0.263	1
10915	123789-HxCDD	19408-74-3	0.466	JBQ	9.62	0.246	1
10915	1234678-HpCDD	35822-46-9	9.62	U	9.62	0.300	1
10915	OCDD	3268-87-9	1.13	JB	19.2	0.315	1
10915	2378-TCDF	51207-31-9	1.92	U	1.92	0.264	1
10915	12378-PeCDF	57117-41-6	0.519	JBQ	9.62	0.228	1
10915	23478-PeCDF	57117-31-4	0.378	JBQ	9.62	0.188	1
10915	123478-HxCDF	70648-26-9	0.318	JBQ	9.62	0.120	1
10915	123678-HxCDF	57117-44-9	0.140	JBQ	9.62	0.119	1
10915	123789-HxCDF	72918-21-9	0.199	JBQ	9.62	0.129	1
10915	234678-HxCDF	60851-34-5	0.270	JBQ	9.62	0.115	1
10915	1234678-HpCDF	67562-39-4	0.413	JBQ	9.62	0.118	1
10915	1234789-HpCDF	55673-89-7	0.197	JBQ	9.62	0.130	1
10915	OCDF	39001-02-0	0.972	JB	19.2	0.313	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.000600				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	57	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	53	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB4-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179335
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB428 SDG#: PH096-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB4-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179335
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB428 SDG#: PH096-02EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243WAJ026	09/04/2013 03:09	Brian K Graham	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13243WAJ026	09/03/2013 09:10	Anna E Stager	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	132470019A	09/06/2013 00:25	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	132470019A	09/04/2013 23:30	Karen L Beyer	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470006A	09/05/2013 03:57	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132470006A	09/04/2013 15:45	Seth A Farrier	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13248004	09/10/2013 00:57	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13248004	09/06/2013 14:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07044	Antimony	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07035	Arsenic	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07046	Barium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07047	Beryllium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
08014	Boron	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
01750	Calcium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07051	Chromium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07052	Cobalt	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07053	Copper	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
01754	Iron	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07055	Lead	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
01756	Lithium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07058	Manganese	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07060	Molybdenum	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07061	Nickel	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
10143	Phosphorus	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
01762	Potassium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
01767	Sodium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07069	Tin	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07070	Titanium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
07072	Zinc	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
10144	Zirconium	SW-846 6010C	1	132410635001	09/02/2013 10:28	Katlin N Cataldi	1
06041	Selenium	SW-846 6020A	1	132410639001B	08/30/2013 22:11	David K Beck	1
06042	Silver	SW-846 6020A	1	132410639001A	08/30/2013 22:11	David K Beck	1
06044	Strontium	SW-846 6020A	1	132410639001A	08/30/2013 22:11	David K Beck	1
06045	Thallium	SW-846 6020A	1	132410639001A	08/30/2013 22:11	David K Beck	1

*=This limit was used in the evaluation of the final result

Sample Description: EB4-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179335
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 15:30 by PH

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB428 SDG#: PH096-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	3b Mercury 7470A	SW-846 7470A	1	132425713008	09/01/2013 10:09	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132410635001	08/29/2013 23:30	Annamaria Stipkovits	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132410639001	08/29/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132425713008	08/31/2013 09:50	Nelli S Markaryan	1
01504	1b Anions by 300.0-Fluoride	EPA 300.0	1	13241655121A	08/29/2013 22:17	Christopher D Meeks	1
00368	1b Anions by 300.0-Nitrate	EPA 300.0	1	13241655121A	08/29/2013 22:17	Christopher D Meeks	1
01506	1b Anions by 300.0-Nitrite	EPA 300.0	1	13241655121A	08/29/2013 22:17	Christopher D Meeks	1
00228	1b Anions by 300.0-Sulfate	EPA 300.0	1	13241655123A	08/29/2013 22:17	Christopher D Meeks	1
00229	29b Sulfite in Water EPA377.1	EPA 377.1	1	13242022901A	08/30/2013 18:00	Michelle L Lalli	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13241006101A	08/29/2013 19:15	Clayton C Litchmore	1

*=This limit was used in the evaluation of the final result

Sample Description: TB1-082813 Water
SSFL Phase 3 Subarea 8

LL Sample # WW 7179336
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 08:00

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB128 SDG#: PH096-03TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13242A20A	08/30/2013 14:22	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13242A20A	08/30/2013 14:22	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179337
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:30 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55309 SDG#: PH096-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.78	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.78	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.78	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.78	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.78	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.78	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.78	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.7	J	21	7.0	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.78	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.78	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.78	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.78	1
12969	2-Methylnaphthalene	91-57-6	0.96	J	1.9	0.78	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.78	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.78	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.78	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.78	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.19
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	42	U	42	14	1
10401	Dalapon	75-99-0	110	U	110	51	1
10401	2,4-DB	94-82-6	20	U	20	7.3	1
10401	Dicamba	1918-00-9	14	U	14	4.7	1
10401	Dinoseb	88-85-7	28	U	28	11	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	20	U	20	11	1
10401	MCPA	94-74-6	2,900	U	2,900	890	1
10401	MCPP (Mecoprop)	93-65-2	2,900	U	2,900	880	1
10401	2,4,5-T	93-76-5	2.0	U	2.0	0.96	1
10401	2,4,5-TP	93-72-1	2.0	U	2.0	0.88	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.96	U	0.96	0.20	1
10590	Alpha BHC	319-84-6	0.96	U	0.96	0.20	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.96	U	0.96	0.20	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179337
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:30 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55309 SDG#: PH096-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	20	U	20	4.6	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.38	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.38	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.41	1
10590	Delta BHC	319-86-8	0.96	U	0.96	0.52	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.38	1
10590	Endosulfan I	959-98-8	0.96	U	0.96	0.25	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.38	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.38	1
10590	Endrin	72-20-8	2.0	U	2.0	0.38	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.38	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.69	1
10590	Heptachlor	76-44-8	0.96	U	0.96	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.96	U	0.96	0.20	1
10590	Methoxychlor	72-43-5	7.8	U	7.8	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.41	1
10590	Toxaphene	8001-35-2	38	U	38	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.8	1
10592	PCB-1242	53469-21-9	20	U	20	4.8	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,500		46.8	8.43	1
06944	Antimony	7440-36-0	1.74	J	4.68	0.865	1
06935	Arsenic	7440-38-2	6.40		4.68	0.819	1
06946	Barium	7440-39-3	142		1.17	0.0386	1
06947	Beryllium	7440-41-7	0.968	J	1.17	0.0784	1
07914	Boron	7440-42-8	11.2	J	11.7	0.982	1
06949	Cadmium	7440-43-9	0.494	J	1.17	0.0889	1
01650	Calcium	7440-70-2	10,300		23.4	3.91	1
06951	Chromium	7440-47-3	36.6		3.51	0.187	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179337
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:30 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55309 SDG#: PH096-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	10.6		1.17	0.116	1
06953	Copper	7440-50-8	16.5		2.34	0.339	1
01654	Iron	7439-89-6	34,400		234	21.2	5
06955	Lead	7439-92-1	10.7		3.51	0.585	1
01656	Lithium	7439-93-2	27.7		4.7	0.40	1
01657	Magnesium	7439-95-4	7,600		11.7	1.95	1
06958	Manganese	7439-96-5	455		1.17	0.0971	1
06960	Molybdenum	7439-98-7	2.34	U	2.34	0.199	1
06961	Nickel	7440-02-0	22.7		2.34	0.152	1
10145	Phosphorus	7723-14-0	235		11.7	3.38	1
01662	Potassium	7440-09-7	3,160		117	9.75	1
01667	Sodium	7440-23-5	227		117	19.5	1
06969	Tin	7440-31-5	3.75	J	11.7	0.257	1
06970	Titanium	7440-32-6	884		1.17	0.199	1
06971	Vanadium	7440-62-2	65.2		1.17	0.152	1
06972	Zinc	7440-66-6	69.0		4.68	0.234	1
10146	Zirconium	7440-67-7	3.61	J	5.85	0.982	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.468	U	0.468	0.117	2
06142	Silver	7440-22-4	0.0526	J	0.234	0.0304	2
06144	Strontium	7440-24-6	55.4		0.468	0.0795	2
06145	Thallium	7440-28-0	0.356		0.234	0.0351	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0147	J	0.0184	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.93		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179337
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:30 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55309 SDG#: PH096-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 11:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13242A16A	08/30/2013 23:19	Laura M Krieger	23.19
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324132216	08/29/2013 15:28	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324132216	08/29/2013 15:28	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132460019A	09/06/2013 20:01	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132420008A	09/05/2013 14:11	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 20:14	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132420008A	09/01/2013 09:30	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132460019A	09/04/2013 10:00	Kelli M Barto	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470022A	09/07/2013 00:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132470022A	09/05/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 19:12	John P Hook	5
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 05:33	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 00:51	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 00:51	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 00:51	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179337
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:30 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55309 SDG#: PH096-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 00:51	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 09:54	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13241039401A	08/29/2013 20:54	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401B	08/31/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179338
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:40 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55314 SDG#: PH096-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.9	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.9	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	6.9	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.9	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.9	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.77	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.77	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.41
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	42	U	42	14	1
10401	Dalapon	75-99-0	100	U	100	51	1
10401	2,4-DB	94-82-6	20	U	20	7.2	1
10401	Dicamba	1918-00-9	14	U	14	4.6	1
10401	Dinoseb	88-85-7	28	U	28	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	20	U	20	10	1
10401	MCPA	94-74-6	2,900	U	2,900	880	1
10401	MCPP (Mecoprop)	93-65-2	2,900	U	2,900	870	1
10401	2,4,5-T	93-76-5	2.0	U	2.0	0.95	1
10401	2,4,5-TP	93-72-1	2.0	U	2.0	0.87	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.97	U	0.97	0.20	1
10590	Alpha BHC	319-84-6	0.97	U	0.97	0.20	1
10590	Beta BHC	319-85-7	2.2	U	2.2	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.97	U	0.97	0.20	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179338
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:40 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55314 SDG#: PH096-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	20	U	20	4.7	1
10590	p,p-DDD	72-54-8	2.0	U	2.0	0.38	1
10590	p,p-DDE	72-55-9	2.0	U	2.0	0.38	1
10590	p,p-DDT	50-29-3	2.0	U	2.0	0.41	1
10590	Delta BHC	319-86-8	0.97	U	0.97	0.52	1
10590	Dieldrin	60-57-1	2.0	U	2.0	0.38	1
10590	Endosulfan I	959-98-8	0.97	U	0.97	0.26	1
10590	Endosulfan II	33213-65-9	2.0	U	2.0	0.38	1
10590	Endosulfan Sulfate	1031-07-8	2.0	U	2.0	0.38	1
10590	Endrin	72-20-8	2.0	U	2.0	0.38	1
10590	Endrin Aldehyde	7421-93-4	2.0	U	2.0	0.38	1
10590	Endrin Ketone	53494-70-5	2.1	U	2.1	0.70	1
10590	Heptachlor	76-44-8	0.97	U	0.97	0.20	1
10590	Heptachlor Epoxide	1024-57-3	0.97	U	0.97	0.20	1
10590	Methoxychlor	72-43-5	7.8	U	7.8	2.0	1
10590	Mirex	2385-85-5	2.0	U	2.0	0.41	1
10590	Toxaphene	8001-35-2	38	U	38	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	38	U	38	12	1
10592	Aroclor 5442	12642-23-8	38	U	38	12	1
10592	Aroclor 5460	11126-42-4	38	U	38	12	1
10592	PCB-1016	12674-11-2	20	U	20	3.8	1
10592	PCB-1221	11104-28-2	20	U	20	5.9	1
10592	PCB-1232	11141-16-5	20	U	20	4.7	1
10592	PCB-1242	53469-21-9	20	U	20	4.7	1
10592	PCB-1248	12672-29-6	20	U	20	3.8	1
10592	PCB-1254	11097-69-1	20	U	20	5.1	1
10592	PCB-1260	11096-82-5	20	U	20	4.5	1
10592	PCB-1262	37324-23-5	20	U	20	3.8	1
10592	PCB-1268	11100-14-4	20	U	20	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C30-C40)	n.a.	12	U	12	4.7	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,600		45.3	8.16	1
06944	Antimony	7440-36-0	0.859	J	4.53	0.837	1
06935	Arsenic	7440-38-2	2.92	J	4.53	0.792	1
06946	Barium	7440-39-3	105		1.13	0.0373	1
06947	Beryllium	7440-41-7	0.388	J	1.13	0.0758	1
07914	Boron	7440-42-8	6.86	J	11.3	0.951	1
06949	Cadmium	7440-43-9	0.618	J	1.13	0.0860	1
01650	Calcium	7440-70-2	233,000		113	18.9	5
06951	Chromium	7440-47-3	16.6		3.39	0.181	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179338
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:40 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55314 SDG#: PH096-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	2.13		1.13	0.112	1
06953	Copper	7440-50-8	5.19		2.26	0.328	1
01654	Iron	7439-89-6	13,000		45.3	4.10	1
06955	Lead	7439-92-1	4.71		3.39	0.566	1
01656	Lithium	7439-93-2	14.5		4.5	0.38	1
01657	Magnesium	7439-95-4	4,710		11.3	1.89	1
06958	Manganese	7439-96-5	90.2		1.13	0.0939	1
06960	Molybdenum	7439-98-7	2.26	U	2.26	0.192	1
06961	Nickel	7440-02-0	7.05		2.26	0.147	1
10145	Phosphorus	7723-14-0	291		11.3	3.27	1
01662	Potassium	7440-09-7	1,210		113	9.44	1
01667	Sodium	7440-23-5	239		113	18.9	1
06969	Tin	7440-31-5	2.83	J	11.3	0.249	1
06970	Titanium	7440-32-6	643		1.13	0.192	1
06971	Vanadium	7440-62-2	28.2		1.13	0.147	1
06972	Zinc	7440-66-6	29.2		4.53	0.226	1
10146	Zirconium	7440-67-7	3.22	J	5.66	0.951	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.453	U	0.453	0.113	2
06142	Silver	7440-22-4	0.0489	J	0.226	0.0294	2
06144	Strontium	7440-24-6	395		2.26	0.385	10
06145	Thallium	7440-28-0	0.129	J	0.226	0.0339	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0182	U	0.0182	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.47		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	14.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179338
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:40 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55314 SDG#: PH096-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 11:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13242A16A	08/30/2013 23:57	Laura M Krieger	24.41
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324132216	08/29/2013 15:30	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324132216	08/29/2013 15:30	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132460019A	09/06/2013 20:28	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132420008A	09/05/2013 14:26	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 20:32	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132420008A	09/01/2013 09:30	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132460019A	09/04/2013 10:00	Kelli M Barto	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470022A	09/07/2013 00:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132470022A	09/05/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 19:16	John P Hook	5
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 05:37	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 00:53	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 00:53	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/10/2013 21:22	David K Beck	10

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179338
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:40 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55314 SDG#: PH096-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 00:53	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 09:56	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13241039401A	08/29/2013 20:54	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401B	08/31/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-18.0-19.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179339
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:50 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55318 SDG#: PH096-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.7
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	39	U	39	13	1
10401	Dalapon	75-99-0	97	U	97	48	1
10401	2,4-DB	94-82-6	18	U	18	6.7	1
10401	Dicamba	1918-00-9	13	U	13	4.3	1
10401	Dinoseb	88-85-7	26	U	26	9.7	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.7	1
10401	MCPA	94-74-6	2,700	U	2,700	820	1
10401	MCPP (Mecoprop)	93-65-2	2,700	U	2,700	810	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.89	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.81	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-18.0-19.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179339
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:50 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55318 SDG#: PH096-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.36	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.36	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.36	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.36	1
10590	Endrin	72-20-8	1.8	U	1.8	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.36	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.65	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.5	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.2	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,400		42.5	7.66	1
06944	Antimony	7440-36-0	1.03	J	4.25	0.786	1
06935	Arsenic	7440-38-2	5.22		4.25	0.744	1
06946	Barium	7440-39-3	90.3		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.444	J	1.06	0.0712	1
07914	Boron	7440-42-8	5.89	J	10.6	0.892	1
06949	Cadmium	7440-43-9	0.498	J	1.06	0.0807	1
01650	Calcium	7440-70-2	40,200		21.2	3.55	1
06951	Chromium	7440-47-3	20.5		3.19	0.170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-18.0-19.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179339
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:50 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55318 SDG#: PH096-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	5.44		1.06	0.105	1
06953	Copper	7440-50-8	9.86		2.12	0.308	1
01654	Iron	7439-89-6	22,400		42.5	3.85	1
06955	Lead	7439-92-1	4.61		3.19	0.531	1
01656	Lithium	7439-93-2	27.3		4.2	0.36	1
01657	Magnesium	7439-95-4	5,630		10.6	1.77	1
06958	Manganese	7439-96-5	290		1.06	0.0882	1
06960	Molybdenum	7439-98-7	2.12	U	2.12	0.181	1
06961	Nickel	7440-02-0	12.3		2.12	0.138	1
10145	Phosphorus	7723-14-0	636		10.6	3.07	1
01662	Potassium	7440-09-7	3,140		106	8.86	1
01667	Sodium	7440-23-5	331		106	17.7	1
06969	Tin	7440-31-5	3.36	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,440		1.06	0.181	1
06971	Vanadium	7440-62-2	42.3		1.06	0.138	1
06972	Zinc	7440-66-6	59.8		4.25	0.212	1
10146	Zirconium	7440-67-7	3.01	J	5.31	0.892	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.425	U	0.425	0.106	2
06142	Silver	7440-22-4	0.212	U	0.212	0.0276	2
06144	Strontium	7440-24-6	90.3		0.425	0.0722	2
06145	Thallium	7440-28-0	0.230		0.212	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.71		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-18.0-19.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179339
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:50 by VC

Submitted: 08/29/2013 09:15
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55318 SDG#: PH096-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13243SLC026	09/05/2013 12:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13243SLC026	09/03/2013 08:00	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13242A16A	08/31/2013 03:08	Laura M Krieger	24.7
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201324132216	08/29/2013 15:31	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201324132216	08/29/2013 15:31	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	132460019A	09/06/2013 20:55	Elizabeth J Marin	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	132420008A	09/05/2013 14:41	Jamie L Brillhart	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132430008A	09/03/2013 20:51	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132430008A	09/02/2013 08:50	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	132420008A	09/01/2013 09:30	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	132460019A	09/04/2013 10:00	Kelli M Barto	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132470022A	09/07/2013 01:08	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132470022A	09/05/2013 02:30	Sherry L Morrow	1
01643	Aluminum	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	132420637001	09/04/2013 05:41	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	132420637001B	09/05/2013 00:55	David K Beck	2
06142	Silver	SW-846 6020A	1	132420637001A	09/05/2013 00:55	David K Beck	2
06144	Strontium	SW-846 6020A	1	132420637001A	09/05/2013 00:55	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-553-SA8-SB-18.0-19.0 Soil
SSFL Phase 3 Subarea 8

LL Sample # SW 7179339
LL Group # 1415082
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 08/28/2013 07:50 by VC

Submitted: 08/29/2013 09:15
Reported: 09/17/2013 09:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

55318 SDG#: PH096-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132420637001A	09/05/2013 00:55	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132420638001	09/04/2013 10:02	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132420637001	09/03/2013 10:15	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132420638001	09/03/2013 13:20	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13241039401A	08/29/2013 20:54	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13242162401B	08/31/2013 00:12	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415082
Reported: 09/17/13 at 09:38 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13243SLC026	Sample number(s): 7179337-7179339									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	93		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	92		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	96		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	123		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	97		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	119		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	104		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	100		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	99		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	98		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	93		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	108		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	96		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	96		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	95		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	92		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	82		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	116		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	92		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	98		79-112		
Batch number: 13243WAJ026	Sample number(s): 7179334-7179335									
Acenaphthene	0.050	U	0.050	0.010	ug/l	90	91	77-118	1	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	96	98	80-123	2	30
Anthracene	0.050	U	0.050	0.010	ug/l	89	95	78-123	6	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	86	89	73-127	3	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	82	96	72-120	17	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	93	98	79-136	5	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	75	77	70-130	3	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	86	96	64-130	11	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	87	89	73-131	3	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	74	71	40-138	5	30
Di-n-butylphthalate	0.11	J	1.0	0.050	ug/l	105	95	64-141	10	30
Chrysene	0.050	U	0.050	0.010	ug/l	95	95	76-125	1	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	88	91	58-131	3	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	92	90	64-128	3	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	87	82	23-139	6	30

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415082
Reported: 09/17/13 at 09:38 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	0.061	J	1.0	0.050	ug/l	76	74	70-143	3	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	92	95	79-124	4	30
Fluorene	0.050	U	0.050	0.010	ug/l	94	96	74-115	2	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	87	89	62-130	3	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	104	105	80-126	2	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	105	107	81-124	2	30
Naphthalene	0.050	U	0.050	0.030	ug/l	106	93	75-120	13	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	65	64	36-120	1	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	63	61	57-145	3	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	87	90	75-120	4	30
Pyrene	0.050	U	0.050	0.010	ug/l	92	92	71-130	0	30
Batch number: 13242A16A	Sample number(s): 7179337-7179339									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	76		67-119		
Batch number: 13242A20A	Sample number(s): 7179334,7179336									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	99	97	75-135	2	30
Batch number: 132460019A	Sample number(s): 7179337-7179339									
2,4-D	36	U	36.	12	ug/kg	104		59-122		
Dalapon	90	U	90.	44	ug/kg	49		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	137*		54-131		
Dicamba	12	U	12.	4.0	ug/kg	94		60-123		
Dinoseb	24	U	24.	9.0	ug/kg	19		10-36		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	114		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	88		60-127		
MCPP (Mecoprop)	2,500 U		2,500.	750	ug/kg	87		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	114		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	113		63-130		
Batch number: 132470014A	Sample number(s): 7179334									
2,4-D	0.50	U	0.50	0.16	ug/l	114	112	68-155	2	30
Dalapon	1.3	U	1.3	0.25	ug/l	62	69	39-115	10	30
2,4-DB	1.0	U	1.0	0.30	ug/l	128	142	50-163	10	30
Dicamba	0.30	U	0.30	0.080	ug/l	92	105	55-163	13	30
Dinoseb	0.50	U	0.50	0.12	ug/l	133	137	16-163	3	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	122	128	89-162	5	30
MCPA	200 U		200.	50	ug/l	92	98	68-154	6	30
MCPP	200 U		200.	50	ug/l	89	98	46-173	10	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	108	114	55-169	5	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	106	111	58-155	5	30
Batch number: 132420008A	Sample number(s): 7179337-7179339									
Aldrin	0.83	U	0.83	0.17	ug/kg	81		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	100		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	92		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	97		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	109		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	92		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	104		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	89		73-128		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1415082
Reported: 09/17/13 at 09:38 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dieldrin	1.7	U	1.7	0.33	ug/kg	111		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	106		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	95		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	92		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	99		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	88		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	92		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	98		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	90		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	97		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 132430008A	Sample number(s): 7179337-7179339									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	83	78	36-106	7	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	103		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	115		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132470019A	Sample number(s): 7179334-7179335									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	80	98*	35-84	20	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	105	111	69-120	5	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	126	134*	69-128	6	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 132470020A	Sample number(s): 7179334									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	52*	59	55-126	14	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	61*	70	63-132	14	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	55*	62*	63-132	12	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	59*	68	68-128	14	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	64	74	62-143	15	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	54*	62	56-137	13	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	58	69	45-134	17	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	53*	60*	63-131	12	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	65	75	65-135	14	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	64	72	48-124	12	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	55	64	53-123	14	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	55*	63	60-129	15	30
Endrin	0.016	U	0.016	0.0065	ug/l	45	62	43-139	31*	30

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